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**Re: ASARCO LLC's Comments on Proposed "Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry," 82 Fed. Reg. 3388 (January 11, 2017) – Docket No. EPA-HQ-SFUND-2015-0781**

Dear U.S. Environmental Protection Agency ("EPA"):

ASARCO LLC ("Asarco") hereby submits the following comments on the above-referenced rulemaking.

**GENERAL COMMENT**

The proposed rules need to be withdrawn so that EPA can consider certain issues that are not discussed in the rulemaking preamble and a resolution of which would necessitate final rules that are not a logical outgrowth of the proposed rules. Among these is the assumption, which underlies the proposed rules, that the retroactive scheme of liability under CERCLA § 107(a) extends to rules that are promulgated under CERCLA § 108(b). It is based on this assumption that the proposed rules would require current owners and operators of currently active or idled hardrock mining facilities to demonstrate financial responsibility for hazardous substance releases that may have occurred and site features that came into existence at the facilities prior to the rules' effective date.<sup>1</sup> This assumption and the rulemaking's failure to assess whether the

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<sup>1</sup> See 82 Fed. Reg. at 3404.

assumption is legally appropriate constitute a fatal flaw of the proposed rules given: (i) the legal axiom that a statute or legislative rule must not be given retroactive effect absent a clear indication of congressional intent that the statute or rule be applied retroactively;<sup>2</sup> and (ii) EPA's duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule.<sup>3</sup>

The rulemaking is equally silent on the questions of whether the proposed rules' requirement to demonstrate financial responsibility should apply to: (a) hazardous substance releases and site features CERCLA liability for which has already been quantified or otherwise resolved in prior administrative or judicial actions; and (b) site features hazardous substance releases from which are federally permitted under other EPA programs, including delegated programs.

The rulemaking fails, correspondingly, to propose, solicit public comments on, or otherwise discuss regulatory mechanisms for excluding the above-described categories of potential and actual releases and site features from the financial responsibility requirements of the proposed rules.

EPA cannot lawfully address the issues described above (which are discussed along with several other issues in greater detail below) by merely responding to comments regarding them in a notice of final rules. EPA must address these issues in a notice of proposed rulemaking, so that the public has an opportunity to comprehend EPA's positions on them and then comment on those positions in an informed manner. Nor may EPA promulgate as final rules regulatory mechanisms to accommodate the issues summarized above, when such mechanisms were not anticipated let alone discussed in the proposed rules. If EPA considers regulatory mechanisms to accommodate these issues, then it must do so in a proposed rulemaking. Otherwise, the final rules will fall outside the ambit of CERCLA § 108(b) and fail to comply with the notice-and-comment requirements of the Administrative Procedure Act.<sup>4</sup>

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<sup>2</sup> *Landgraf v. Usi Film Prods.*, 511 U.S. 244, 280 (1994); *Northeast Hosp. Corp. v. Sebelius*, 657 F.3d 1, 13 (D.C. Cir. 2011).

<sup>3</sup> *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 534-35 (D.C. Cir. 1983) ("EPA retains a duty to examine key assumptions as part of its affirmative 'burden of promulgating and explaining a non-arbitrary, non-capricious rule.'" (quoting *National Lime Association v. EPA*, 627 F.2d 416, 433 (D.C. Cir. 1980)); accord *Appalachian Power Co. v. EPA*, 135 F.3d 791, 818 (D.C. Cir. 1998).

<sup>4</sup> 5 U.S.C. § 553; *Allina Health Servs. v. Sebelius*, 746 F.3d 1102 (D.C. Cir. 2014) ("An agency may promulgate a rule that differs from a proposed rule only if the final rule is a 'logical outgrowth' of the proposed rule . . . A final rule is a logical outgrowth if affected parties should have anticipated that the relevant modification was possible.") (citing *Ass'n of Private Sector Colleges & Universities v. Duncan*, 681 F.3d 427, 442 (D.C. Cir. 2012) and *CSX Transp., Inc. v. Surface Transp. Bd.*, 584 F.3d 1076, 1080, (D.C. Cir. 2009)).

## **SPECIFIC COMMENTS**

**I. THE PROPOSED FINANCIAL RESPONSIBILITY RULES' APPLICATION TO RELEASES THAT MAY HAVE OCCURRED AND SITE FEATURES THAT CAME INTO EXISTENCE PRIOR TO THE RULES' EFFECTIVE DATE WOULD CONSTITUTE IMPERMISSIBLE RETROACTIVE APPLICATION OF CERCLA § 108(b).**

EPA should rigorously assess whether Congress intended the rules required under CERCLA § 108(b) to apply retroactively to hazardous substance releases that may have occurred and site features that came into existence prior to the rules' effective date. Were EPA to engage in such an assessment, it would reasonably find that the rules can apply lawfully only to site features and associated potential releases that come into existence after the rules' effective date.

**A. EPA Should Assess Whether Congress Actually Intended the Rules Required Under CERCLA § 108(b) to Apply Retroactively to Releases that May Have Occurred and Site Features that Came Into Existence Prior to the Rules' Effective Date.**

Court opinions on the retroactivity of CERCLA's provisions have focused on Congress' intent. With respect to CERCLA § 107, courts have concluded that:

- Since Congress, in CERCLA §107(f)(1), explicitly limited retroactive liability under § 107(a)(4)(C) (natural resources damages) while enacting no such limitation for liability under § 107(a)(4)(A) and (B) (response costs), Congress implicitly intended liability under § 107(a)(4)(A) and (B) to apply retroactively to releases that pre-date CERCLA's enactment;<sup>5</sup>
- Retroactive application of § 107(a)(4)(A) and (B) to releases that pre-date CERCLA's enactment would not be inconsistent with CERCLA's legislative history, which includes documentation that some legislators may have believed that liability for response costs specifically under § 107(a)(4)(A) and (B) would encompass hazardous substance releases that pre-date CERCLA's enactment;<sup>6</sup> and

<sup>5</sup> *United States v. Northeastern Pharmaceutical & Chem. Co., Inc.*, 810 F.2d 726, 736-37 (8th Cir. 1986) ("**NEPACCO**"); *Nevada ex rel. DOT v. United States*, 925 F. Supp. 691, 693-94 (D. Nev. 1996) ("**Nevada DOT**"); *United States v. Shell Oil Co.*, 605 F. Supp. 1065, 1075-77, 1079 (D. Colo. 1985) ("**Shell Oil**"); *United States v. Olin Corp.*, 107 F.3d 1506, 1513, n.17 (11th Cir. 1997) ("**Olin Corp.**"); *Ninth Ave. Remedial Group v. Chalmers*, 946 F. Supp. 659-660 (N.D. Ind. 1996) ("**Ninth Ave.**").

<sup>6</sup> *Ninth Ave.*, 946 F. Supp. at 661-64; *Nevada DOT*, 925 F. Supp. at 695, n.8; *Kelley v. Thomas Solvent Co.*, 714 F. Supp. 1439, 1444 (W.D. Mich. 1989); *Olin Corp.*, 107 F.3d at 1514.

▪ Retroactive application of § 107(a)(4)(A) and (B) to releases that pre-date CERCLA's enactment would be necessary to prevent a frustration of CERCLA's purpose of holding parties that participated in releases of hazardous substances responsible for the response costs associated with the releases.<sup>7</sup>

However, no court has considered whether Congress intended a wholly different section of CERCLA, § 108(b),<sup>8</sup> to be applied to hazardous substance releases that occurred before CERCLA's enactment; or whether Congress intended the financial responsibility rules promulgated under § 108(b) to apply to releases that may have occurred and site features that came into existence prior to the rules' effective date. Therefore, it is incumbent on EPA to conduct an assessment of Congress' intent before it finalizes rules that would apply § 108(b) in such a manner.

That a separate assessment of retroactivity is required for § 108(b) is underscored by the courts' treatment of other sections of CERCLA. Invariably, the courts determine whether CERCLA applies retroactively on a section-by-section basis. This is necessary given the strong legal presumption against the retroactive application of statutes and legislative rules.<sup>9</sup> For example, CERCLA § 106(b)(2) has been held not to apply retroactively<sup>10</sup> or not necessarily to apply retroactively<sup>11</sup> and retroactive application of CERCLA § 113(j) has been held improper,<sup>12</sup> while CERCLA § 127 has

<sup>7</sup> *Olin Corp.*, 107 F.3d 1506, 1514, n.19; *Shell Oil*, 605 F. Supp. at 1069-1073; *United States v. Mottolo*, 695 F. Supp. 615, 622 (D.N.H. 1988); *United States v. Atl. Richfield Co.*, 1996 U.S. Dist. LEXIS 22886, \*31-32 (D. Mont. 1996); *United States v. Alcan Aluminum Corp.*, 1996 U.S. Dist. LEXIS 16358, \*13-14 (N.D.N.Y. 1996).

<sup>8</sup> See *Ninth Ave.*, 946 F. Supp. at 659 ("Unlike the prospective provisions in the 1991 Civil Rights Act discussed by the *Landgraf* Court which were not connected to the specific provision that the plaintiff wanted to apply retroactively, liability for response costs, liability for natural resource damages, and the prospective limitation for natural resource damages are all part of the same section in CERCLA.") (referring to *Landgraf v. Usi Film Prods.*).

<sup>9</sup> *Landgraf*, 511 U.S. at 280; see also *Northeast Hosp. Corp.*, 657 F.3d at 13 ("It is well settled that an agency may not promulgate a retroactive rule absent express congressional authorization.") (citing *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988)).

<sup>10</sup> *Wagner Seed. Co., Inc. v. Bush*, 946 F.2d 921-25 (D.C. Cir. 1991) (affirming EPA's position that the reimbursement provision of § 106(b)(2) applies only to cleanup orders received after Congress adopted that provision).

<sup>11</sup> *Dico, Inc. v. Diamond*, 35 F.3d 348, 353, n.6 (8th Cir. 1994) ("We save for another day resolution of whether § 106(b)(2) applies retroactively to a party who has received and complied with an order issued prior to SARA's effective date.")

<sup>12</sup> *United States v. Hardage*, 663 F. Supp. 1280, 1284-86 (W.D. Okl. 1987) (holding arbitrary and capricious standard of § 113(j) was inapplicable to a § 106 action for injunctive relief because, in such a case, there is no "response action taken or ordered by the President" and that retroactive application of subsection 113(j) is improper); accord *United States v. Conservation Chem. Co.*, 661 F. Supp. 1416, 1424-31 (W.D. Mo. 1987).

been held to apply retroactively.<sup>13</sup> These holdings, in addition to the court opinions that limit the retroactive application of § 107(a)(4)(C), discussed above and further below,<sup>14</sup> clearly indicate that EPA cannot simply assume that Congress intended § 108(b) or rules promulgated thereunder to apply retroactively. EPA must conduct a retroactivity assessment specific to § 108(b), before it promulgates implementing rules applicable to: (i) releases that may have occurred before the rules' effective date; or (ii) site features that came into existence prior to the rules' effective date. The assessment should be published in the Federal Register, EPA should solicit public comments on the assessment, and EPA should finalize the assessment in a rulemaking that includes a thorough evaluation of the public comments, in order to satisfy the due process requirements of the Administrative Procedure Act.<sup>15</sup>

**B. The § 108(b) Rules Can Lawfully Apply Only to Site Features and Associated Potential Releases that Come into Existence After the Rules' Effective Date.**

Retroactive application of legislative rules is unlawful unless there is clear evidence that Congress intended the rules to apply retroactively.<sup>16</sup> The proposed financial responsibility rules would be retroactive legislative rules because they would “take[] away or impair[] vested rights acquired under existing laws, or create[] a new obligation, impose[] a new duty, or attach[] a new disability, in respect to transactions or considerations already past.”<sup>17</sup>

In the context of CERCLA, no provisions of the Act and its implementing rules can be applied retroactively unless there is clear evidence of congressional intent to that effect. Congress' intent is discerned from the face of the statutes, the legislative records of their enactment, and whether retroactivity is essential to avoid frustrating the purposes of the Act.<sup>18</sup>

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<sup>13</sup> *Department of Toxic Substances Control v. Interstate Non-Ferrous Corp.*, 99 F. Supp. 2d 1123, 1134 (E.D. Cal. 2000).

<sup>14</sup> See footnote 5.

<sup>15</sup> See footnotes 3 and 4.

<sup>16</sup> *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. at 208; *Northeast Hosp. Corp. v. Sebelius*, 657 F.3d at 13; see also *National Mining Ass'n v. McCarthy*, 758 F.3d 243, 251-52 (D.C. Cir. 2014) (“An agency action that purports to impose legally binding obligations or prohibitions on regulated parties—and that would be the basis for an enforcement action for violations of those obligations or requirements—is a legislative rule.”).

<sup>17</sup> See *Landgraf*, 511 U.S. at 269. In assigning financial responsibility obligations, nowhere do the proposed rules draw a distinction between already existing site features and site features yet to be constructed at “currently-active or -idled facilities.” See 82 Fed. Reg. at 3404, 3486-3512.

<sup>18</sup> See footnotes 5, 6 and 7.

1. Section 108 on its Face Does Not Provide Clear Evidence that Congress Intended the Rules Promulgated Under § 108(b) to Apply to Releases that May Have Occurred and Site Features that Came into Existence Prior to the Rules' Effective Date.

The language of § 108 does not provide clear evidence that Congress intended the § 108(b) financial responsibility rules to apply to releases that may have occurred and site features that came into existence prior to the rules' effective date.

If anything, the language of the statute indicates the contrary:

- CERCLA does not include explicit language mandating the retroactivity of rules promulgated under § 108(b).

- Section 108(b) does not explicitly require the rules to make the obligation of financial responsibility a function of potential liability under § 107(a), the way that § 108(a)(1) does with respect to vessels.<sup>19</sup> Rather, under § 108(b)(1), the rules are supposed to make the obligation of financial responsibility a function of the “degree and duration of risk” associated with the facilities’ production and handling of hazardous substances. Accordingly, rules adopted under § 108(b) would not seem to be geared to potential liability under § 107(a) the way that rules adopted under § 108(a)(1) would. The proposed rulemaking disregards the significance of the difference between § 108(a)(1) and § 108(b)(1) specifically to an understanding of Congress’ intent, because the rulemaking engages in no effort to ascertain Congress’ intent.<sup>20</sup> EPA’s statement that interpreting both subparagraphs in the same way furthers “policy objectives” of “helping to ensure adequate funding for all types of potential CERCLA liabilities” and “encouraging owners and operators to take into account the full breadth of potential CERCLA liability when structuring their operations,”<sup>21</sup> does not satisfy applicable statutory construction requirements, let alone adequately address the congressional intent prong of those requirements.<sup>22</sup> Moreover, a policy objective of encouraging owners and operators to take into account the full breadth of potential

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<sup>19</sup> Section 108(a)(1) provides that “[t]he owner or operator of each vessel (except a nonself-propelled barge that does not carry hazardous substances as cargo) over three hundred gross tons that uses any port or place in the United States or the navigable waters or any offshore facility, shall establish and maintain, in accordance with regulations promulgated by the President, evidence of financial responsibility of \$300 per gross ton (or for a vessel carrying hazardous substances as cargo, or \$5,000,000, whichever is greater) to cover the liability prescribed under paragraph (1) of section 9607(a) of this title” (emphasis added).

<sup>20</sup> See 82 Fed. Reg. at 3400/2.

