

CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining

Proposed Rule Public Webinar

January 30, 2017

Presentation Overview

- ▶ Formula Overview
 1. Response Component
 2. Natural Resource Damages Component
 3. Health Assessment Component
- ▶ Financial Responsibility Formula
- ▶ Peer Review
- ▶ Reductions
- ▶ Calculator Demonstration
- ▶ Questions

Formula Overview

- ▶ Preamble discussion of the formula starts at 82 FR 3388 at 3461
- ▶ Proposed CFR § 320.63: Determining the Financial Responsibility Amount
 - (a) Information Used to Determine Financial Responsibility Amounts under CERCLA § 108(b)
 - (b) Development of the Hardrock Mining Financial Responsibility Formula
 - (c) Hardrock Mining Financial Responsibility Formula
 - (d) Inputs to the Financial Responsibility Formula
 - (e) Reductions to the Financial Responsibility Amount

Formula Overview

TotalFinancialResponsibility = "
*Deflator*_{y*} /

*Deflator*₂₀₁₄
 $\times [\sum_{i=1}^n \text{ResponseCost}_{i}]$

$\times [1 + \text{OverheadOversight}_{r}]$

$\times \text{StateAdjustmentFactor}_{s}$

$\times 1.134$ (*NaturalResourceDamageMultiplier*)

$+ \$550,000$ (*HealthAssessmentCosts*) "

Formula Overview

Section 1 - Overview

- ▶ EPA sought a practical approach that could account for a limited number of site-specific details, but also that could easily be applied nationwide.
- ▶ EPA proposed the use of a national, site-based financial responsibility formula to determine the financial responsibility amount for a facility.
- ▶ The formula EPA is considering is comprised of the following three components:
 1. Response component;
 2. Natural resource damage component; and
 3. Health assessment component.

Formula Overview

TotalFinancialResponsibility = "
Deflator ↓ *y* * /

Deflator ↓ 2014
× [$\sum_{i=1}^n$ *ResponseCost* ↓ *i*]

× [1 + *OverheadOversight* ↓ *r*]

× *StateAdjustmentFactor* ↓ *s*

× 1.134 (*NaturalResourceDamageMultiplier*)

+ \$550,000 (*HealthAssessmentCosts*) "

Response Component

Section 2.1 - CERCLA Response Costs

- ▶ EPA collected information on response costs from national priorities list (NPL) and non-NPL CERCLA hardrock mining facilities (HMFs):
 - Records of decision (RODs)
 - Settlements
 - Actual expenditures to date by EPA
 - Estimated expenditures for present and future work by potentially responsible parties

Response Component

Section 2.2 - Response Activities

- ▶ EPA collected data on specific activities conducted at 438 operable units at 88 NPL or Superfund alternative hardrock mining sites.
- ▶ Using this data, EPA could link specific site features to releases or threatened releases of hazardous substances, and to remedies that incurred response costs.
- ▶ EPA found that 13 site features (e.g., tailings) served as the source of release that resulted in remedies within an initial list of 12 categories (e.g., water treatment).

Response Component

Section 2.3 - Linking Response Categories to Engineering Cost Estimates

- ▶ EPA linked the majority of the initial list of remedy categories to similar tasks identified in the current engineering cost data from reclamation and closure plan detailed cost estimates.
- ▶ For example, EPA linked the remedy category of on-site disposal/ engineering containment to current engineering cost estimate tasks such as backfill, earthwork, revegetation, stormwater control, and source controls (e.g., synthetic cover).
- ▶ These tasks were grouped into 13 response categories for further analysis.

Response Component

Table 1. 13 Response Categories

Capital Costs	Operations and Maintenance (O&M)
1. Open Pit	10. Short Term O&M/Monitoring
2. Underground Mine	11. Interim O&M
3. Waste Rock	12. Long-Term O&M/Monitoring
4. Heap/Dump Leach	13. Water Treatment
5. Tailings Facility	
6. Process Pond/Reservoir	
7. Slag Pile	
8. Drainage	
9. Solid/Hazardous Waste Disposal	