<sup>21</sup> *Id.*

<sup>22</sup> See footnotes 2, 5, 6 and 7.



CERCLA liability “when structuring their operations” points to financial responsibility rules that apply only to site features and associated potential releases that come into existence after the rules’ effective date. That notwithstanding, the rulemaking does not establish that there is a clear linkage between § 108(b) and § 107(a).

▪ Even if § 108(b) could be read to impose financial responsibility for potential liability under § 107(a), one plausible interpretation would remain that the potential liability covered by the financial responsibility is only for site features and associated potential releases that come into existence after the rules’ effective date. Such a prospective-only interpretation arguably would be the best interpretation, given that references in § 108 to § 107 do not distinguish between liability under § 107 (a)(4)(A) and (B) (response costs) which according to courts can arise regardless of when the release occurred and liability under § 107(a)(4)(C) (natural resources damages) which under § 107(f)(1) cannot arise if the release and resulting damages occurred wholly before CERCLA’s enactment.<sup>23</sup> A prospective-only interpretation would certainly be appropriate as long as EPA intends to include natural resource damages within the scope of required financial responsibility, since prospective-only application of the proposed rules would clearly avoid their application to natural resources damages in a way that violates § 107(f)(1) or frustrates Congress’ intent in enacting § 107(f)(1).<sup>24</sup>

▪ Section 108(d) provides another basis for concluding that, if § 108(b) could be read to impose financial responsibility for potential liability under § 107(a), then the best interpretation is that the potential liability covered by the financial responsibility is only for site features and associated potential releases that come into existence after the rules’ effective date. Specifically, subparagraph (d)(1) limits the total liability of any guarantor of the responsibility to the aggregate amount of the monetary limits in the financial assurance instrument; whereas subparagraph (d)(2) states that nothing in subsection (d) “shall be construed, interpreted, or applied to diminish the liability of any person under section 107.” This dichotomy would evince a congressional intent that the financial assurance required under § 108(b) applies only to site features and associated potential releases that come into existence after the rules’ effective date, while leaving liability for releases that may have occurred prior to the rules’ effective date to be dealt with directly under § 107. Surely Congress was aware that financial assurance providers would be largely reluctant to underwrite instruments that assure coverage of liability for releases that predate the instruments; if not also aware of the prevalence, even as of 1980, of “retroactive date” and “continuity date” provisions in financial assurance instruments. EPA’s proposal to unilaterally nullify such provisions in any

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<sup>23</sup> See footnote 5.

<sup>24</sup> Alternatively, the proposed rules must be revised to exclude from the scope of required financial responsibility all obligations for natural resource damages that can be demonstrated to have occurred wholly before CERCLA’s enactment.

instrument acquired to comply with the proposed rules<sup>25</sup> falls far short of an assessment of whether such a result would be consistent with what Congress could have intended when it enacted § 108.<sup>26</sup> The likelihood that financial assurance providers would not consent to such terms in numbers sufficient to effectuate the proposed rules only underscores that EPA's assumption that § 108(b) necessitates financial responsibility for releases that may have occurred prior to the rules' effective date must be contrary to Congress' intent.<sup>27</sup>

- Section 108(b)(2) states that “[t]he level of financial responsibility” required under the rules “shall be initially established, and, when necessary, adjusted . . . based on the payment experience of the Fund . . . court settlements and judgments, and voluntary claims satisfaction.” Congress must have expected that: (i) the payment experience of the Fund, court settlements and judgments, and voluntary claims satisfaction would have been relatively insignificant within the five-year rulemaking window contemplated at § 108(b)(1); and (ii) the only way that the initial rulemaking could not work an unconscionable result for lack of such information during the first five years of CERCLA's implementation would be for the rulemaking to apply only to site features and associated potential releases that come into existence after the initial rules' effective date.

- Section 108(b)(3) states that the financial responsibility rules “shall incrementally impose financial responsibility requirements as quickly as can reasonably be achieved . . .” Such a requirement arguably would not be necessary to relieve the taxpayer of the cost of Fund-financed cleanups if the rules adopted within the five-year rulemaking window specified at § 108(b) would apply retroactively anyway.

2. The Legislative Record Does Not Provide Clear Evidence that Congress Intended the Rules Promulgated under § 108(b) to Apply to Releases that May Have Occurred and Site Features that Came Into Existence Prior to the Rules' Effective Date.

The legislative record does not provide clear evidence that Congress intended the § 108(b) financial responsibility rules to apply to releases that may have occurred and site features that came into existence prior to the rules' effective date.

<sup>25</sup> 82 Fed. Reg. at 3429/3, 3430/1.

<sup>26</sup> See footnotes 2, 5, 6 and 7.

<sup>27</sup> EPA's proposal to require financial responsibility for releases at currently active or idled facilities regardless of whether the releases occurred prior to the rules' effective date, 82 Fed. Reg. at 3404, in conjunction with its position that financial assurance instruments fielded to comply with the rules shall not include “retroactive date” or “continuity date” provisions and such provisions shall be deemed “amended to conform” with the rules, *id.* at 3429/3, arguably renders the limitation on guarantor liability in CERCLA § 108(d)(1) mere surplusage in violations of applicable canons of statutory construction.



If anything, the legislative record indicates the contrary:

- The House and Senate reports, testimony, and other documents in the record of CERCLA's enactment do not speak to: (i) the question of whether § 108(b) is intended to impose financial responsibility for potential liability under § 107(a); and (ii) the question of, even if § 108(b) is intended to impose financial responsibility for potential liability under § 107(a), whether the financial responsibility must encompass liability for releases that may have occurred and site features that came into existence prior to the rules effective date. Therefore, the presumption against applying § 108(b) rules in such a manner is not rebutted by CERCLA's legislative history.<sup>28</sup>

- According to the D.C. Circuit Court of Appeals, the financial responsibility rules required under § 108(b) would fill a “gap” in the financial assurance regulatory landscape.<sup>29</sup> If Congress was motivated to fill this “gap” when it enacted § 108(b),<sup>30</sup> then Congress was aware that the financial assurance regulatory landscape that existed for mineral development facilities was comprised of mined land reclamation rules that applied (and which continue to apply) their financial responsibility requirements prospectively, as preconditions of approvals to construct site features.<sup>31</sup> There is nothing in the history of CERCLA that indicates Congress' intended to cut against the grain of the relevant financial assurance regulatory landscape and require financial responsibility rules that apply to already-constructed site features.

- Congress explicitly intended the financial responsibility requirements of Clean Water Act § 311(p) to be a model for the CERCLA financial responsibility rules.<sup>32</sup>

<sup>28</sup> See *Landgraf*, 511 U.S. at 279 (“Moreover, in none of our decisions that have relied upon Bradley or Thorpe have we cast doubt on the traditional presumption against truly “retrospective” application of a statute.”); *City of New York v. Permanent Mission of India*, 618 F.3d 172, 193 (2nd Cir. 2010) (“Indeed, in *Bowen*, the Supreme Court referenced the general presumption against retroactivity for the interpretation of congressional enactments and legislative rules, and then added that “[b]y the same principle” statutory grants of legislative rule making authority should not ordinarily be interpreted to include the power to issue retroactive rules.”) (citing 488 U.S. at 208).

<sup>29</sup> *In re Idaho Conservation League*, 811 F.3d 502, 511 (D.C. Cir. 2016).

<sup>30</sup> Cf. 96 Cong. Senate Hearings 1980, Hearings Before the Committee on Commerce, Science and Transportation on S. 1480 (September 11 and 12, 1980), Prepared Statement of Sec. Downey (stating subparagraphs (b)(1) and (b)(2) would be “in addition to those of existing law”).

<sup>31</sup> See, for example, 36 C.F.R. § 228.13(a) which requires a reclamation assurance bond for any mineral development operations on National Forest System lands for which a mine plan of operations is required under 36 C.F.R. § 228.4. The requirement to file a mine plan of operations under 36 C.F.R. § 228.4 has always applied only to operations that would cause new surface disturbance features. See 39 Fed. Reg. 31317 (1974); 46 Fed. Reg. 36142 (renumbering rules).

<sup>32</sup> Senate Environment and Public Works Committee Report 96-846, Reporting S. 1480 (July 11, 1980).

Section 311(p), which was subsequently repealed,<sup>33</sup> applied only prospectively; that is, it required owners and operators of vessels to maintain financial responsibility for future water pollution events.

3. Retroactive Application of the § 108(b) Financial Responsibility Rules is Not Essential to Avoid Frustrating CERCLA's Purposes.

Assuming that CERCLA's retroactivity is sustained following the Supreme Court's decision in *Landgraf*,<sup>34</sup> the only remaining basis for finding that Congress intended the § 108(b) financial responsibility rules to apply to releases that may have occurred and site features that came into existence prior to the rules' effective date would be that such a reading of the statute is essential in order to avoid frustrating CERCLA's purposes.<sup>35</sup> The Eleventh Circuit Court of Appeals opined that "Congress' twin goals of cleaning up pollution that occurred prior to December 11, 1980, and of assigning responsibility to culpable parties can be achieved only through retroactive application of CERCLA's response cost liability provisions" at § 107(a)(4)(A) and (B).<sup>36</sup> The question must be asked, then, does this same logic apply to § 108(b)?

Could it be true that Congress' goals of cleaning up pollution that occurred before 1980 and assigning responsibility to culpable parties can be achieved only by applying the § 108(b) financial responsibility rules retroactively, so that they govern releases that may have occurred and site features that came into existence prior to the rules' effective date?

The answer obviously is "no." CERCLA has been applied for 37 years absent any § 108(b) financial responsibility rules. This is adequate proof that application of the proposed rules to releases that may have occurred and site features that came into existence prior to the rules' effective date is not necessary to prevent frustration of CERCLA's purposes. Moreover, EPA's authority and other parties' abilities, upheld by the courts, to reach conduct that pre-dates CERCLA's enactment and which pre-dates

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<sup>33</sup> P.L. 101-380, Title I, §§ 1001, 1020, 104 Stat. 486 (Aug. 18, 1990).

<sup>34</sup> See *Olin Corp.*, 107 F.3d at 1512, 1515 (rejecting the district court's holding that *Landgraf* "demolishes the interpretive premises on which prior cases had concluded that CERCLA is retroactive").

<sup>35</sup> *Id.* at 1514, n. 19 ("As Olin points out, the Supreme Court has held that the clear intent standard requires more than a recognition that 'retroactive application of a new statute would vindicate its purpose more fully.' [citing *Landgraf*]. In this case, however, retroactive enforcement of CERCLA does more than merely allow a 'fuller vindication' of the statute's purposes; it prevents frustration of the statute's purposes.") (emphasis added); accord *Accord Atl. Richfield Co.*, 1996 U.S. Dist. LEXIS 22886, \*31-32; *Alcan Aluminum Corp.*, 1996 U.S. Dist. LEXIS 16358, \*13-14; *United States v. Domenic Lombardi Realty, Inc.*, 2001 U.S. Dist. LEXIS 24645, \* 94-95 (D. R.I. 2001);

<sup>36</sup> *Id.* at 1514 (emphasis added).

the promulgation of § 108(b) rules, using the tools available to them under CERCLA §§ 104, 106(a), 107, 122, and 113, eliminate any notion that retroactive application of CERCLA § 108(b) and the rules promulgated thereunder is necessary to avoid frustrating CERCLA's purposes.

It is upon these considerations that the proposed rulemaking fails the test elucidated in *Olin*. The most that EPA appears to offer in favor of the proposed rules' retroactivity is that making the § 108(b) rules' obligation of financial responsibility a function of potential liability under § 107(a), in the manner of § 108(a)(1), would "help[] to ensure adequate funding for all types of potential CERCLA liabilities" and "encourage[] owners and operators to take into account the full breadth of potential CERCLA liability when structuring their operations."<sup>37</sup> While the first of these two considerations may indicate that the rules' retroactivity would more fully vindicate CERCLA's purposes, it fails the requirement, affirmed in *Olin*, to show that absent the rules' retroactivity CERCLA's purposes would be frustrated.<sup>38</sup>

Given the foregoing, the proposed financial responsibility rules cannot lawfully be applied to releases that may have occurred and site features that came into existence prior to the rules' effective date. It would be satisfactory of CERCLA's purposes for EPA to precondition the construction of new site features upon a prior demonstration of the owner's or operator's satisfaction of appropriate financial responsibility requirements promulgated under § 108(b), while leaving historic site features and historic releases at currently active, idled or other facilities unaffected by the rules and subject only to treatment under §§ 104, 106(a), 107 and 122. Any argument to the contrary would be unavailing in light of § 108(b) on its face, CERCLA's legislative history, and the 37 years during which CERCLA has been applied absent a financial responsibility rulemaking.

At a minimum, CERCLA and the congressional record are ambiguous as to whether the § 108 rules can apply retroactively and the presumption against applying the rules retroactively is not rebutted in EPA's rulemaking.<sup>39</sup> In order for EPA to address these concerns, it must do so in a proposed rulemaking. Otherwise, the final rules will be *ultra vires* of § 108(b) and fail to satisfy applicable due process requirements.<sup>40, 41</sup>

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<sup>37</sup> 82 Fed. Reg. at 3400/2 (discussed in Section I.B.1, above). Nowhere else in the rulemaking does EPA come close to appearing to consider whether the § 108(b) rules can lawfully apply to releases that may have occurred and site features that came into existence prior to the rules' effective date.

<sup>38</sup> See footnote 35.

<sup>39</sup> See footnote 28.

<sup>40</sup> See footnote 4.

4. Retroactive Application of the § 108(b) Financial Responsibility Rules Would Render the Rights of Apportionment under *BNSF* and Contribution under § 113 Meaningless.

To the extent that § 108(b) must be construed within the context of CERCLA as a whole, any § 108(b) rulemaking that requires an owner or operator to secure financial assurance for releases that may have occurred and site features that came into existence prior to its ownership or operation—especially rules that employ the financial responsibility formula of the proposed rulemaking—would render meaningless: (i) the right, affirmed in *Burlington Northern & Santa Fe Ry. v. United States (BNSF)*, to avoid joint and several liability for such releases and site features by proving that a reasonable basis for apportionment concerning them exists;<sup>42</sup> and (ii) the right of contribution under CERCLA § 113 for such releases.

If an owner or operator is required to secure tens or hundreds of millions of dollars of financial assurance for releases that may have occurred prior to its ownership or operation, then the options of avoiding joint and several liability under *BNSF* and securing contribution under § 113, for releases that may eventually be demonstrated to have occurred prior to its ownership or operation, are inconsequential. Indeed, construing § 108(b) to allow such a result would be unconscionable, because it would impose massive financial responsibility for harms caused by others while the availability of equitable redress under *BNSF* or § 113—which rests first on a determination that a release actually occurred and then on the commencement and conclusion of associated litigation—remains uncertain. Such a drastic outcome would not be necessary to avoid frustrating CERCLA's purposes.<sup>43</sup>

On the other hand, construing § 108(b) to require financial assurance to be secured only for site features and associated potential releases that come into existence after the rules' effective date would keep consequential the equitable right of apportionment affirmed in *BNSF* and the equitable right of contribution codified at § 113.

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<sup>41</sup> Even if it is ultimately determined that § 108(b) rules can apply to releases that may have occurred and site features that came into existence prior to the rules' effective date, a separate determination would need to be made of whether the rules can apply to releases that occurred or may have occurred prior to CERCLA's enactment. An agency's determination of whether a statute is retroactive is not entitled to *Chevron* deference. *Zivkovic v. Holder*, 724 F.3d 894, 900 (7th Cir. 2013); see also *INS v. St. Cyr*, 533 U.S. 289, 320, n.45 (2001) ("Because a statute that is ambiguous with respect to retroactive application is construed under our precedent to be unambiguously prospective . . . there is, for *Chevron* purposes, no ambiguity in such a statute for an agency to resolve.") (citing *Landgraf*, 511 U.S. at 264).

<sup>42</sup> See 556 U.S. 599, 613-619 (2009).

<sup>43</sup> See Section I.B.3, above.

5. EPA Certainly Has the Discretion to Exclude from § 108(b) Coverage Releases that May Have Occurred and Site Features that Came into Existence Prior to the Rules' Effective Date.

CERCLA § 108(b)(2) requires that the financial responsibility rules “protect against the level of risk which the President in his discretion believes is appropriate.” EPA clearly has the discretion and ought to exclude from coverage under § 108(b) releases that may have occurred and site features that came into existence prior to the rules' effective date, given: (i) an appropriate construction of § 108(b), as laid out above; (ii) concerns about the costs and benefits of the proposed rules, which are discussed in Section VII below; and (iii) EPA's ongoing ability to address releases that may already have occurred and site features that are already in existence (at currently active and idled facilities and otherwise) under CERCLA §§ 104, 106(a), 107 and 122. Indeed, EPA's discretion to exclude from § 108(b) coverage releases that may have occurred and site features that came into existence prior to the rules' effective date is akin to the discretion that EPA has already asserted to exclude from § 108(b) coverage “owners or operators of past hardrock mining facilities.”<sup>44</sup>

II. APPLICATION OF THE PROPOSED RULES TO SITE FEATURES CERCLA LIABILITY FOR RELEASES FROM WHICH HAS BEEN PREVIOUSLY RESOLVED COULD BE UNLAWFUL.

Since the late 1980s, EPA has entered into numerous administrative orders on consent (“**AOCs**”) and judicial consent decrees (“**CDs**”) that resolve the liability of owners and operators for hazardous substance releases under CERCLA § 107. Many of these settlements include EPA covenants not to sue for the same releases, protections from cost contribution actions relating to the releases, fixed response action obligations for associated site features, and the establishment of financial instruments to assure the satisfaction of the response action obligations. In addition, since the late 1980s, there have been numerous unilateral judicial orders in cost recovery and contribution actions brought by non-federal parties under CERCLA §§ 107 and 113. These orders define the parties' obligations under CERCLA, with respect to the releases and site features at issue, with claims and issue preclusive effect.

Nowhere in the rulemaking does EPA address whether the financial responsibility requirements should apply at all to site features CERCLA liability for releases from which has already been defined in such AOC's, CDs or judicial orders. The proposed rules simply: (i) make the financial responsibility required under the rules available to satisfy requirements subsequently imposed in AOC's, CDs or judicial orders;<sup>45</sup> and (ii) allow the technical specifications of response actions that are imposed by AOC's, CDs

<sup>44</sup> See 82 Fed. Reg. at 3404/2.

<sup>45</sup> *Id.* at 3502/2.

or judicial orders to be offered as evidence that the criteria in proposed rule 320.63(d) are already being satisfied, at least to some extent, in support of a request to reduce the amount of financial responsibility that the owner or operator must demonstrate.<sup>46</sup> This is a material defect of the proposed rules.

If it is eventually determined that the proposed rules can lawfully apply to releases that may have occurred and site features that came into existence prior to the rules' effective date, then all site features CERCLA liability for releases from which has already been defined in AOCs, CDs or judicial orders, including ones that impose corresponding financial assurance obligations, must be totally exempt from the proposed rules' obligation to demonstrate financial responsibility, including the obligation to calculate financial responsibility under proposed rule 320.63. Otherwise, the rules' application or enforcement will eventually, or at least could potentially, violate the covenants and releases that are typical of such AOCs, CDs and orders.<sup>47</sup>

At a minimum, EPA's failure to address in the proposed rulemaking any of the concerns identified in this Section II violates EPA's duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule.<sup>48</sup> In order for EPA to address these concerns, it must do so in a proposed rulemaking. Otherwise the rulemaking will fail to comply with the due process requirements of the Administrative Procedure Act.<sup>49</sup>

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<sup>46</sup> 82 Fed. Reg. at 3505/3.

<sup>47</sup> Asarco reserves the right to challenge the proposed rules' application to any site features, including, without limitation, site features that are addressed by the AOC for the Asarco Hayden Plant Site (EPA Docket No. CERCLA-2008-13). Asarco also reserves the right to assert in any proceeding that CERCLA liability for certain releases and site features was discharged in bankruptcy, and that application of the proposed rules to those releases and site features would violate the Bankruptcy Code. This includes, without limitation, the alleged natural resource damages liability that was addressed by the Settlement Agreement Regarding Natural Resource Damage Claims for Mineral Creek, the Gila River and the San Pedro River, Arizona (U.S. Bankruptcy Court for the Southern District of Texas, Corpus Christi Division, Case No. 05-21207).

<sup>48</sup> See footnote 3. EPA's inclusion of Asarco facilities and other facilities within Appendix A of its December 1, 2016 Regulatory Impact Analysis and in other assessments concerning the rulemaking without regard to the concerns identified in Section II also constitutes a failure to examine key assumptions.

<sup>49</sup> See footnote 4.



**III. THE PROPOSED RULES WOULD INAPPROPRIATELY IMPOSE CERCLA FINANCIAL RESPONSIBILITY REQUIREMENTS FOR SITE FEATURES RELEASES FROM WHICH ARE FEDERALLY PERMITTED OR GOVERNED BY LABOR LAWS.**

As explained in Section I, above, the proposed rulemaking is based materially on EPA's conclusion that the purpose of the § 108(b) rules is to impose financial responsibility for potential liability under § 107(a), in the manner of § 108(a)(1). If that is so, then the rules cannot lawfully impose financial responsibility for releases for which there is no potential liability under § 107(a).

- CERCLA § 107(j) states that “[r]ecovery by any person (including the United States or any State . . .) for response costs or damages resulting from federally permitted releases shall be pursuant to existing law in lieu of this section.”<sup>50</sup> Therefore, provisions should be added to the proposed rules to the effect that: (i) any site feature from which the only releases of hazardous substances that can occur are federally permitted releases must be excluded from the obligation to demonstrate financial responsibility; and (ii) federally permitted releases that may occur from any site feature must be excluded from the calculation of financial responsibility for that site feature, under proposed rule 320.63. These provisions should, at a minimum, concern financial responsibility calculated for response costs and natural resource damages, if not also financial responsibility calculated for health assessment costs. In addition, the proposed rules should be revised to the extent that they are otherwise inconsistent with § 107(j) or Congress' intentions regarding § 107(j). Otherwise, the rules would require financial responsibility in relation to releases for which there can be no liability under § 107, in contradiction of EPA's conclusion regarding the purpose of the § 108(b) rules.

- CERCLA § 101(22)(A) and 40 C.F.R. § 300.5 also exclude from the definition of “release” and § 107 liability releases of hazardous substances that pose risks only to workers and invitees in a work place, whenever such risks are governed by MSHA, OSHA or worker compensation laws.<sup>51</sup> Therefore, provisions should be added

<sup>50</sup> CERCLA § 101(10) defines “federally permitted releases” to include discharges in compliance with a PDES permit, certain discharges in compliance with a RCRA permit, any injections of fluids underground that are authorized by a UIC permit, emissions into the air subject to a CAA Title V permit or a NSPS or NESHAP requirement, and certain introductions of pollutants into publicly owned treatment works in accordance with applicable pretreatment program requirements. This definition applies both to federal permit programs and delegated state or tribal programs. See, e.g., *Blankenship v. Consol. Coal Co.*, 850 F.3d 630, 638 (4th Cir. 2017).

<sup>51</sup> See *Covalt v. Carey Canada, Inc.*, 860 F.2d at 1437 (7th Cir. 1988) (“Nothing in either the 1986 amendments [of CERCLA] or their legislative history hints that EPA is to muscle in on the territory of the Department of Labor, which administers programs dealing with workplace safety.”); *id.* at 1437 (stating CERCLA “does not regulate .. the levels of toxic substances permitted at work (the subject of the Occupational Safety and Health Act)”); *Barnes v. Koppers, Inc.*, 534 F.3d at 364 (5th Cir. 2008) (citing

to the proposed rules to the effect that: (i) any site feature from which the only releases of hazardous substances that can occur are releases that pose risks to workers and invitees in the work place must be excluded from the obligation to demonstrate financial responsibility, when the risks are governed by MSHA, OSHA or worker compensation laws; and (ii) releases must be excluded from the calculation of financial responsibility under proposed rule 320.63 to the extent that the risks from the releases are governed by MSHA, OSHA or work compensation laws. These provisions should, at a minimum, concern financial responsibility calculated for response costs and natural resource damages, if not also financial responsibility calculated for health assessment costs. In addition, the proposed rules should be revised to the extent that they are otherwise inconsistent with § 101(22)(A) and 40 C.F.R. § 300.5. Otherwise, the rules would require financial responsibility in relation to releases for which there can be no liability under § 107, in contradiction of EPA's conclusion regarding the purpose of the § 108(b) rules.

- EPA should review the historic response costs, estimates and other data used to derive the proposed rules' financial responsibility formula in order to ensure that they did not include response costs, natural resource damages or health assessment costs associated with federally permitted releases or releases risks from which are governed by MSHA, OSHA or worker compensation laws. This possibility would be presented by settlements that resolved § 107 liability but where the parties agreed to disagree on whether the settlements concerned releases that were federally permitted or governed by MSHA, OSHA or worker compensation laws or the respondent did not admit to § 107 liability for releases that it contended were federally permitted or governed by MSHA, OSHA or worker compensation laws. If such costs were included in the data used to derive the proposed financial responsibility formula, then the financial responsibility formula should be derived anew in a manner that does not incorporate those costs.<sup>52</sup>

The proposed rulemaking does not address the concerns discussed in this Section III. EPA should address these concerns in a notice of proposed rulemaking, so that the public has an opportunity to comprehend EPA's positions on them and then comment on those positions in an informed manner. Otherwise the rulemaking will fail to comply with the due process requirements of the Administrative Procedure Act.<sup>53</sup>

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*Covalt* for the proposition that "CERCLA has defined limits" which do not extend to regulation of the levels of toxic substances permitted in the workplace).

<sup>52</sup> See 58 Fed. Reg. 49200, 49204 (September 22, 1993) ("For '[f]ederally-permitted releases,' as defined in NCP, § 300.5 (1990 ed.) and CERCLA section 101(10), the government has specifically identified the types and levels of hazardous substances that may safely and appropriately be released") (emphasis added).

<sup>53</sup> See footnotes 3 and 4.

#### **IV. EPA HAS WRONGLY CONCLUDED THAT THE PROPOSED RULES HAVE NO FEDERALISM IMPLICATIONS.**

The proposed rulemaking states that “EPA does not believe that CERCLA § 114(d) gives a preemptive effect to EPA’s CERCLA § 108(b) financial responsibility regulations over state reclamation bonding requirements.”<sup>54</sup> EPA bases this belief on three considerations, which according to EPA indicate that § 114(d)’s preemption of state financial assurance rules is not triggered by EPA’s proposed § 108(b) rules.<sup>55</sup> EPA concludes that the rulemaking, therefore, has no federalism implications.<sup>56</sup> EPA should reconsider its analysis.

▪ EPA states that §§ 108(b) and 114 “are expressly focused on hazardous substances” and the “risks they present” if released to the environment, whereas “many state reclamation bonding regimes” that apply to hardrock mining facilities “are not similarly limited to CERCLA hazardous substances or their releases.”<sup>57</sup> EPA points for example to New Mexico, California, Colorado, Idaho and other state financial assurance requirements for hardrock mining facilities that are geared to reclamation, including revegetation, of mine-disturbed areas.<sup>58</sup> However, the analysis that underlies these statements is materially incomplete. Arizona’s aquifer protection permit (“**APP**”) program includes financial assurance requirements that govern all hardrock mining facilities within the State and are expressly focused on hazardous substances—including explicitly CERCLA hazardous substances—and the risks they present if released to the environment.<sup>59</sup> The proposed rulemaking does not discuss these APP requirements. If the rules are promulgated without addressing these requirements, then an APP-regulated hardrock mining facility that establishes evidence of financial responsibility in accordance with the proposed Part 320 rules would be immediately relieved of the obligation to maintain existing financial assurance instruments under the APP program and the State would be preempted from enforcing them.

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<sup>54</sup> 82 Fed. Reg. at 3484/2.

<sup>55</sup> *Id.* at 3403-3404.

<sup>56</sup> *Id.* at 3484/1.

<sup>57</sup> *Id.* at 3403/2.

<sup>58</sup> See *id.* at 3403/2-3. Notably, the “[f]irst” and “[t]hird” considerations on page 3403 of the proposed rulemaking are actually the same consideration: state reclamation rules may not be limited to hazardous substances or their releases precisely because they serve regulatory purposes that are different from the rules required under CERCLA § 108(b). On the other hand, it may be that the proposed Subpart H rules stray into reclamation territory outside the authority of § 108(b).

<sup>59</sup> See A.R.S. § 49-243(N); A.A.C. R18-9-A203; see also A.R.S. § 49-201 (definitions of “discharge,” “pollutant” and “hazardous substance”); see generally A.R.S. §§ 49-241 through 49-252; A.A.C. R18-9-101, R18-9-A201 through R18-9-A214. The APP program is discussed further in Section V.A, below.

▪ EPA states that the clause in § 114(d), “[e]xcept as provided in this subchapter [sic],” “logically encompasses” the limitation on preemption in § 114(a), which provides “[n]othing in this chapter shall be construed or interpreted as preempting any State from imposing additional liability or requirements with respect to the release of hazardous substances within such State.”<sup>60</sup> From this, EPA concludes that Congress must have intended the preemptive effect of subsection (d) to be “minimized.”<sup>61</sup> This intention, according to EPA, “naturally preserve[s] state mine bonding requirements ‘as additional requirements’ to the extent that they may also address the release of hazardous substances.”<sup>62</sup> This view of § 114 is incorrect. If subsection (a) truly affects the interpretation of subsection (d), then the effect is as literally stated in subsection (a), which is that no preemption occurs, which reads subsection (d) out of existence. Subsection (a) does not give EPA *carte blanche* to decide whether or how much preemption is allowed, in order to “minimize” subsection (d)’s preemptive effect. Subsection (a) either negates subsection (d) or it does not. The better interpretation of subsection (a) is that it refers to liability or requirements other than financial responsibility requirements. This interpretation preserves the preemptive effect of subsection (d).<sup>63</sup> Therefore, any application of the APP financial responsibility requirements discussed above cannot co-exist with an application of the proposed Part 320 financial responsibility requirements. Unless and until the owner/operator of a hardrock mining facility that is in compliance with both the proposed Part 320 requirements and existing APP requirements elects to apply, under proposed rule 320.63(c)-(d), for exemptions from having to calculate financial responsibility for components of EPA’s proposed financial responsibility formula and EPA accepts the application, the owner/operator will be relieved of the obligation to maintain its existing financial assurance instruments under the APP program and Arizona will be preempted from enforcing them.<sup>64</sup>

▪ EPA states that “it makes sound policy sense for CERCLA § 114(d) to be read to allow” state financial assurance requirements and the proposed Part 320 requirements “in tandem.”<sup>65</sup> According to EPA, it cannot reasonably be expected to “write its national CERCLA § 108(b) requirements to simultaneously correspond to 50

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<sup>60</sup> 82 Fed. Reg. at 3403/2-3.