Response Component

Section 3 - Response Component Data Collection

- ▶ EPA obtained a sample of 63 facilities' reclamation and closure plan engineering cost estimates with data on
 - Capital and operations and maintenance costs,
 - Acreage of various site features (e.g., open pits), and
 - Water treatment flows
- ▶ These sites were supplemented with three CERCLA sites contained in EPA's CERCLA site data set sites for additional water treatment cost data.
- ▶ EPA collected the following data from Environmental Impact Statements or other publicly available documents:
 - Water balance data (e.g., precipitation), and
 - Process method data (e.g., use of cyanide leaching)

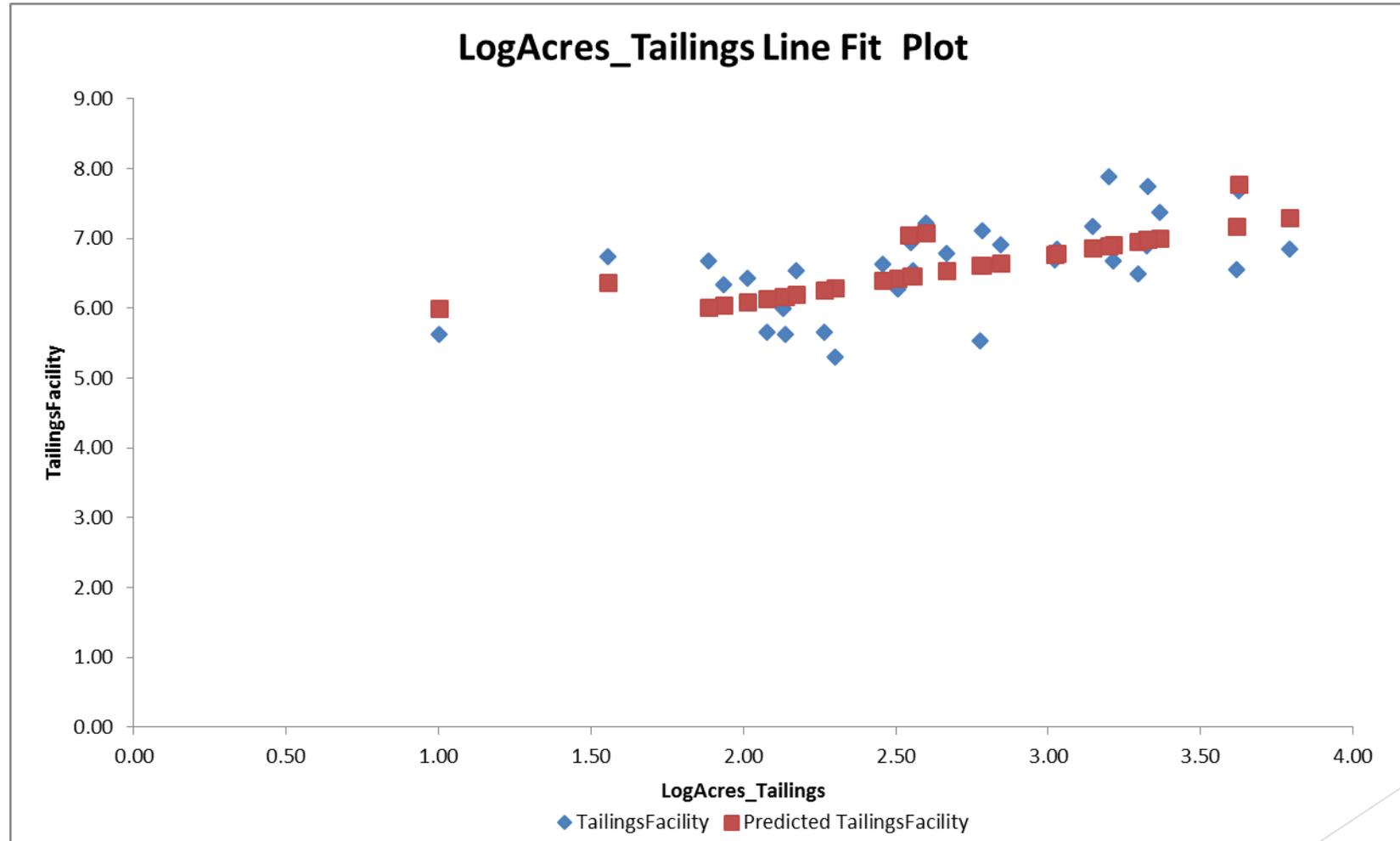
Response Component

Section 4 - Response Component Regression Analysis

- ▶ EPA conducted statistical analysis to establish a numerical relationship between a limited number of facility's site-specific characteristics and the resulting associated reclamation and closure plan costs. This was used to generate a sub-formula that results in an expected financial responsibility amount for each response category, on a nation-wide basis.
- ▶ Bidirectional elimination stepwise regression - started with variables believed to be most significant and test the addition or deletion of individual variables.
- ▶ Results generally confirmed the significance of the variables EPA expected to be predictive.