<sup>61</sup> *Id.* at 3403/3.

<sup>62</sup> *Id.*

<sup>63</sup> See *Freeman v. Quicken Loans, Inc.*, 566 U.S. 624, 635 (2012) (stating the canon against construing a statute in a manner that renders one of its provisions surplusage “favors that interpretation which avoids surplusage”).

<sup>64</sup> There is little doubt that the proposed rules, if promulgated, will give rise to actions for declaratory relief from the analogous state financial responsibility rules and state actions to enforce their rules.

<sup>65</sup> 82 Fed. Reg. at 3404/1.

different states' reclamation requirements.”<sup>66</sup> These statements are inapposite. A correct application of the rules of statutory construction compels a finding that APP financial responsibility requirements, at least, have the potential to be preempted when the proposed Part 320 rules are satisfied by owners/operators of hardrock mining facilities in Arizona.

▪ For an exemption application that a facility owner/operator files under proposed rule 320.63(c)-(d) to have any chance of success, the best management practices and best available demonstrated control technology (“**BMP/BADCT**”) requirements of the state within which the facility is located would have to be substantively the same as the criteria specified in proposed rule 320.63(d). Thus, states may reasonably feel coerced into revising their BMP/BADCT requirements in order to ensure that: (i) owners/operators of hardrock mining facilities within those states will have a chance of qualifying for exemptions under 320.63(c)-(d); and (ii) analogous financial responsibility requirements of the state will thereby not be preempted under § 114(d).<sup>67</sup>

In light of the forgoing, EPA should reconsider the federalism implications of the § 108(b) rules. EPA should do so in a proposed rulemaking in order to ensure that the final rule is a logical outgrowth of the analysis and reflects public comments on the analysis. Otherwise the rulemaking will fail to comply with the due process requirements of the Administrative Procedure Act.<sup>68</sup>

**V. THE PROPOSED FINANCIAL RESPONSIBILITY FORMULA IS INCONSISTENT WITH THE DEGREE AND DURATION OF RISK ASSOCIATED WITH MINING FACILITIES.**

According to EPA, because CERCLA § 108(b) provides only general direction on how to calculate financial responsibility (“**FR**”) amounts for classes of facilities, it confers upon EPA significant discretion regarding the methodology for deriving FR amounts for hardrock mining facilities.<sup>69</sup> EPA certainly has some discretion in developing an approach to FR. However, under § 108(b)(1), EPA must ensure that its selected approach results in an amount of FR being required that is “consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances” at a hardrock mining facility. The proposed rules fail to meet this requirement.

<sup>66</sup> 82 Fed. Reg. at 3404/1.

<sup>67</sup> The states' policymaking in response would be made extremely difficult by the fact that EPA's discretion whether to accept an exemption application is essentially standardless under the proposed rules.

<sup>68</sup> See footnotes 3 and 4.

<sup>69</sup> 82 Fed. Reg. at 3460/1.

**A. The Derivation of the Financial Responsibility Formula Should Have Given Greater Weight to Data from Modern, Well-Regulated Hardrock Mining Facilities.**

The derivation of the proposed baseline FR formula relied too heavily on actual or estimated response cost data<sup>70</sup> from poorly regulated, historic hardrock mining facilities. Today's mining facilities are well-regulated and designed and operated so as to minimize their potential to release hazardous substances into the environment. While EPA cannot escape the mandate at § 108(b)(2) to derive a FR formula that takes into account "the payment experience of the Fund . . . court settlements and judgments, and voluntary claims satisfaction," EPA may give more weight in deriving the formula to data from modern mining operations. EPA could do so as a function of calendar year or decade, a function of the advents of applicable regulatory regimes, or otherwise. Only by giving more weight to data from modern operations will EPA be able to satisfy its obligation, under § 108(b)(1), to ensure that the FR formula is "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances."

EPA itself "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."<sup>71</sup> One example of such current regulations is Arizona's comprehensive APP program, discussed in Section IV, above.

The APP program is a substantive groundwater protection permit program that goes far beyond anything required by federal law. An APP is required for all mine leaching operations, mine tailings storage facilities, surface impoundments, and injection wells, as well as any other activity that has a reasonable potential to result in hazardous substances reaching groundwater.<sup>72</sup>

In order to obtain an APP, the owner/operator of a hardrock mining facility must, to the satisfaction of the Arizona Department of Environmental Quality ("**ADEQ**"):

(1) Demonstrate that the facility will employ best available demonstrated control technology ("**BADCT**"), processes and operating methods to achieve the greatest possible degree of control of potential hazardous substance discharges;<sup>73</sup>

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<sup>70</sup> 82 Fed. Reg. at 3462/1.

<sup>71</sup> *Id.* at 3461/1.

<sup>72</sup> A.R.S. § 49-241(A)-(B).

<sup>73</sup> A.R.S. § 49-243(B)(1).



(2) Characterize the nature and extent of any existing soil contamination at the facility<sup>74</sup> and assess the potential of any discharge of hazardous substances at the facility to cause leaching of hazardous substances from surface soils or the vadose zone into the groundwater.<sup>75</sup>

(3) Establish points of compliance with applicable groundwater quality standards, which are presumptively set at the edge of the pollutant management area (the area within which hazardous substances may be located under the mine's operating plan);<sup>76</sup>

(4) Prepare a groundwater pollutant fate and transport model that defines and characterizes the potential extent of hazardous substance migration as the result of any discharge from the facility;<sup>77</sup>

(5) Demonstrate that any hazardous substance discharge that may occur will not cause or contribute to violations of applicable groundwater quality standards at the points of compliance (or, if such standards are already exceeded due to background water quality, that there will be no further degradation of water quality at the points of compliance);<sup>78</sup>

(6) Demonstrate that it has the technical capability to comply with the permit's terms and conditions;<sup>79</sup>

(7) Develop a closure plan for the facility and demonstrate that it has the financial capability to comply with the permit's terms and conditions, including financial assurance of the closure plan's implementation;<sup>80</sup>

(8) Conduct groundwater monitoring at the points of compliance to ensure that applicable groundwater quality standards are not exceeded;<sup>81</sup>

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<sup>74</sup> At the permittee's request, ADEQ may include within the APP a requirement to perform remedial action under the Water Quality Assurance Revolving Fund statutes, which are Arizona's analogue of CERCLA, or Arizona's corresponding Voluntary Remediation Program. A.R.S. § 49-243(L).

<sup>75</sup> A.A.C. R18-9-A202(A)(8)(b)(vii)-(viii).

<sup>76</sup> A.R.S. § 49-244; A.A.C. R18-9-A202(A)(6).

<sup>77</sup> A.R.S. § 49-243(A)(4); A.A.C. R18-9-A202(A)(8).

<sup>78</sup> A.R.S. § 49-243(B)(2)-(3).

<sup>79</sup> A.R.S. § 49-243(N)(1).

<sup>80</sup> A.R.S. § 49-243(K) & (N); A.A.C. R18-9-A202(A)(10); A.A.C. R18-9-A203.

<sup>81</sup> A.R.S. § 49-243(K); A.A.C. R18-9-A205 & R18-9-A206.

(9) Conduct groundwater monitoring at the points of compliance or at points hydraulically upgradient of the points of compliance to ensure that alert levels are not exceeded (alert levels are more stringent than applicable groundwater quality standards and are included in the permit to provide an early warning of possible exceedances of groundwater quality standards at the points of compliance);<sup>82</sup>

(10) Report monitoring results routinely to ADEQ;<sup>83</sup>

(11) Implement contingency actions, including source control or remediation, in the event that an applicable alert level or groundwater quality standard is exceeded; if another permit condition is violated; or if a discharge results in imminent and substantial endangerment of public health or the environment;<sup>84</sup> and

(12) If clean closure of the facility (defined as eliminating to the greatest degree practicable any reasonable probability of a discharge occurring from the facility and of exceeding applicable groundwater quality standards at any points of compliance) cannot be achieved, develop a post-closure plan and establish financial assurance of the post-closure plan's implementation.<sup>85</sup>

Furthermore, ADEQ has developed the Arizona Mining BADCT Guidance Manual which specifies which technologies for the control of releases of hazardous substances constitute best available demonstrated control technology ("**BADCT Manual**").<sup>86</sup> The BADCT Manual applies to design and operation of all aspects of hardrock mining facilities and provides risk-reducing criteria for site selection, geology, stability, materials characterization, closure and post-closure, and surface water control. ADEQ utilizes the BADCT Manual in developing the terms and conditions of APPs issued to all hardrock mining facilities.

The comprehensive nature of the APP rules and BADCT Manual illustrates the scope and breadth of the APP program as applied to the potential for hazardous substance releases at hardrock mining facilities in Arizona. And yet, the preamble to the proposed rulemaking makes absolutely no mention of the APP program or BADCT Manual. At a minimum, the derivation of the FR formula should be revised to give greater weight to data from sites that included hardrock mining facilities regulated under

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<sup>82</sup> A.R.S. § 49-243(K); A.A.C. R18-9-A205 & R18-9-A206.

<sup>83</sup> A.R.S. § 49-243(K); A.A.C. R18-9-A207.

<sup>84</sup> A.R.S. § 49-243(K); A.A.C. R18-9-A204.

<sup>85</sup> A.R.S. § 49-243(K) & (N); A.A.C. R18-9-A202(A)(10); A.A.C. R18-9-A203).

<sup>86</sup> <http://legacy.azdeq.gov/environ/water/wastewater/download/badctmanual.pdf>.

such modern regulatory programs.<sup>87</sup> Otherwise, the rulemaking will fail to satisfy the requirement of CERCLA § 108(b)(1) to ensure that the FR formula is “consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.”

In the alternative, EPA should adopt the program deferral approach discussed in the preamble to the proposed rulemaking;<sup>88</sup> amend the proposed rules to include authority for EPA to engage in a determination of whether a state’s regulatory program includes criteria that are substantially equivalent to those that are ultimately promulgated at 320.63(d); and thereafter, based on such a determination, exempt from the ambit of the Part 320 rules all hardrock mining facilities in Arizona that are regulated under the APP program.

**B. EPA’s Exclusion of “No Action,” “Alternative Drinking Water,” and “Monitored Natural Attenuation” Remedies from the Data Used to Derive the Financial Responsibility Formula Was Inappropriate.**

The proposed rulemaking states that EPA excluded from the derivation of the FR formula three of the twelve historic remedy types: “No action,” “Alternative drinking water,” and “Monitored natural attenuation.”<sup>89</sup> EPA’s justification in favor of the exclusion is that EPA was concerned that including these remedy types “could have the effect of producing an inadequate amount of financial responsibility for those sites where engineered controls [are] necessary.”<sup>90</sup> EPA states that this is a “conservative assumption to help ensure the adequacy of the amount of financial responsibility should engineering controls prove necessary.”<sup>91</sup> This is an understatement.

The exclusion of these three historic remedy types from the derivation of the FR formula is over-conservative: it skews the amount of FR that would be calculated under the rules away from an amount that would be “consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances” and moreover fails to satisfy the requirement, under CERCLA § 108(b)(2), that the “level of financial responsibility” be materially based “on the payment experience of the Fund . . . court settlements and judgments, and voluntary

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<sup>87</sup> EPA’s failure to give sufficient weight to Arizona’s APP regulations, in particular, belies EPA’s assertion that the proposed FR formula “is designed to reflect . . . reductions in risk that may result from compliance with other regulatory requirements.” 82 Fed. Reg. at 3400-3401.

<sup>88</sup> *Id.* at 3468-69.

<sup>89</sup> *Id.* at 3462/1.

<sup>90</sup> *Id.* at 3462/1-2.

<sup>91</sup> *Id.* at 3462/2.

claims satisfaction.” A worst-case formula which assumes that every feature of a hardrock mining facility requires an engineered response fails to satisfy the rulemaking mandate of § 108(b).

**C. Certain Data that Were Used to Derive Some of the Components of the Financial Responsibility Formula Should Not Have Been Used and Other Data that Should Have Been Used Were Omitted.**

On a site feature-by-site feature basis, the proposed baseline FR formula was derived using data that should not have been included in the derivation and excluded data that should have been included in the derivation.

- Open Pit Category. The derivation of the component of the proposed formula that would be used to estimate FR for open pits included a data point that is not representative of typical reclamation or response costs for open pits: almost \$223 million which was estimated or expended to backfill the open pit at the Phoenix Historic mine in Nevada.<sup>92</sup> Backfilling is practically never used to reclaim or remediate open pits. Attachment 1 to these comments depicts the overestimation of response costs for open pits that results from the inclusion of this data point in the derivation of the open pit component of the formula. Moreover, backfilling is disfavored when the open pit serves as a hydrologic sink, which is often the case, since the backfilling could reverse the groundwater’s hydraulic gradient away from the pit.

- Waste Rock Category. The derivation of the component of the proposed formula that would be used to estimate FR for waste rock piles includes data points that are not representative of typical reclamation or response costs for waste rock piles: over \$110 million that was expended to recontour and revegetate the waste rock piles at the Chino mine in New Mexico; over \$107 million that was estimated or expended to recontour and revegetate the waste rock piles at the Tyrone mine in New Mexico; and over \$70 million that was estimated or expended for source controls for the waste rock piles at the Phoenix Historic mine in Nevada.<sup>93</sup> Such costly revegetation is practically never employed in the reclamation of waste rock piles. Attachment 2 to these comments depicts the overestimation of response costs for waste rock piles that results from the inclusion of these data points in the derivation of the waste rock component of the formula. Moreover, the inclusion of revegetation data in the derivation is highly questionable and likely inappropriate. Revegetation is not typically a part of a CERCLA response action. The propagation of revegetation is driven by concerns for aesthetic values, slope stability and erosion control rather than to address historic or potential

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<sup>92</sup> “CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document—Peer Review Draft” (September 19, 2016) (“**Formula Background Document**”), at G-3.

<sup>93</sup> Formula Background Document at G-7.

releases of hazardous substances. This points to an underlying inconsistency in the proposed rulemaking. On the one hand, EPA has concluded that the rulemaking does not have federalism implications in large part because its focus, which is hazardous substance releases, is materially different from the focus of state reclamation bonding requirements (discussed in Section IV, above). On the other hand, EPA has relied substantially on historic reclamation costs or cost estimates to derive the financial responsibility formula. This inconsistency is a fundamental flaw of the rulemaking. EPA should not have used, or relied so heavily on, reclamation cost data that have little or no relevance to the remediation or control of hazardous substance releases, in its development of site-feature components of the proposed FR formula.

- Slag Category. The derivation of the component of the proposed formula that would be used to estimate FR for slag is based on a single data point: the capital cost associated with the closed slag pile at the Chino mine in New Mexico, resulting in a \$64,000 per acre cost estimate for slag piles.<sup>94</sup> This estimate was based on a 2007 closure document.<sup>95</sup> However, page 74 of that closure document states that “[t]est results indicate that the slag does not leach constituents above [New Mexico Water Quality Control Commission] criteria. Tests on soil samples and tuff bedrock indicate metals associated with the slag were not leached to the native materials.”<sup>96</sup> Thus, the capital cost that EPA used as the single data point for estimating slag response costs is not related to the risk of a hazardous substance release. If EPA adopts final rules that are based on this data point, then the rules will violate § 108(b)(1)’s requirement that they be “consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.” Moreover, as a general matter, slag is a glass-like material that is not readily prone to leaching or otherwise releasing hazardous substances into the environment or posing a meaningful risk to human health or the environment. The rulemaking docket is devoid of any data that indicate the contrary.

- Solid and Hazardous Waste Disposal Category. The proposed FR formula includes \$2.6 million for the disposal of solid and hazardous waste.<sup>97</sup> Solid waste *per se* is not a concern of CERCLA and does not necessarily entail a risk of hazardous substances. Therefore, to the extent that the proposed formula was derived using solid waste disposal cost data, its promulgation in final rules would violate § 108(b)(1)’s requirement that the rules be “consistent with the degree and duration of risk associated

<sup>94</sup> Formula Background Document at 3-17, 4-15..

<sup>95</sup> Formula Background Document at 3-17 (citing a document found at [https://www.epa.gov/sites/production/files/2015-07/documents/fs\\_silver\\_city\\_nm.pdf](https://www.epa.gov/sites/production/files/2015-07/documents/fs_silver_city_nm.pdf) ).

<sup>96</sup> [http://www.emnrd.state.nm.us/mmd/marp/permits/documents/GR009RE\\_20081121\\_Chino-ClosureCloseoutPlan-08282007.pdf](http://www.emnrd.state.nm.us/mmd/marp/permits/documents/GR009RE_20081121_Chino-ClosureCloseoutPlan-08282007.pdf).

<sup>97</sup> 82 Fed. Reg. at 3505/1; *see also id.* at 3508/3.

with the production, transportation, treatment, storage, or disposal of hazardous substances.” Moreover, the response subcategories of solution removal, building decontamination, and haulage and disposal that informed the derivation of this component of the FR formula were undertaken at only a small number of the sites that EPA canvassed (less than 1.6%, 7.6%, and 11% of the total, respectively).<sup>98</sup> Of the 66 sites that EPA evaluated, the most common of the six response subcategories that informed the derivation of this component of the formula were undertaken at only twenty sites (less than 1/3 of the total). Yet the formula assumes that all of these costs will be required for every hardrock mining facility. This would constitute another failure to satisfy § 108(b)(1)’s requirement that the rules be “consistent with the degree and duration of risk . . .”

- Water Treatment Category. In deriving the proposed FR formula, EPA assumed that water treatment would be required at every hardrock mining facility.<sup>99</sup> This is an unreasonably conservative assumption since many hardrock mining facilities never require water treatment. Moreover, EPA assumes that 5% of water falling on a site feature will require treatment, based on the average percolation rate through cover at facilities evaluated in the Alternative Cover Assessment Program (“**ACAP**”).<sup>100</sup> This overstates volumes of water potentially requiring treatment for three reasons: (i) the ACAP data include only one site from the arid Southwest (Apple Valley, CA),<sup>101</sup> which skews the formula’s “one size fits all” percolation rate to one that is substantially greater than the rates that actually prevail in the arid Southwest; (ii) water that percolates through cover may yet be trapped in the tailings and waste rock and never pass through those features to a point where it may require treatment; and (iii) water that percolates through tailings typically does not require treatment. EPA should consider revising the portion of the formula that relates to water treatment to take these factors into account.

- Natural Resource Damages. In the proposed rulemaking, EPA solicits comments on whether it would be appropriate to use, in the derivation of this component of the FR formula, the median of natural resource damage (“**NRD**”) settlements at the twenty-four sites of record, rather than the average cost that is reflected in the proposed formula. This would entail a calculation of NRD that is 3.8% of responses costs rather than 13.4%.<sup>102</sup> Without affecting the balance of Asarco’s comments, Asarco believes that using the median would: (i) minimize somewhat the effect of large NRD settlements that would appear to be statistical outliers; and (ii) result

<sup>98</sup> Formula Background Document at 4-15, Table 4-6.

<sup>99</sup> Formula Background Document at 7-2.

<sup>100</sup> [https://clu-in.org/conf/tio/mining\\_052015/slides/Albright\\_Day\\_Two.pdf](https://clu-in.org/conf/tio/mining_052015/slides/Albright_Day_Two.pdf).

<sup>101</sup> [https://clu-in.org/conf/tio/mining\\_052015/slides/Albright\\_Day\\_Two.pdf](https://clu-in.org/conf/tio/mining_052015/slides/Albright_Day_Two.pdf), at 11.

<sup>102</sup> 82 Fed. Reg. at 3465/2.



in a formula component for NRD that is somewhat more representative of NRD achieved at most CERCLA sites. That said, using the median would not eliminate the problem that the component of the FR formula that would be used to estimate FR for NRD grossly overstates what NRD could potentially be for hardrock mining facilities. By way of example, Asarco settled NRD claims related to Asarco's Ray Operations and Hayden Operations for \$4 million plus transfer by quit claim deed to the Arizona's Game and Fish Department of three properties valued at over \$3 million.<sup>103</sup> This covered alleged releases occurring over 100 years of operations, most of which occurred absent the kind of regulatory regimes that today govern hardrock mining facilities. By contrast, for Ray alone, EPA's proposed formula would require FR for NRD of roughly \$59 million if the 13.4% multiplier is used, or roughly \$16.7 million if the 3.8% multiplier is used.<sup>104</sup> Finally, there were several sites that EPA canvassed in the development of this component of the FR formula for which no NRD were assessed.<sup>105</sup> EPA should have included these in the derivation of this component of the formula.

- Definition of "Disturbed Acreage." The definition in proposed 320.62 of "disturbed acreage/acres" effectively encompasses acreage for stormwater diversions, roads and overburden that are not included in one of the site feature categories that make up the FR formula and, moreover, do not tend to be correlated with risk associated with hazardous substances. This acreage nonetheless appears to be included in the calculation of baseline FR amounts for the short and long term O&M and drainage categories.<sup>106</sup> This would be outside of EPA's authority under § 108(b).

**D. The Financial Responsibility Formula Fails to Adequately Distinguish Site Features that Pose Greater Risk from Site Features within the Same Category that Pose Lesser or No Significant Risk.**

In deriving the FR formula, EPA has assumed that all site features within the same category (e.g., all waste rock piles) pose the same degree of risk to the environment. This is not actually the case. A waste rock pile that does not contain acid-generating material does not pose the same degree of risk as a waste rock pile that

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<sup>103</sup> Settlement Agreement Regarding Natural Resource Damage Claims for Mineral Creek, the Gila River and the San Pedro River, Arizona (U.S. Bankruptcy Court for the Southern District of Texas, Corpus Christi Division, Case No. 05-21207). For the reasons stated in Section II, above, all site features CERCLA liability for releases from which has already been defined in AOCs, CDs or judicial orders must be totally exempt from the proposed rules' obligation to demonstrate FR.

<sup>104</sup> "Regulatory Impact Analysis of Financial Responsibility Requirements under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry Proposed Rule" (December 1, 2016) ("Regulatory Impacts Analysis" or "RIA"), Exhibit B-9.

<sup>105</sup> Formula Background Document at 5-2, 5-3.

<sup>106</sup> See proposed rule 320.63(b)(1)(ix), (x) and (xii).

does. Also, an acid-generating waste rock pile that sits atop a geological outcrop composed of limestone does not pose the same degree of risk as an acid-generating waste rock pile that sits atop glacial till. The FR formula should be revised to provide for the input of site-specific factors such as these. It would not be difficult to identify factors that might, in general, lead to higher or lower risk potential associated with a particular hardrock mining operation. Such factors could include: the acid-generating potential of the site feature; the geological outcrop or manufactured base on which the site feature lies; depth to groundwater; proximity to surface waters; net precipitation; whether toxic impurities are present in relatively high concentrations in the ore that is being mined at the facility; whether physical processes only are used in milling; what types of chemicals are used in leaching; etc.

At a minimum, proposed rule 320.63 should be revised to exempt from the requirement to calculate FR any site feature that meets the applicable performance criteria, even though other site features in the same category do not. Otherwise, the rules will be *ultra vires* of EPA's authority under CERCLA § 108(b)(1).

**E. The Degree to Which the Financial Responsibility Formula Emphasizes a Site Feature's Acreage is Inappropriate.**

The FR formula that EPA has developed largely ends with acreage as the critical factor in determining the financial responsibility amount for each site feature. If all site features posed exactly the same type of risk, then this approach might be reasonable. However, not all site features pose the same risk. Reliance on footprint as an indicator of environmental risk does not satisfy § 108(b)(1)'s mandate that the FR formula be "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances."

■ As an example of the illogical results of the proposed formula, EPA estimated that Asarco's Mission Mine would require \$710 million in FR, even after assumed reductions under 320.63(c)-(d).<sup>107</sup> This exorbitant figure was arrived at despite the fact that Mission: (i) has no leach dumps; (ii) utilizes a milling process based only on physical separation; (iii) has demonstrated to ADEQ's satisfaction that its waste rock is inert (would not leach substances exceeding drinking water standards);<sup>108</sup> (iv) has a depth to groundwater of over 200 feet below ground surface (with depths of as much as 400 feet in some places); and (v) has a 2015 approved jurisdictional determination from the Corps of Engineers<sup>109</sup> verifying that there are no regulated waters of the United States adjacent to the mine. But because it is a large facility in

<sup>107</sup> RIA, Exhibit B-9.

<sup>108</sup> See Attachment 3 to these comments.

<sup>109</sup> SPL-2015-005250-MWL.

terms of acres, it has the second largest estimated required FR of the 49 sites that EPA modeled in the Regulatory Impact Analysis.

- Past regulatory experience at the Mission Mine provides a good gauge of how inflated the FR required by the proposed rules would be. Asarco successfully closed and reclaimed three tailings storage facilities on the San Xavier District of the Tohono O'odham Nation reservation at a cost of roughly \$10,000 per acre. This included a 12-inch cover of topsoil and revegetation and 12 to 18 inches of inert material cover on the sides of the facilities. By contrast, using the acreage-based methodology of the proposed FR formula would yield a FR obligation for the three tailings storage facilities of roughly \$31,000 per acre (before adding operation and maintenance, oversight, and natural resource damage multipliers according to the proposed rules).<sup>110</sup>

- Past regulatory experience at Asarco's Ray Operations provides another gauge of how inflated the FR required by the proposed rules would be. For the Ray Operations, EPA used the proposed formula to estimate that the closure of the waste rock piles would cost roughly \$38,000 per acre and that the closure of the tailings storage facilities would cost roughly \$31,000 per acre.<sup>111</sup> In contrast, closure and post-closure costs that have already been approved under the APP program for these site features would be \$3,707 per acre and \$15,881 per acre, respectively. As explained in Section V.A, above, the APP closure costs are based on site-specific demonstrations that have been approved by ADEQ according to the APP rules and BADCT Manual which go far beyond anything required by federal law.

- The Asarco bankruptcy provides another gauge of how inflated the FR required by the proposed rules would be. For the two Asarco mines where EPA itself estimated FR, it concluded that roughly \$1.425 billion in FR is required.<sup>112</sup> These are operating facilities that are governed by numerous stringent environmental permits. In the bankruptcy, Asarco resolved CERCLA and other claims for cleanup, restoration and NRD at more than 80 sites in nineteen states for approximately \$1.79 billion.<sup>113</sup> Most of the sites in question were historic sites that were built and operated for much if not all of their existence with little or no environmental regulation. To suggest that two operating, well-regulated sites should have FR that is similar in magnitude to 80 historic sites that had little or no regulation for the bulk of their existence is strong evidence that the proposed formula is generating highly inflated estimates in violation of § 108(b)(1).

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<sup>110</sup> RIA, Exhibit B-3.

<sup>111</sup> RIA, Exhibits B-3 and B-7.

<sup>112</sup> RIA, Exhibit B-9.

<sup>113</sup> See <https://www.epa.gov/enforcement/case-summary-asarco-2009-bankruptcy-settlement>.

**F. The Statistical Analyses Used to Derive the Financial Responsibility Formula was Materially Flawed.**

The statistical analyses that EPA performed to determine the proposed rules' correlation between the acreage and other aspects of a given site feature category and the FR amount that would presumptively need to be demonstrated for that category suffer from several flaws. These flaws take the proposed rules further beyond the four corners of CERCLA § 108(b).

- Outliers. Data points greater than 1.5 to 3.0 times the interquartile range should, as a rule, be excluded from regression analysis. Such data points are properly considered outliers. The data sets that EPA used to arrive at correlated FR amounts for most of the site feature categories included data points greater (and, in many cases, substantially greater) than 1.5-3.0 times the interquartile range. This has resulted in proposed, presumptively required FR for site feature categories that are inappropriately inflated. For instance, had the data set that EPA used for the open pit category excluded outliers which EPA did not exclude, the resulting presumptively required FR for that category would have been over 400% less than proposed. Such statistical methods and results: (i) are arbitrary and capricious; (ii) fail to satisfy the requirement of § 108(b)(1) that the rules be "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances; and (iii) fail to satisfy the requirement of § 108(b)(2) that the level of FR required by the rules be "based on the payment experience of the Fund . . . court settlements and judgments, and voluntary claims satisfaction."

- Assumption of Lognormality. EPA's regression analysis assumed that the data sets used to arrive at correlated FR amounts for the site feature categories were lognormally distributed. The proposed rulemaking fails to justify this assumption. This failure violates EPA's duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule.<sup>114</sup> This failure is especially troubling given that the assumption of lognormality inflates, and in some cases vastly inflates, the amount of the presumptively required FR. For instance, had the data set that EPA used for the drainage category not been assumed to be lognormally distributed, the resulting presumptively required FR for that category would have been over 900% less than proposed.

- Exclusion of Zero Data Points. It is uncertain from the proposed rulemaking how EPA incorporated data on source control costs in the regression analyses. The proposed rulemaking is vague about what activities or structures were deemed to constitute source controls. This violates EPA's duty to examine key

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<sup>114</sup> See footnote 3.

assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule.<sup>115</sup> That said, it appears that EPA's regression analyses for the open pit, waste rock, heap leach and tailings categories excluded from their associated data sets any zero values that reflected the absence of source controls among the historic data that EPA considered. This methodology would: (i) be arbitrary and capricious; and (ii) fail to satisfy the requirement of § 108(b)(2) that the level of FR required by the rules be "based on the payment experience of the Fund . . . court settlements and judgments, and voluntary claims satisfaction."

**G. The Proposed Financial Responsibility Formula Needs to Be Validated Against Real World Experience.**

The proposed rulemaking solicits comment on whether EPA should attempt to validate the proposed baseline FR formula by running it for CERCLA sites that have incurred costs across all site features.<sup>116</sup> This would be a reasonable way to assess the validity of the formula and is, moreover, surely a requirement of CERCLA § 108(b)(2). Asarco is confident that such an exercise would show that the currently proposed formula greatly overestimates response costs, even at historic sites.

Asarco also believes that EPA should attempt to validate the formula on a feature-specific level. For example, for a CERCLA site involving only tailings, EPA should run the formula component for tailings to compare the costs projected by the formula to the actual costs incurred. Responsible parties may be able to provide cost data to supplement that available to EPA.