Tailings Facility Line Fit Plot

Log Capital Costs (Tailings Facility) vs. Log Acreage (LogAcres_Tailings)



Response Component

Section 4 - Response Component Regression Analysis (continued)

- ▶ Two response categories either did not obtain a statistical fit with any variables, or did not have sufficient data to conduct regression analysis.
 - Solid and hazardous waste disposal (no statistical fit)
 - Slag pile (one data point)
- ▶ Additionally, annualized operations and maintenance costs from some regressions had to be converted into a net present value for the purposes of establishing a single financial responsibility amount.
- ▶ Specifically, EPA used the following based on the experience of Superfund:
 - a 10-year short-term operations and maintenance period;
 - a perpetual long-term operations and maintenance period; and
 - a real discount rate of 2.63%.

Formula Overview

TotalFinancialResponsibility = "
*Deflator*_{y*} /

*Deflator*₂₀₁₄
× [∑_{i=1}ⁿ *ResponseCost*_i]

× [1 + *OverheadOversight*_r]

× *StateAdjustmentFactor*_s

× 1.134 (*NaturalResourceDamageMultiplier*)

+ \$550,000 (*HealthAssessmentCosts*) "

Response Component

Section 4 - Response Component Regression Analysis (continued)

- ▶ EPA calculated overhead and oversight costs as a percent of direct engineering costs
 - Overhead costs (e.g., mobilization) account for approximately an additional 36% of direct engineering costs; and
 - Oversight costs (e.g., agency contract management) differ based on the specific indirect rate published by EPA.
- ▶ Additionally, to adjust for locality differences in prices of labor and materials, the response component of the formula is multiplied by the most current state cost adjustment factors in U.S. Army Corps of Engineers, “Civil Works Construction Cost Index System” (2015).

Formula Overview

TotalFinancialResponsibility = "
Deflator ↓ *y** /

Deflator ↓ 2014
× [$\sum_{i=1}^n$ *ResponseCost* ↓ *i*]

× [1 + *OverheadOversight* ↓ *r*]

× *StateAdjustmentFactor* ↓ *s*

× **1.134** (*NaturalResourceDamageMultiplier*)

+ \$550,000 (*HealthAssessmentCosts*) "

Natural Resource Damages Component

Section 5

- ▶ EPA collected information on natural resource damages from HMFs through:
 - CERCLA hardrock mining court settlements and judgments, and
 - Records of voluntary natural resource damages payments.
- ▶ EPA found 24 sites with both natural resource damages and response costs.

Formula Overview

TotalFinancialResponsibility = "
*Deflator*_{y*} /

*Deflator*₂₀₁₄
× [∑_{i=1}ⁿ *ResponseCost*_i]

× [1 + *OverheadOversight*_r]

× *StateAdjustmentFactor*_s

× 1.134 (*NaturalResourceDamageMultiplier*)

+ \$550,000 (*HealthAssessmentCosts*) "

Health Assessment Component

Section 6

- ▶ Agency for Toxic Substances and Disease Registry (ATSDR) provided EPA with average, minimum, and maximum costs for their site health assessments from a recent 18 month period.
- ▶ Most health assessments make use of EPA-collected data and require similar types of activities and reports. Thus, costs are expected to be relatively consistent across facilities.
- ▶ EPA assumed a fixed cost of \$550,000 for all sites, representing the average provided by ATSDR.

Financial Responsibility Formula

Section 7

- ▶ It is adjusted for inflation using the GDP deflator.
- ▶ The use of source controls and water treatment are assumed as a conservative assumption.
- ▶ Since source controls are assumed, the volumes of water calculated for water treatment are reduced to represent the percolation expected through site features with source controls such as store-and-release or synthetic covers.
- ▶ EPA data from the field indicates that such covers result in, on average, percolation of 5% of annual precipitation.
- ▶ The background document is available in the proposed rule docket (**EPA-HQ-SFUND-2015-0781-0500**).