This exercise would be particularly important because EPA estimates historic response costs of \$12.9 billion at 243 mining and mineral processing sites.<sup>117</sup> This equates to roughly \$53 million per site. EPA further estimates that 117 of these sites accounted for roughly \$12 billion in response costs. This equates to roughly \$103 million per site, presumably representing the more significant sites. The amount of FR calculated by EPA for two Asarco sites (over \$700 million each) dwarfs these historic costs, despite modern mining practices that reduce risk. This suggests that the formula is generating FR amounts that are significantly greater than those authorized by CERCLA § 108(b).

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<sup>115</sup> See footnote 3.

<sup>116</sup> 82 Fed. Reg. at 3466/3.

<sup>117</sup> *Id.* at 3479/1.

**H. The Proposed Rules Need to Allow for Site-Specific Inputs into the Financial Responsibility Formula.**

EPA acknowledges that a site-specific approach to determining FR would be the “most precise” way to determine FR amounts but rejects the approach because it would be the “most resource intensive to implement.”<sup>118</sup> That said, EPA solicits comments on how a site-specific approach might be developed “in situations where there has been no remedy decision.”<sup>119</sup>

EPA’s concern to avoid taxing its resources is no justification for imposing a FR formula that, due materially to its lack of site-specific inputs, is prone to overestimating response costs to the degree that it does and imposing thereby on the hardrock mining industry the requirement to secure, at significant (if not debilitating) cost, tens or hundreds of millions of dollars in financial assurance that is demonstrably unnecessary to satisfy the requirements of CERCLA § 108(b) (see, e.g., Section V.E, above). Moreover, EPA’s solicitation of comments on how a site-specific approach might be developed is blind to the examples of site-specific approaches that already exist under other federal programs (e.g., 43 C.F.R. Subpart 3809 with respect to reclamation) and state programs (e.g., Arizona’s APP program). EPA should have made a better effort to assess, if not incorporate, the site-specific approach of such programs in the rulemaking rather than put forward the “one-size-fits-all” approach of the baseline FR formula.

EPA’s preference to avoid a site-specific approach because it would be “resource intensive to implement” is also arguably disingenuous. The proposed rules already commit EPA to engage in site-specific determinations in response to applications under proposed rule 320.63(c)-(d) for exemptions from having to calculate FR for components of the proposed FR formula.<sup>120</sup> For example, an application for exemption from having to calculate FR for open pits in which lakes may form must include “a plan for the minimization, prevention, or collection and treatment of water in the pit lakes, discharges, and/or seepage, that factors in information on site hydrology, water quality characterization information, and pit lake ecological risk assessment information.”<sup>121</sup> In addition, proposed rule 320.64 would apparently authorize EPA to require the applicant to engage in site characterization and submit the site characterization results to EPA based on which EPA would determine whether the application is justified. If EPA believes that its staff can perform this type of review, then it is not clear why they would not be able to review instead a proposal for financial assurance regarding such open

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<sup>118</sup> 82 Fed. Reg. at 3460/2.

<sup>119</sup> *Id.* at 3460/3.

<sup>120</sup> *Id.* at 3505-3509.

<sup>121</sup> *Id.* at 3506/2.



pits that is either entirely site-specific at the outset or else is based on a revised FR equation that can be solved using more site-specific inputs.

EPA is, notably, proposing a “site-by-site evaluation of facility risk for decisions to release an owner or operator from CERCLA § 108(b) requirements,” and adds that “EPA has substantial experience making individualized determinations of site risk, as this practice is consistent with EPA’s practice under the Superfund program.”<sup>122</sup> If EPA feels capable enough of following through on such proposal that it would make the proposal in a rulemaking, then: (i) surely EPA has the resources to engage in site-by-site evaluations to determine FR in the first instance; and (ii) EPA would be estopped to assert that a site-by-site approach is inconsistent with the requirements of § 108(b) or unauthorized by § 108(b).

Based on the foregoing, EPA should revisit its determination not to adopt the “closure plan” alternative described in the preamble to the proposed rulemaking.<sup>123</sup> This should be done in a revision of the proposed rulemaking. Otherwise, the rulemaking will fail to satisfy the requirement of CERCLA § 108(b)(1) to ensure that the FR rules are “consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances” at hardrock mining facilities and violate applicable due process requirements.<sup>124</sup>

## **VI. THE REDUCTION CRITERIA OF PROPOSED RULE 320.63(c)-(d) WOULD ENTAIL INAPPROPRIATE REGULATION OF HARDROCK MINING FACILITIES.**

The criteria in proposed rule 320.63(d) that would have to be met in order for owners/operators of hardrock mining facilities to be exempt from components of the baseline FR formula are not representative of sound mining practices. Rather, they are unduly onerous. As a result, the availability of the demonstration option in proposed rule 320.63(c) would not rectify the rulemaking’s underlying problem of failing to satisfy § 108(b)(1)’s mandate that the FR requirements be “consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.”

### **A. EPA is Impermissibly Using the Reduction Criteria to Try and Mandate What it Believes are Good Mining Practices.**

In the proposed rulemaking, EPA appears to be trying to mandate what it considers to be good mining practices through the back door—allowing operators to

<sup>122</sup> 82 Fed. Reg. at 3415/3.

<sup>123</sup> See *id.* at 3401/2-3.

<sup>124</sup> See footnotes 3 and 4.

design or re-design site features to meet “voluntary” reduction criteria in order to reduce otherwise exorbitant and potentially unaffordable FR amounts generated by the proposal’s deeply flawed baseline FR formula.

Despite EPA’s express disavowal of any intent to regulate the conduct of hardrock mining,<sup>125</sup> the proposed rules would accomplish exactly that, a fact that EPA seems aware of when it in the preamble repeatedly refers to its intent to incentivize operators to adopt sound mining practices.<sup>126</sup> This, when encouraging sound mining practices is not even a stated goal of CERCLA.

In the development of the reduction criteria, moreover, EPA employed certain practices—e.g., the GARD Guide—as fundamental benchmarks without explaining why they represent sound mining practices at all types of hardrock mining facilities, in all conditions.<sup>127</sup> This is a material failure of EPA’s duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule.<sup>128</sup>

**B. The All or Nothing Nature of Proposed Rule 320.63(c)-(d) Could Lead to Arbitrary Results.**

The process for securing exemptions from having to calculate FR for components of the FR formula under proposed rule 320.63(c)-(d) could lead to arbitrary and unwarranted results.

For example, in a situation in which a mine plan of operation provides for management at an open pit of flows associated with a 100-year storm event rather than a 200-year event as required by proposed rule 320.63(d)(1)(iii) but meets the balance of the criteria in proposed rule 320.63(d)(1), it would be unreasonable to require the enormous amount of FR for that pit that would be necessitated using the proposed baseline FR formula. In such a case, the required FR would not bear a reasonable relationship to the degree and duration of risk posed by hazardous substances at the facility.

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<sup>125</sup> 82 Fed. Reg. at 3400/1

<sup>126</sup> See, e.g., *id.* at 3396/1, 3400/1-2, 3403/1, 3404/2.

<sup>127</sup> See “Financial Responsibility Requirements under CERCLA 108(b) for Classes of Facilities in the Hardrock Mining Industry Proposed Rule: Financial Responsibility Reductions, Technical Support Document” (December 1, 2016) (“**Reduction Criteria Background Document**”), at 8, 11, 14, 17, 25, 28, 41, 69, 79.

<sup>128</sup> See footnote 3.

EPA's rejection of the possibility of a partial reduction in required FR within components of the proposed FR formula if some but not all reduction criteria are met<sup>129</sup> is arbitrary. EPA states that the reduction criteria are not intended to reflect proportional reduction in risk, but rather are part of an overall set of requirements intended to reduce risk. But there is no logical reason—other than perhaps reducing EPA's workload—to not allow for partial reductions in required FR for various formula sub-components if key criteria are demonstrated, especially given the enormous amounts of FR required under the proposed baseline formula.

**C. The General Performance Standard of Proposed Rules 320.27 and 320.63(c) is Vague and Overbroad.**

The proposed rulemaking states that the FR reduction criteria of proposed rule 320.63(d) incorporate the “general performance standard in paragraph 320.63(c).”<sup>130</sup>

In order to qualify for a reduction, the owners and operators must be prepared to demonstrate to EPA that any requirements relied upon under paragraph 320.63(d) also meet the general standard, that the engineering requirements will result in a minimum degree and duration of risk associated with the production, transportation, treatment, storage, or disposal, as applicable, of all hazardous substances present at that site feature.<sup>131</sup>

Additionally, the general facility requirements of the rulemaking include proposed rule 320.27(a), which puts forth the same general performance standard:

The owner or operator may petition to be released from its obligations under this part by submitting a request to the Administrator, which must include evidence demonstrating that the degree and duration of risk associated with the production, transportation, treatment, storage and disposal of hazardous substances is minimal. Upon receiving such request, the Administrator will evaluate facility information, including the information submitted by the owner or operator, regarding the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous

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<sup>129</sup> 82 Fed. Reg. at 3470.

<sup>130</sup> *Id.* at 3467/3.

<sup>131</sup> *Id.*

substances at the facility, and make a determination regarding the owner's or operator's request.<sup>132</sup>

It is unclear why the general performance standard is necessary, given the extremely detailed and conservative reduction criteria EPA has set forth in proposed rule 320.63(d). Moreover, the general performance standard is vague to the point that it would provide EPA essentially standardless discretion to reject applications for FR reductions for site features regardless of whether they demonstrate that the corresponding criteria of proposed rule 320.63(d) are met.

The final § 108(b) rules should: (i) not include a general performance standard of the kind specified in proposed rule 320.63(c); and (ii) state that any rejection by EPA of an application for exemptions from having to calculate FR for components of the FR formula under proposed rule 320.63(c)-(d) or any administrative order to calculate FR for components of the FR formula is outside the bar on pre-enforcement review that has been held to apply to certain CERCLA proceedings under 42 U.S.C. § 113(h).

It is also unclear from the face of proposed rule 320.63(c) that owners/operators that demonstrate satisfaction of the reduction criteria in proposed rule 320.63(d) for a given site feature category would be exempt from having to perform the presumptive FR calculation for that category. Since this is EPA's intention,<sup>133</sup> the rule itself should explicitly state that this would be the case.

**D. Many of the Performance Standards Specified in Proposed Rule 320.63(d) Would Conflict with Performance Standards that Are Applicable to Hardrock Mining Facilities under Other Regulatory Programs.**

Many of the criteria in proposed rule 320.63(d) are inconsistent with hardrock mining facility permit conditions that other government agencies impose in order to minimize the potential of hazardous substance releases to the environment. Discussed below are several performance standards set forth in proposed rule 320.63(d) that are inconsistent with performance standards that ADEQ imposes on hardrock mining facilities pursuant to Arizona's APP program (discussed in Sections IV and V.A, above). In each of these cases, an Arizona facility would be deemed by EPA not to be minimizing the potential of hazardous substance releases from the site feature in question, whereas the facility would be deemed by ADEQ to be accomplishing just that. ADEQ has been regulating the construction, operation and closure of hardrock mining facilities under the APP program for decades. EPA, with the proposed rulemaking, is

<sup>132</sup> 82 Fed. Reg. at 3489/3.

<sup>133</sup> *Id.* at 3468.

new to this scene. This, if nothing else, supports a conclusion that the following inconsistencies exemplify the proposed rules' failure to be "consistent with the degree and duration of risk" associated with hazardous substances at hardrock mining facilities in Arizona.

- For FR reductions in the open pit, waste rock, tailings and leach categories, the proposed rules would require a minimum static safety factor of 1.5 for all "critical structures" and 1.3 for all non-critical structures.<sup>134</sup> In contrast, Arizona's BADCT Manual requires a minimum static safety factor of 1.5 for all heap and dump leach piles, tailings embankments, and tailings impoundments, as well as for waste rock piles that may discharge; but allows the safety factor to be reduced to 1.3 if adequate site-specific testing results are available (and also for intermediate construction phases for tailings impoundments).<sup>135</sup> Thus, EPA's proposed rules would require the more stringent safety factor of 1.5 even though the operator has made a site-specific demonstration that a safety factor of 1.3 is sufficient.

- For a reduction in the open pit category, often the largest single component of FR required under the proposed rules,<sup>136</sup> EPA would require a plan that "prevents ponding."<sup>137</sup> Arizona recognizes that a pit that extends below groundwater level creates a hydrologic sink that acts as a BADCT measure for surrounding facilities, ensuring that any seepage originating from discharging facilities located within the capture zone of the sink is captured in the pit, rather than migrating off-site.<sup>138</sup> Ponding in a pit that is a hydrologic sink is a natural phenomena that poses no risk to the surrounding aquifer. Implementing any plan to prevent the ponding is a fruitless, costly endeavor that would have no effect on the migration of pollutants and only serve to increase treatment costs. Treating water in a pit that acts as a hydrologic sink to generally applicable water quality standards would be unnecessary when there is no outflow from the pit. If EPA is truly concerned about minimizing the potential for hazardous substance releases, then it should recognize the value of sinks rather than penalizing operations that create them by making such operations automatically ineligible for FR reductions for the open pit category.

- EPA seeks comment on whether particular reduction criteria under proposed § 320.63(c)-(d) are inappropriate "under particular facility conditions that could

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<sup>134</sup> 82 Fed. Reg. at 3506/1.

<sup>135</sup> BADCT Manual at E-7.

<sup>136</sup> See RIA at B-16 to B-19, Exhibit B-7. FR for the open pit component alone can be as \$253 million for a single facility).

<sup>137</sup> 82 Fed. Reg. at 3506/1.

<sup>138</sup> See A.R.S. § 49-243(G).

still be defined in the context of a national rule.”<sup>139</sup> As the previous point makes clear, the requirement to prevent ponding or treat water in pits that serve as hydrologic sinks is an example of an inappropriate reduction criterion. If necessary, reduction criteria for pits could be drafted using New Mexico’s and Arizona’s rules as benchmarks. New Mexico’s rules essentially define flow-through pit systems as those where water in a pit is predicted to flow into groundwater and violate standards at monitoring well locations specified in the relevant permit.<sup>140</sup> FR should not be required for pits that are demonstrated to not constitute flow-through pits (i.e., to act as hydrologic sinks). In Arizona, a technical demonstration that a pit is a hydrologic sink is required as part of the APP process and must be re-demonstrated throughout a facility’s operational life.<sup>141</sup>

- For FR reductions in the open pit, tailings, leach, process pond, slag, drainage and new waste rock pile categories, the proposed rules would require a plan to “store” the volume of water generated during a 24-hour period by a 200-year storm event.<sup>142</sup> This would be contrary to Arizona’s BADCT Manual, which uses 100 years as the design storm return period, unless site-specific factors warrant a different design period.<sup>143</sup> Here too, EPA’s generic approach creates an assumed risk and then mandates excessive controls to address that artificially assumed risk, even where Arizona’s program uses site-specific information to develop more appropriate controls.

- For FR reductions in the open pit, waste rock, tailings, leach and process pond categories, the proposed rules would require concurrent or sequential reclamation of “mined areas.”<sup>144</sup> This has never been a requirement of the APP program. Rather, in Arizona the necessity of concurrent reclamation is assessed on a site by site basis as a function of its utility to control discharge; otherwise, owners/operators may choose to implement concurrent reclamation voluntarily.

- For FR reductions in the open pit, waste rock, tailings, leach, process pond, slag, long term O&M and water treatment categories, EPA would require the performance standards in proposed rule 320.63(d) to be designed with a minimum 200-year design life.<sup>145</sup> The practice in Arizona has been to negotiate that issue on a case-

<sup>139</sup> 82 Fed. Reg. at 3468/1-2; Reduction Criteria Background Document at 1.