Formula Overview

TotalFinancialResponsibility = "
*Deflator*_{y*} /

*Deflator*₂₀₁₄
 $\times [\sum_{i=1}^n \text{ResponseCost}_{li}]$

$\times [1 + \text{OverheadOversight}_{lr}]$

$\times \text{StateAdjustmentFactor}_{ls}$

$\times 1.134$ (*NaturalResourceDamageMultiplier*)

$+ \$550,000$ (*HealthAssessmentCosts*) "

Peer Review: Overview

- EPA conducted a letter peer review through an independent contractor.
- There were four peer reviewers with expertise in:
 1. Applied statistics and/or econometrics;
 2. Applied economics or policy analysis; and
 3. Knowledge of one or more of the following:
 - a) Hard rock mining processes;
 - b) The general principles behind estimating environmental damages;
 - c) CERCLA actions and Superfund sites; and/or
 - d) Experience studying releases of hazardous substances and working with data on response and remediation costs and natural resource damages.
- EPA submitted the background document for peer review in mid-September.
- A compilation of peer review materials and comments has been placed in the proposed rule docket (**EPA-HQ-SFUND-2015-0781-0499**).

Peer Review: Charges

- ▶ Overall assessment of the appropriateness of the underlying methodology.
- ▶ Recommendations that might improve the soundness and transparency.
- ▶ Appropriateness of, or supplemental data to, response activities collected.
- ▶ Improvements to the standardization and other pre-analysis data steps.
- ▶ Linkages to response categories and/or additional site features.
- ▶ Statistical models chosen and robustness analyses.

Peer Review: Comment Areas

- ▶ EPA binned all of the comments into the following five comment areas:
 1. Data Collection
 2. Response Component Analysis
 3. Natural Resource Damage Component Analysis
 4. Formula Adjustments and Use
 5. Comments Related to the Documentation and Miscellaneous Comments

Peer Review: EPA Response to Comments

- ▶ The peer review generally supported EPA's methodology.
- ▶ Many of the comments resulted from documentation or transparency issues which EPA intends to correct in the final formula background document.
- ▶ EPA performed additional analyses as suggested by peer reviewers, and is considering changes to the formula as discussed in the proposed rule preamble, including:
 - Alternative natural resource damage multipliers
 - Alternatives to the assumption of source controls
- ▶ The draft response to comments document has been placed in the proposed rule docket (**EPA-HQ-SFUND-2015-0781-0498**).

Reductions

- ▶ EPA's rule is intended, in part, to provide incentives for practices that decrease the need for future CERCLA actions.
- ▶ EPA desires to account for risk-reducing effects of compliance with other programs.
- ▶ The rule proposes under § 320.63(c) to allow (but not require) owners or operators to reduce the response cost component of the financial responsibility formula by making an adequate demonstration that risk reducing regulatory requirements are in place.

Reductions

- ▶ To satisfy § 320.63(c) an owner or operator must demonstrate the following:
 - Evidence that the owner or operator is subject to the requirements;
 - Evidence that the owner's or operator's obligation to implement such requirements are imposed in an enforceable document;
 - Evidence that the owner or operator has demonstrated, and is required to demonstrate, adequate financial responsibility to assure implementation of the required activities; and
 - Certification by the owner or operator that the facility is in compliance with the requirements.
- ▶ Owners and operators that meet the criteria for a formula would not have to calculate financial responsibility for that component.
- ▶ The rationale for the inclusion of specific requirements is presented in a technical support document available in the docket for the proposed rule (**EPA-HQ-SFUND-2015-0781-0304**).

Reductions

- ▶ EPA solicited comment on whether the rule should also allow for EPA to conduct a programmatic review of other regulatory requirements and their implementation, with the objective of determining whether the reduction criteria are met across the program in question.
- ▶ Such a program deferral approach would provide for programmatic-based reductions in situations where the program meets the requirements for deferral of CERCLA section 108(b) requirements for the full response component of the financial responsibility formula - that is, for all facilities and all response categories.
- ▶ Under this approach, owners and operators would not be required to comply with the requirements to calculate a financial responsibility amount and to obtain a financial responsibility instrument under EPA's CERCLA 108(b) regulations after EPA determines that a state or federal program meets certain criteria.
- ▶ EPA also solicited comment on whether to consider partial deferral from the response component of the formula where a federal or state program met the criteria for deferral for some but not all of the thirteen response categories.

Financial Responsibility Calculator Demonstration

Instructions

use by interested persons seeking to calculate a financial responsibility amount as would be required under the proposed 40 CFR Part 320.63. The calculator is employed by completing the tabs numbered 1 through 15. Each tab requires the user to enter different information into white cell fields, as noted below. These inputs are used to automatically calculate a financial responsibility amount.

5-a(iii) Example

Cells with white fill and black borders indicate fields where the users input data.

User input cells are preceded by field numbers which are presented as tab-row(column). For example, 5-a(iii) would indicate user input tab "5" (Waste Rock Criteria), user input row "a" (relating to public safety criteria), and user input column "iii" (relating to adequate financial assurance).

Example

Italicized text indicates outputs that will calculate automatically.

detailed breakout of the response component in the "Detailed Response Component" tab. For the user's convenience, relevant definitions from 40 CFR Part 320.62 have been duplicated in the "Definitions" tab of this worksheet.

DISCLAIMER: This calculator was developed solely for the convenience of users, to assist in calculating a financial responsibility amount under proposed 40 CFR Part 320.63. Use of this calculator is not required by, or necessary to satisfy the requirements of, proposed 40 CFR Part 320.63, and the components of this calculator are not proposed regulatory requirements. While EPA has made efforts to ensure consistency between the calculator and the proposed regulations, in the case of a conflict between this calculator and the proposed requirements, the requirements published in the Federal Register represent EPA's intent for the proposed rule

Worksheet Tab	User Action Required
1) General Information	Enter general information about the facility, owner, and operator
2) Response Component Input	Enter site-specific formula inputs (e.g., precipitation)
3) Open Pit Criteria	Evaluate each criteria of the open pit performance standard
4) Underground Mine Criteria	Evaluate each criteria of the underground mine performance standard
5) Waste Rock Criteria	Evaluate each criteria of the waste rock performance standard
6) Heap Dump Leach Criteria	Evaluate each criteria of the heap/dump leach performance standard
7) Tailings Criteria	Evaluate each criteria of the tailings facility performance standard
8) Process Pond Res. Criteria	Evaluate each criteria of the process pond/reservoir performance standard
9) Slag Pile Criteria	Evaluate each criteria of the slag pile performance standard
10) Waste Disposal Criteria	Evaluate each criteria of the solid and hazardous waste disposal performance standard
11) Drainage Criteria	Evaluate each criteria of the drainage performance standard
12) Short-Term O&M Criteria	Evaluate each criteria of the short-term O&M/monitoring performance standard
13) Interim O&M Criteria	Evaluate each criteria of the interim O&M performance standard
14) Long-Term O&M Criteria	Evaluate each criteria of the long-term O&M/monitoring performance standard
15) Water Treatment Criteria	Evaluate each criteria of the water treatment performance standard

Note: If cells display ##### or cell text appears to be cut off, adjust the zoom on your personal Excel program, by going to View>Zoom, and reduce zoom percentage.

Instructions

use by interested persons seeking to calculate a financial responsibility amount as would be required under the proposed 40 CFR Part 320.63. The calculator is employed by completing the tabs numbered 1 through 15. Each tab requires the user to enter different information into white cell fields, as noted below. These inputs are used to automatically calculate a financial responsibility amount.

5-a(iii) Example

Cells with white fill and black borders indicate fields where the users input data.

User input cells are preceded by field numbers which are presented as tab-row(column). For example, 5-a(iii) would indicate user input tab "5" (Waste Rock Criteria), user input row "a" (relating to public safety criteria), and user input column "iii" (relating to adequate financial assurance).

Example

Italicized text indicates outputs that will calculate automatically.

detailed breakout of the response component in the "Detailed Response Component" tab. For the user's convenience, relevant definitions from 40 CFR Part 320.62 have been duplicated in the "Definitions" tab of this worksheet.