<sup>140</sup> Reduction Criteria Background Document at 27.

<sup>141</sup> See ADEQ’s APP Hydrology Substantive Review Checklist (November 2014), at 9 (specifying the requirements for demonstrating the presence of a hydrologic sink). This checklist can be found at [http://legacy.azdeq.gov/environ/water/permits/download/hydro\\_checklist.docm](http://legacy.azdeq.gov/environ/water/permits/download/hydro_checklist.docm).

<sup>142</sup> 82 Fed. Reg. at 3506-3509.

<sup>143</sup> BADCT Manual at E-14.

<sup>144</sup> 82 Fed. Reg. at 3506-3508.

<sup>145</sup> *Id.*



by-case basis determined by facility characteristics and the final closure plan prepared prior to site final closure. Mandating that FR be demonstrated today for two centuries of control measures in order to secure reductions in exorbitant baseline FR amounts is not reasonably related to the degree and duration of risk at many hardrock mining facilities.

- For FR reductions in the open pit, waste rock, leach, tailing and slag categories, the proposed rules would require a 95% capture/removal efficiency for seepage/discharges if the seepage/discharge is not expected to meet water quality standards.<sup>146</sup> This is not required under Arizona law; rather, owners/operators demonstrate to ADEQ's approval whether and to what extent seepage control is required for particular facilities.<sup>147</sup>

- For FR reductions in the waste rock and slag categories, the proposed rules include performance standards that apply depending on whether applicable water quality standards are met at points of compliance.<sup>148</sup> For the other categories, the point-of-compliance concept is absent. The point-of-compliance concept is embedded within the Arizona APP program<sup>149</sup> and should be a qualifying feature of any applicable performance standard under the proposed rules.

- For reductions in the tailings, heap leach and process ponds categories, the proposed rules would require a "liner designed to minimize/eliminate releases from the unit."<sup>150</sup> To the extent that this means a synthetic liner, such a rule would be inconsistent with the BADCT Manual, which allows base metals tailings impoundments to be constructed without synthetic liners based on site-specific conditions.<sup>151</sup> On the other hand, it may be that it is not EPA's intention to require a synthetic liner for this FR reduction component.<sup>152</sup> This uncertainty should be resolved in a way that makes clear

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<sup>146</sup> 82 Fed. Reg. at 3506-3508.

<sup>147</sup> The APP program requires facility owners and operators to implement BADCT to reduce discharges to groundwater, A.R.S. § 49-243(A), and ensure that aquifer water quality standards (set equal to SDWA MCLs) are met at appropriate points of compliance (or that water quality is not further degraded if standards are not met at the points of compliance at the time of permit issuance). A.R.S. § 49-243(B)(2)-(3). BADCT can take into account (but may not rely wholly on) site-specific characteristics. A.R.S. § 49-243(A). Based on these overarching requirements and additional guidance in the BADCT Manual, facilities negotiate with ADEQ the need for, and extent of, seepage control measures at particular facilities as part of the permit process. ADEQ has never adopted a set percentage of mandatory seepage reduction/control.

<sup>148</sup> 82 Fed. Reg. at 3507/1, 3508/3.

<sup>149</sup> See Section V.A., above.

<sup>150</sup> 82 Fed. Reg. at 3507/2, 3508/1.

<sup>151</sup> BADCT Manual at 3-58, 3-59.

<sup>152</sup> Reduction Criteria Background Document at 41, 51-52.

that liners, if required under the final rules, may be natural, geosynthetic or synthetic based on site-specific conditions.

**VII. EPA'S ANALYSIS OF THE PROPOSED RULES' COSTS AND BENEFITS IS DEEPLY FLAWED.**

The proposed rulemaking: (i) significantly underestimates the financial impact of the proposed rules on the hardrock mining industry; (ii) grossly overestimates the industry's ability to secure financial assurance under the proposed rules; and (iii) vastly inflates the benefits of the proposed rules, relative to existing federal and state regulatory regimes that already govern the industry.

**A. The RIA Significantly Underestimates the Proposed Rules' Financial Impact on the Hardrock Mining Industry.**

EPA estimates that the total amount of financial assurance that the hardrock mining industry would have to secure under the proposed rules will total \$7.1 billion.<sup>153</sup>

This is likely a gross underestimation.

▪ According to the RIA, the 49 sites in the modeled universe (representing 22% of the potentially regulated universe of 221 sites) would require over \$4.9 billion in FR,<sup>154</sup> which works out to roughly \$100 million per facility. EPA provides no explanation as to why the other 78% of the potentially regulated universe (172 sites) would only require an additional \$2.2 billion in FR, which works out to roughly \$12.8 million per facility. The modeled universe represents, at best, a cross section of the industry. However, looking at just the copper sector, the modeled universe excludes the two largest copper mines in the country. So it seems unlikely that the non-modeled universe consists of smaller facilities than does the modeled universe. Rather, it seems likely that the RIA significantly underestimates the amount of FR that would be required under the proposed rules. Specifically, if the entire potentially regulated universe mirrored the FR required for the modeled universe (based on EPA's estimate, roughly \$100 million per facility), then the total required FR for the industry under the proposed rules would be closer to \$22.1 billion (over three times EPA's estimate). Presumably the cost to industry to financially assure that amount would likewise be more than triple EPA estimate. The RIA should be revised to provide a new calculation of the industry's FR based on either the entire industry or a true cross section of the industry, rather than cherry-picked facilities that skew the data to under-represent the cost to industry.

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<sup>153</sup> 82 Fed. Reg. at 3391-92.

<sup>154</sup> RIA, Table B-9.

- In arriving at its industry-wide \$7.1 billion figure, EPA acknowledges that it “assumed” in the RIA that identified risk-reducing practices in closure and reclamation documents reviewed by EPA would fully meet the reduction criteria in proposed rule 320.63(c).<sup>155</sup> EPA states that this assumption “simplifies the construct of the proposed rule’s requirements for reductions.” In other words, the reductions EPA grants in the RIA in reaching the total \$7.1 billion estimated cost to industry are unlikely to be realized when the proposed formula and reduction criteria are actually applied. Thus, the costs to industry resulting from the proposed rules would likely be much higher than EPA has admitted.

- EPA has compared its estimated industry costs to total revenues and “operating cash flow.”<sup>156</sup> By doing so, EPA underestimates the impact of the proposed rules on hardrock mining companies. Total revenues and operating cash flows are inappropriate metrics to determine the impacts to a company’s bottom line. The appropriate metric to determine the true impact to a company (or the industry as a whole) is net revenues or profits.

**B. The RIA Employs Statistical Practices that are Highly Questionable.**

The RIA presents data that seems consistently designed to increase the amount of FR required under the proposed rules while underestimating the cost of securing financial assurance of the FR.

- It is unclear why EPA selected the median in Table X-1 to extrapolate estimated total industry costs.<sup>157</sup> The mean (or average) would better account for the facilities with very large estimated FR requirements and would more accurately estimate the costs of the proposed rules to the industry. The RIA should be revised to extrapolate total industry costs from a weighted mean cost of the modeled universe.

- The modeled universe contains many small mining facilities and a few very large facilities. In a dataset like this, the median amount will be low and the mean amount will be high relative to each other. The RIA switches between using mean and median values for its estimates, without sufficient explanation: (i) EPA uses mean rather than median to estimate NRD cost (13.4% vs. 3.8%), effectively selecting the highest value for potential NRD costs (discussed in Section V.C, above); and (2) conversely, when estimating the cost to industry to obtain financial assurance of the calculated FR, EPA uses the median, thereby arriving at the lowest estimate of possible cost to obtain

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<sup>155</sup> 82 Fed. Reg. at 3391/3.

<sup>156</sup> *Id.* at 3395/1-2.

<sup>157</sup> *Id.* at 3391; RIA, Exhibit 5-4.

such instruments and understating total costs to the industry. This qualifies as arbitrary and capricious rulemaking.

- EPA's decision not to remove outliers in developing the cost curves for waste rock and open pits (discussed in Section V.C, above) significantly overestimates the cost of FR, resulting in a cost per acre that is much higher than is typically required for the vast majority of hardrock mining facilities.

### **C. The Costs of the Proposed Rules Would Dwarf Any Benefits.**

EPA's estimate of FR for two of Asarco's five facilities is \$1.425 billion.<sup>158</sup> Even if EPA's estimate of the cost of securing corresponding financial assurance is correct,<sup>159</sup> the annual cost to Asarco to secure the financial assurance for those two facilities alone would be \$14.25 million - \$57 million. This represents a significant percentage of EPA's estimate of the total annual cost to the entire industry, which is \$111 million - \$171 million.<sup>160</sup> Over the 34 year period that EPA uses to evaluate the savings to the federal government, the annual payments by Asarco for FR at these two sites alone would amount to a total of between \$484.5 million and \$1.938 billion.<sup>161</sup> Thus, over a 34 year period,<sup>162</sup> the cost to a single company alone, for only two sites, is likely to exceed—potentially by a factor of 4—the total estimated benefits to the federal government of between \$511 million and \$527 million over that same period.<sup>163</sup> Factoring in the potential costs for the other 219 sites in the potentially regulated universe would make the cost/benefit imbalance even more pronounced. These costs are so exorbitant that they could change the entire cost structure of mining economics and destroy the economic competitiveness of the U.S. hardrock mining industry.

Looked at another way: for one Asarco facility, using EPA's estimate of required FR for the facility, the estimated cost of the financial assurance instrument (1.1-4% of required FR) equates to an increase in 7-28 cents per pound in the cost of producing

<sup>158</sup> RIA, Exhibit B-9 (sites 8 and 12). By citing the EPA estimates of required FR for its facilities, Asarco is in no way suggesting that it agrees with these estimates or that they represent an appropriate amount of FR. As stated above, Asarco believes that the formula generates ridiculously overstated FR amounts that have little to do with risk, and that the reduction criteria are often illogical. We merely use the EPA estimates in this section to point out the flaws in EPA's consideration of the impact of its proposal.

<sup>159</sup> EPA's estimate is 1.1% - 4% of required FR, based on credit rating of the company purchasing the instrument. 82 Fed. Reg. at 3392, Table X-2.

<sup>160</sup> 82 Fed. Reg. at 3393/1.

<sup>161</sup> This calculation does not include the three other Asarco facilities that EPA has identified as being in the potentially regulated universe, but which were not part of the modeled universe.

<sup>162</sup> For one of the Asarco sites in question, the current expected mine life exceeds 34 years.

<sup>163</sup> 82 Fed. Reg. at 3396/1; see *id.* at 3395, Exhibit X-6.

copper. Refined copper is currently selling for roughly \$2.60 per pound. In a cyclical industry that often operates on the margin, this can make operations uneconomic for prolonged periods of time. Because copper prices are set on the world market, U.S. producers cannot raise the price to simply pass this increased cost on to consumers. Imposing dramatic FR costs threatens to make the U.S. hardrock mining industry non-competitive in a world market and could result in crippling the capacity to produce copper domestically.

Unlike closure/reclamation costs which unequivocally will occur under already existing federal and state regulatory regimes, moreover, the FR outlays under the proposed rules would be for contingent response costs that may never occur. If release events do occur, they will typically be on a smaller scale basis than the proposed formula contemplates and will be addressed in any event under existing regulations (such as Arizona's APP regulations).

Finally, if the proposed rules are finalized without the substantial revisions indicated in the balance of these comments, then many hardrock mining facilities in the U.S. will likely end up paying more in premiums to secure and maintain financial assurance to satisfy the rules over the lifespan of the facilities than the values of the assurance instruments. This would further dwarf any response costs that might be required under existing law. For example, at one Asarco facility, using EPA's "weighted average" annualized compliance cost of 2.3-2.4%,<sup>164</sup> the total FR cost over the current anticipated life of the facility, which is approximately 50 years,<sup>165</sup> would result in a total payout of between \$822,250,000 and \$858,000,000 over the life of the facility.<sup>166</sup> In this and other cases, the owner/operator ends up paying more in premiums than the overall FR amount required by the proposed rules, and certainly more than any potential response expenditures ever likely to be required at a modern, regulatorily compliant mining facility.

On the other hand, EPA claims there would be qualitative benefits associated with the rule, such as benefits from improved environmental performance and faster cleanups.<sup>167</sup> However, no quantitative analysis of these benefits was performed. EPA also fails to consider that mining company resources that could go to real environmental improvements would, under the proposed rules, be tied up in paying for FR that may not ever be needed. And, in estimating the costs, EPA fails completely to provide an

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<sup>164</sup> 82 Fed. Reg. at 3392/3.

<sup>165</sup> EPA uses a quantification period of 34 years for its financial assurance analysis. This is a significant underestimation for many mines. The facility used in this example actually has a currently projected mine life of over 50 years.

<sup>166</sup> \$715,000,000 x annual cost (.023 or .024) x 50.

<sup>167</sup> See, e.g., 82 Fed. Reg. at 3396/1, 3400/1-2, 3403/1, 3404/2.

analysis of the impact on employment, stating merely that “EPA did not have sufficient data to model and quantify the potential change in mines’ employment levels as a result of the proposed regulation.”<sup>168</sup> Just because EPA was not able to quantify potential employment impact, however, does not mean that there would be no such impact. Given the potential for the proposed rules to harm the competitiveness of the U.S. mining industry, as noted above, some analysis of potential employment impacts is necessary. The proposed rulemaking should be revised to address these RIA defects.

**D. EPA Has Vastly Overestimated the Willingness and Ability of Financial Assurance Providers to Assure the Financial Responsibility Amounts that Would be Calculated under the Proposed Rules.**

EPA has “assumed that no market capacity constraints exist for the issuance of third-party instruments sufficient to cover the financial responsibility amounts estimated earlier in this discussion.”<sup>169</sup> This is a critical assumption and is almost certainly wrong, given: (i) that the total amount of required FR may be far higher than EPA estimates; and (ii) the rulemaking’s proposal to unilaterally nullify “retroactive date” and “continuity date” provisions in any financial assurance instruments that would be secured to comply with the rules (discussed in Section I.B.1, above). Even if providers decide to make financial assurance available to address the requirements of the proposed rules, they are likely to be far more expensive than EPA estimates, for the very same reasons. A lack of reasonably priced FR instruments would greatly increase the costs of the proposal, and could in some cases make it impossible as a practical matter for entities to secure required coverage. The RIA needs to be revised to consider these issues.

Public information on the value of known reserves was also not considered in by EPA. In many cases, the asset value of a mine may be less than the amount of FR that would be required under the proposed rules. This would make financial assurance for the calculated FR amount unachievable. The RIA needs to be revised to consider the value of company assets and ore reserves.

**VIII. THE PROPOSED RULES’ DEFINITION OF “AUTHORIZED TO OPERATE” IS OVERBROAD.**

The proposed rules’ definition of “[A]uthoriz(-ed)(-ation) to operate”<sup>170</sup> has the potential to make subject to the proposed rules facilities that have not yet begun any operations that have the potential to cause hazardous substance releases. This would be contrary to CERCLA § 108(b). The definition should be revised accordingly. At a minimum, the definition should: (i) make clear that the proposed rules do not apply to

<sup>168</sup> 82 Fed. Reg. at 3395/3.

<sup>169</sup> *Id.* at 3392/2.