DISCLAIMER: This calculator was developed solely for the convenience of users, to assist in calculating a financial responsibility amount under proposed 40 CFR Part 320.63. Use of this calculator is not required by, or necessary to satisfy the requirements of, proposed 40 CFR Part 320.63, and the components of this calculator are not proposed regulatory requirements. While EPA has made efforts to ensure consistency between the calculator and the proposed regulations, in the case of a conflict between this calculator and the proposed requirements, the requirements published in the Federal Register represent EPA's intent for the proposed rule

Worksheet Tab	User Action Required
1) General Information	Enter general information about the facility, owner, and operator
2) Response Component Input	Enter site-specific formula inputs (e.g., precipitation)
3) Open Pit Criteria	Evaluate each criteria of the open pit performance standard
4) Underground Mine Criteria	Evaluate each criteria of the underground mine performance standard
5) Waste Rock Criteria	Evaluate each criteria of the waste rock performance standard
6) Heap Dump Leach Criteria	Evaluate each criteria of the heap/dump leach performance standard
7) Tailings Criteria	Evaluate each criteria of the tailings facility performance standard
8) Process Pond Res. Criteria	Evaluate each criteria of the process pond/reservoir performance standard
9) Slag Pile Criteria	Evaluate each criteria of the slag pile performance standard
10) Waste Disposal Criteria	Evaluate each criteria of the solid and hazardous waste disposal performance standard
11) Drainage Criteria	Evaluate each criteria of the drainage performance standard
12) Short-Term O&M Criteria	Evaluate each criteria of the short-term O&M/monitoring performance standard
13) Interim O&M Criteria	Evaluate each criteria of the interim O&M performance standard
14) Long-Term O&M Criteria	Evaluate each criteria of the long-term O&M/monitoring performance standard
15) Water Treatment Criteria	Evaluate each criteria of the water treatment performance standard

Note: If cells display ##### or cell text appears to be cut off, adjust the zoom on your personal Excel program, by going to View>Zoom, and reduce zoom percentage.

Worksheet Tab	User Action Required
1) General Information	Enter general information about the facility, owner, and operator
2) Response Component Inputs	Enter site-specific formula inputs (e.g., precipitation)
3) Open Pit Criteria	Evaluate each criteria of the open pit performance standard
4) Underground Mine Criteria	Evaluate each criteria of the underground mine performance standard
5) Waste Rock Criteria	Evaluate each criteria of the waste rock performance standard
6) Heap_Dump Leach Criteria	Evaluate each criteria of the heap/dump leach performance standard
7) Tailings Criteria	Evaluate each criteria of the tailings facility performance standard
8) Process Pond_Res. Criteria	Evaluate each criteria of the process pond/reservoir performance standard
9) Slag Pile Criteria	Evaluate each criteria of the slag pile performance standard
10) Waste Disposal Criteria	Evaluate each criteria of the solid and hazardous waste disposal performance standard
11) Drainage Criteria	Evaluate each criteria of the drainage performance standard
12) Short-Term O&M Criteria	Evaluate each criteria of the short-term O&M/monitoring performance standard
13) Interim O&M Criteria	Evaluate each criteria of the interim O&M performance standard
14) Long-Term O&M Criteria	Evaluate each criteria of the long-term O&M/monitoring performance standard
15) Water Treatment Criteria	Evaluate each criteria of the water treatment performance standard

Response Component Inputs

	Field #		
Open Pit Total Acres	2-a	1,000.0	Disturbed Acres
Underground Mine #1	2-b	Yes - with pressurized hydraulic head	
Underground Mine #2	2-c	No	
Underground Mine #3	2-d	No	
Underground Mine Discharges	2-e	0.0	Gallons/Minute
Waste Rock Total Acres	2-f	500.0	Disturbed Acres
Heap/Dump Leach Total Acres	2-g	500.0	Disturbed Acres
Tailings Facility (Impoundment Only)	2-h	150.0	Disturbed Acres
Tailings Facility (Paste/Dry Stack Only)	2-i	100.0	Disturbed Acres
<i>Tailings Facility Acres Total</i>		250.0	Disturbed Acres
<i>Tailings Impoundment Acres Total</i>		150.0	Disturbed Acres
Process Pond/Reservoir Total Acres	2-j	75.0	Disturbed Acres
Slag Pile Total Acres	2-k	0.0	Disturbed Acres
In-Situ Leaching	2-l	No	
In-Situ Leaching Discharge	2-m	0.0	Gallons/Minute
Precipitation	2-n	30.0	Inches/year
Net Precipitation	2-o	5.0	Inches/year
		<i>Total Acres</i>	2325.0 Disturbed Acres
		<i>Total Flows</i>	180.2 Gallons/Minute
U.S. EPA Region	2-p	Region 10	
State	2-q	AK	

Drainage Performance Criteria							Field #	Evidence that the owner or operator is subject to the requirements described in §320.63(d)(9)	Evidence that the owner's or operator's obligation to implement such requirements are imposed in an enforceable document as defined in §320.61	Evidence that the owner or operator has demonstrated, and is required to demonstrate, adequate financial responsibility to assure implementation of the required activities	Certification by the owner or operator that the facility is in compliance with the requirements described in §320.63(d)(9)	Result
This facility has a plan to address seasonal process water fluctuations and water balance based on a 200-year wet year event.							11-a(i-iv)	yes	yes	yes	yes	Meet
Reduction Yes												

9) Slag Pile Criteria

10) Waste Disposal Criteria

11) Drainage Criteria

12) Short-Term O&M Criteria

Drainage Performance Criteria							Field #	Evidence that the owner or operator is subject to the requirements described in §320.63(d)(9)	Evidence that the owner's or operator's obligation to implement such requirements are imposed in an enforceable document as defined in §320.61	Evidence that the owner or operator has demonstrated, and is required to demonstrate, adequate financial responsibility to assure implementation of the required activities	Certification by the owner or operator that the facility is in compliance with the requirements described in §320.63(d)(9)	Result
This facility has a plan to address seasonal process water fluctuations and water balance based on a 200-year wet year event.							11-a(i-iv)	yes	yes	yes	yes	Meet
Reduction Yes												

- 9) Slag Pile Criteria
- 10) Waste Disposal Criteria
- 11) Drainage Criteria
- 12) Short-Term O&M Criteria
- ...

Detailed Response Component	Initial Amount	Qualifies for Reduction?	Formula Amount
1. <i>Open Pit Category</i>	\$153,111,552	Yes	\$0
2. <i>Underground Mine Category</i>	\$4,500,000	No	\$4,500,000
3. <i>Waste Rock Category</i>	\$29,607,329	Yes	\$0
4. <i>Heap/Dump Leach Category</i>	\$45,268,404	Yes	\$0
5. <i>Tailings Facility Category</i>	\$15,261,433	Yes	\$0
6. <i>Process Pond/Reservoir Category</i>	\$2,729,964	Yes	\$0
7. <i>Slag Pile Category</i>	\$0	No	\$0
8. <i>Drainage Category</i>	\$2,086,534	Yes	\$0
9. <i>Solid and Hazardous Waste Disposal Category</i>	\$2,600,000	Yes	\$0
10. <i>Short-Term O&M/Monitoring Category</i>	\$3,080,214	Yes	\$0
11. <i>Interim O&M Category</i>	\$213,497,700	Yes	\$0
12. <i>Long-Term O&M/Monitoring Category</i>	\$7,370,921	No	\$7,370,921
13. <i>Water Treatment Category</i>	\$22,168,572	Yes	\$0
Subtotal from Above	\$501,282,623	-98%	\$11,870,921
<i>(x) 1+ Overhead and Oversight Percentage</i>			1.49
<i>(x) State Adjustment Factor</i>			1.19
Response Component (Total)			\$20,997,474

Summary Information

<i>Response Component</i>	\$20,997,474
<i>Natural Resource Damages Component</i>	\$2,813,662
<i>Health Assessment Component</i>	\$550,000
<i>Inflation Adjustment Factor</i>	1.02
Total CERCLA 108(b) Financial Responsibility	\$24,884,911

Questions

- ▶ During this Q&A session:
 - ▶ Questions that were submitted prior to the webinar will be answered first.
 - ▶ We will answer as many questions submitted during the webinar as we can.
 - ▶ Please note the following question guidelines:
 - ▶ In order to make this session useful for all participants, we will not be able to address site-specific questions in this forum.
 - ▶ Please make the context of your question clear, include slide number or topic name if applicable.
- ▶ Comments on the proposed rule can be submitted to the docket through **March 13, 2017 (EPA-HQ-SFUND-2015-0781)**.