<sup>170</sup> *Id.* at 3486/2-3.



any facility that has not received all permits and other licenses required under federal, state and local laws before the facility can lawfully operate; (ii) make clear that the proposed rules do not become enforceable until a facility that is otherwise fully permitted and licensed to operate actually commences operation; (iii) explicitly exclude initial construction work and other activities that do not involve production, transportation, treatment, storage, or disposal of hazardous substances; and (iv) explicitly exclude any facility that has already been closed under other, applicable regulatory programs, the issuance of permits or other licenses that have been issued for the closed facility notwithstanding (such as an Arizona APP, RCRA permit, Clean Water Act § 404 permit, or stormwater permit that has been issued for the closed facility). Arizona APP and RCRA permits issued in connection with facility closures, in particular, already address the potential of the closed facility to release hazardous substances and include financial assurance requirements that occupy the field of potential releases from the closed facility.

**IX. THE FIVE-ACRE EXEMPTION THRESHOLD SHOULD BE CLARIFIED.**

Under proposed rule 320.60(a)(2)(iv), mineral processors with less than five disturbed acres of waste pile and surface impoundment are exempt from the application of Subpart H of the proposed rules.<sup>171</sup> This provision would need to be clarified so that surface impoundments that are not used in the treatment, storage or disposal of hazardous substances and otherwise fall outside of the definition of “[A]uthoriz(-ed)(-ation) to operate” as modified by Asarco’s comments in Section VIII, above, do not count toward the five-acre threshold.<sup>172</sup>

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<sup>171</sup> 82 Fed. Reg. at 3503/2.

<sup>172</sup> By way of illustration, at Asarco’s Amarillo refinery, which is included in the “Maximum Extent” Potentially Regulated Universe,” RIA, at A-1, there are no waste piles or tailings impoundments. Processing activities take place indoors. The only active surface impoundments at the facility periodically contain industrial stormwater. The one inactive surface impoundment that remains at the facility was formerly used in processing, but its future use in processing is not authorized and Asarco is currently negotiating its closure with the State of Texas under the State’s RCRA program (which has its own financial assurance requirements). In these circumstances, no FR should be required for Amarillo under § 108(b) rules. Excluding Amarillo from the regulated universe also would be consistent with EPA’s apparent intent to regulate only processing operations that are proximate to mining operations. RIA, at 2-1 fn. 13, ES-2. Notably, EPA’s historic cost data do not include any examples associated with standalone refineries such as Amarillo.

**X. THE PROPOSED RULEMAKING INCLUDES SEVERAL STATEMENTS OF FACT CONCERNING ASARCO AND ITS OPERATIONS THAT ARE INCORRECT.**

The proposed rulemaking makes several incorrect statements of fact regarding Asarco and its hardrock mining facility operations. To the extent that those statements are not addressed above, Asarco reserves the right to correct or challenge those statements in any administrative or judicial proceeding.

\* \* \* \*

Asarco appreciates your consideration of the above. If you have any questions, please do not hesitate to let me know at [dyantorno@asarco.com](mailto:dyantorno@asarco.com) or 520-356-2229.

Sincerely,



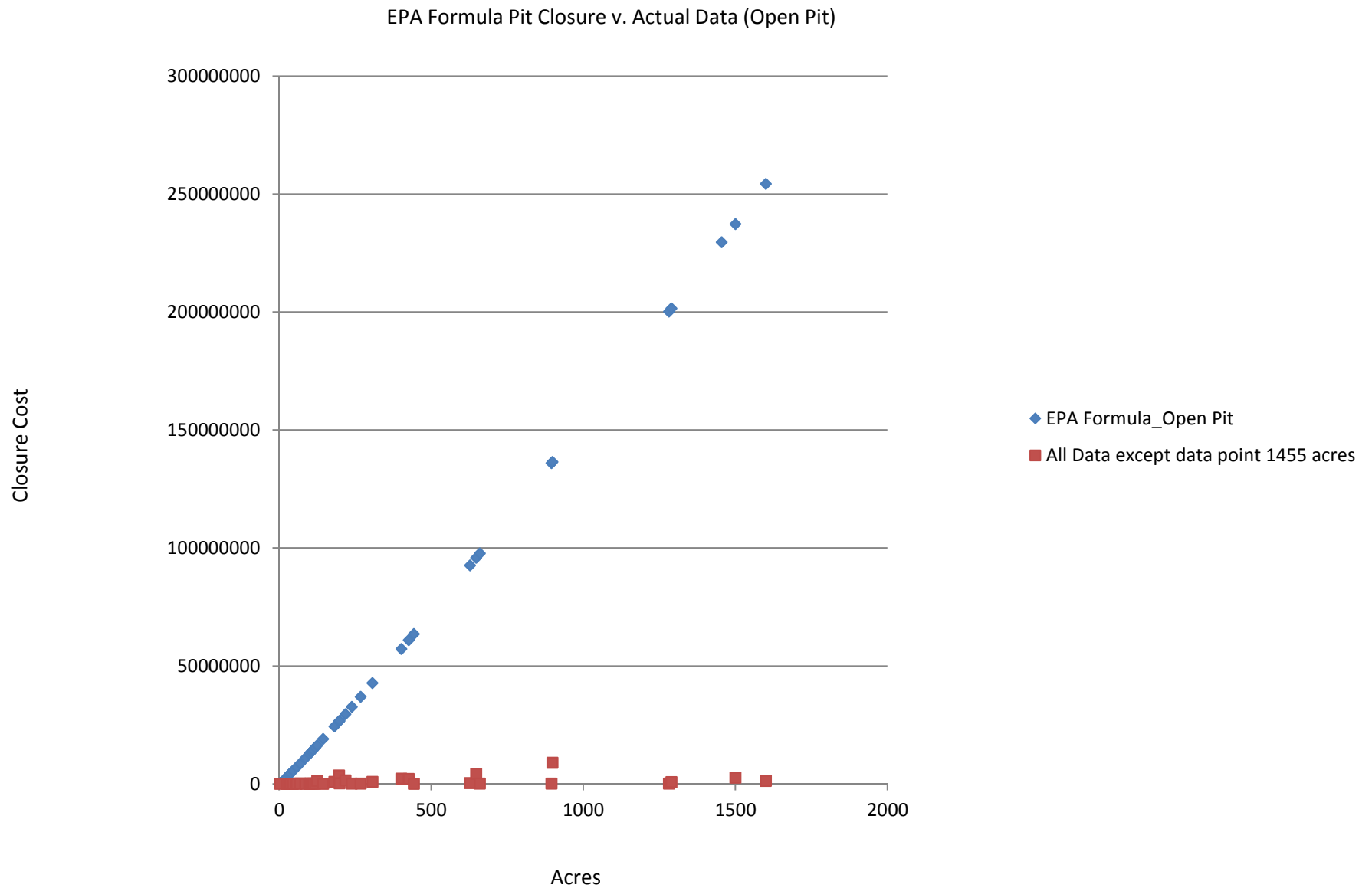
Duane M. Yantorno  
Corporate Manager of State and Federal  
Regulatory Affairs  
ASARCO LLC

Attachments

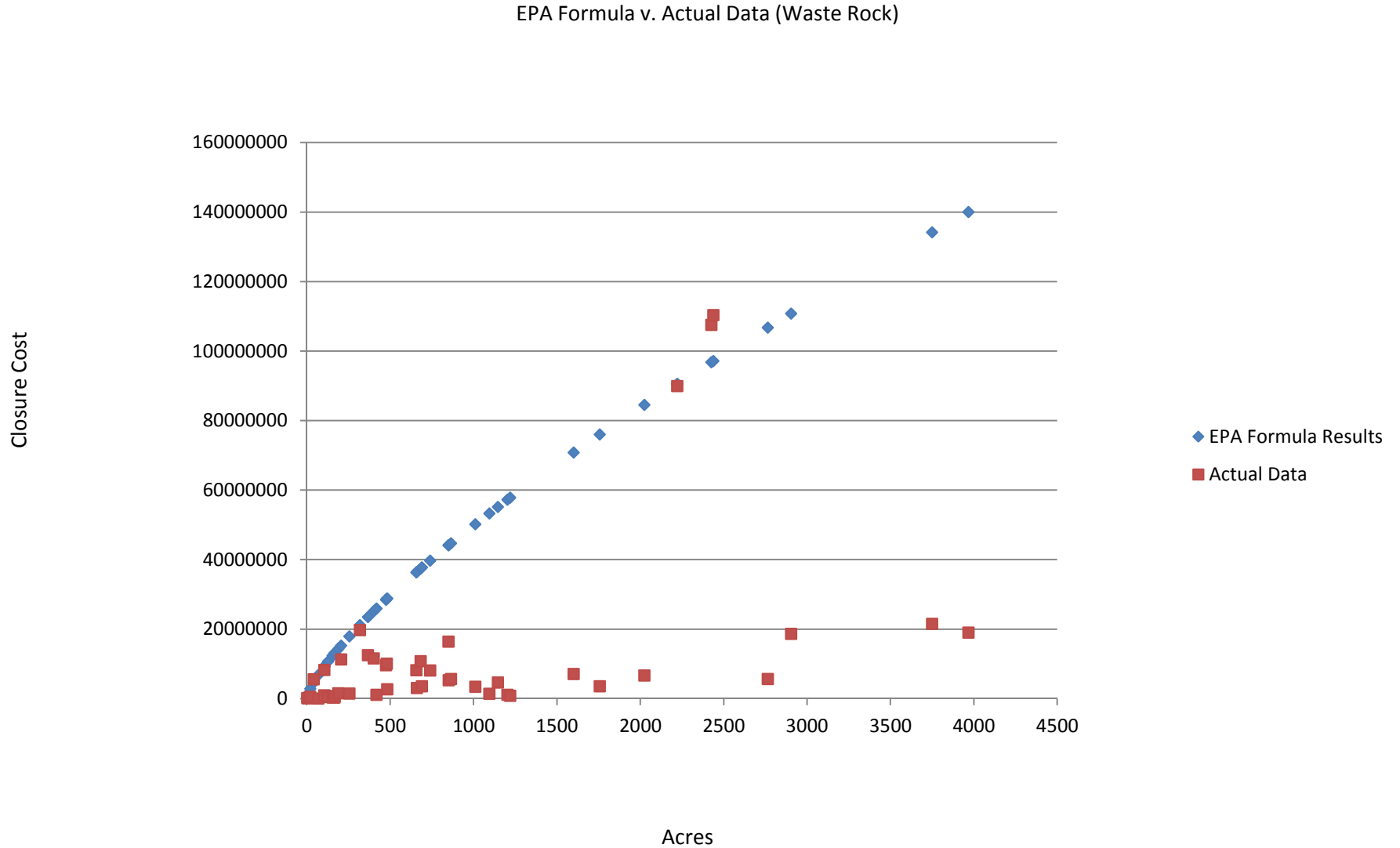
- 1 – Overestimation of Response Costs for Open Pits (see Section V.C)
- 2 – Overestimation of Response Costs for Waste Rock Piles (see Section V.C)
- 3 – Inertness Determination for Mission Mine Waste Rock (see Section V.E)

cc: Nancy Johannesmeyer, Senior Manager, Environmental Affairs, ASARCO LLC  
George A. Tsiolis, Attorney at Law  
Scott H. Thomas, Fennemore Craig, P.C.  
Mark W. DeLaquil, Baker & Hostetler LLP  
Krishna Parameswaran, PhD

**ASARCO LLC's Comments on CERCLA Financial Responsibility Rulemaking Proposal**  
**Attachment 1 – Overestimation of Response Costs for Open Pits (see Section V.C)**



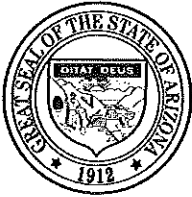
**ASARCO LLC's Comments on CERCLA Financial Responsibility Rulemaking Proposal**  
**Attachment 2 – Overestimation of Response Costs for Waste Rock Piles (see Section V.C)**



**ASARCO LLC's Comments on CERCLA Financial  
Responsibility Rulemaking Proposal**

**Attachment 3**

**Inertness Determination for Mission Mine Waste Rock (see Section V.E)**



Janice K. Brewer  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007  
(602) 771-2300 • [www.azdeq.gov](http://www.azdeq.gov)



Henry R. Darwin  
Director

November 14, 2012

ASARCO LLC – Mission Complex  
Attn: Thomas Klempel, P.E.  
Environmental Manager  
4201 W. Pima Mine Road (P.O. Box 111)  
Sahuarita, AZ 85629

Re: Determination of Applicability for ASARCO Mission Complex – Ike Dump RDA

Inventory Number:	100508	LTF ID:	56916
USAS Number:	100086-00	Place ID:	932

Dear Mr. Klempel:

The Arizona Department of Environmental Quality (ADEQ) has reviewed the Determination of Applicability (DOA) application for the ASARCO Mission Complex – Ike Dump RDA. Based on the information submitted with the DOA, received on September 27, 2012, **no Aquifer Protection Permit (APP) will be required** for the Ike Dump Rock Deposition Area (RDA) Expansion for the following reasons:

1. The information submitted in the DOA indicated that the lateral expansion of the Ike Dump RDA still qualifies as a non-discharging facility due to the continuing applicability of the inertness demonstration per (A.R.S. §49-250(20) and §49-201(20)), and the seepage evaluation performed using the Help model demonstrates that no seepage losses should occur through the bottom of the dump, even for a 100-year, post-mining scenario per (A.R.S. §49-241(B)).

ADEQ may withdraw this decision if future changes in operation occur or if the information submitted in the DOA is found to be inaccurate. Further, this letter is not intended to waive any federal, state or local requirements.

This decision is an appealable agency action under A.R.S. § 41-1092. You have a right to request a hearing and file an appeal under A.R.S. § 41-1092.03(B). You must file a written Request for Hearing or Notice of Appeal within **30 days** of your receipt of this Notice. A Request for Hearing or Notice of Appeal is filed when it is received by ADEQ's Hearing Administrator as follows:

Southern Regional Office  
400 West Congress Street • Suite 433 • Tucson, AZ 85701  
(520) 628-6733



Mr. Klempel  
November 14, 2012  
Page 2 of 2

Hearing Administrator  
Office of Administrative Counsel  
Arizona Department of Environmental Quality  
1110 W. Washington Street  
Phoenix, AZ 85007

The Request for Hearing or Notice of Appeal shall identify the party, the party's address, the agency and the action being appealed and shall contain a concise statement of the reasons for the appeal. Upon proper filing of a Request for Hearing or Notice of Appeal, ADEQ will serve a Notice of Hearing on all parties to the appeal. If you file a timely Request for Hearing or Notice of Appeal you have a right to request an informal settlement conference with ADEQ under A.R.S. § 41-1092.06. This request must be made in writing no later than **20 days** before a scheduled hearing and must be filed with the Hearing Administrator at the above address.

If you have any questions, please contact Ingrid Clark at (602) 771-4385.

Sincerely,



Ingrid Clark  
Environmental Engineering Specialist  
Groundwater Section  
Water Quality Division

cc: Brian Munson, CDM Smith  
Jerry Smit, Manager, Groundwater Section (GWS), WQD, ADEQ  
Mindi Cross, Manager, Compliance Section, WQD, ADEQ  
Vimal Chauhan, Manager, Mining Unit, GWS, WQD, ADEQ  
Lynne Dekarske, EPS/Billing, Administrative Services Team, WQD, ADEQ

AU12:0132