



**VALUE CREATION  
THROUGH REGENERATION**





# Bunker Hill Restart

## Agenda

### Morning brief [09:45-10:15]

- Safety Share
- Restart plan (high-level)
- Commitments & actions (AMD)
- Payments
- Clean-up & community

### Afternoon site visit [12:40-14:10]

- Physical tour of infrastructure in Kellogg main yard
  - Kellogg Tunnel & EPA channel
  - Process Plant
  - Filter Plant site
  - Q&A





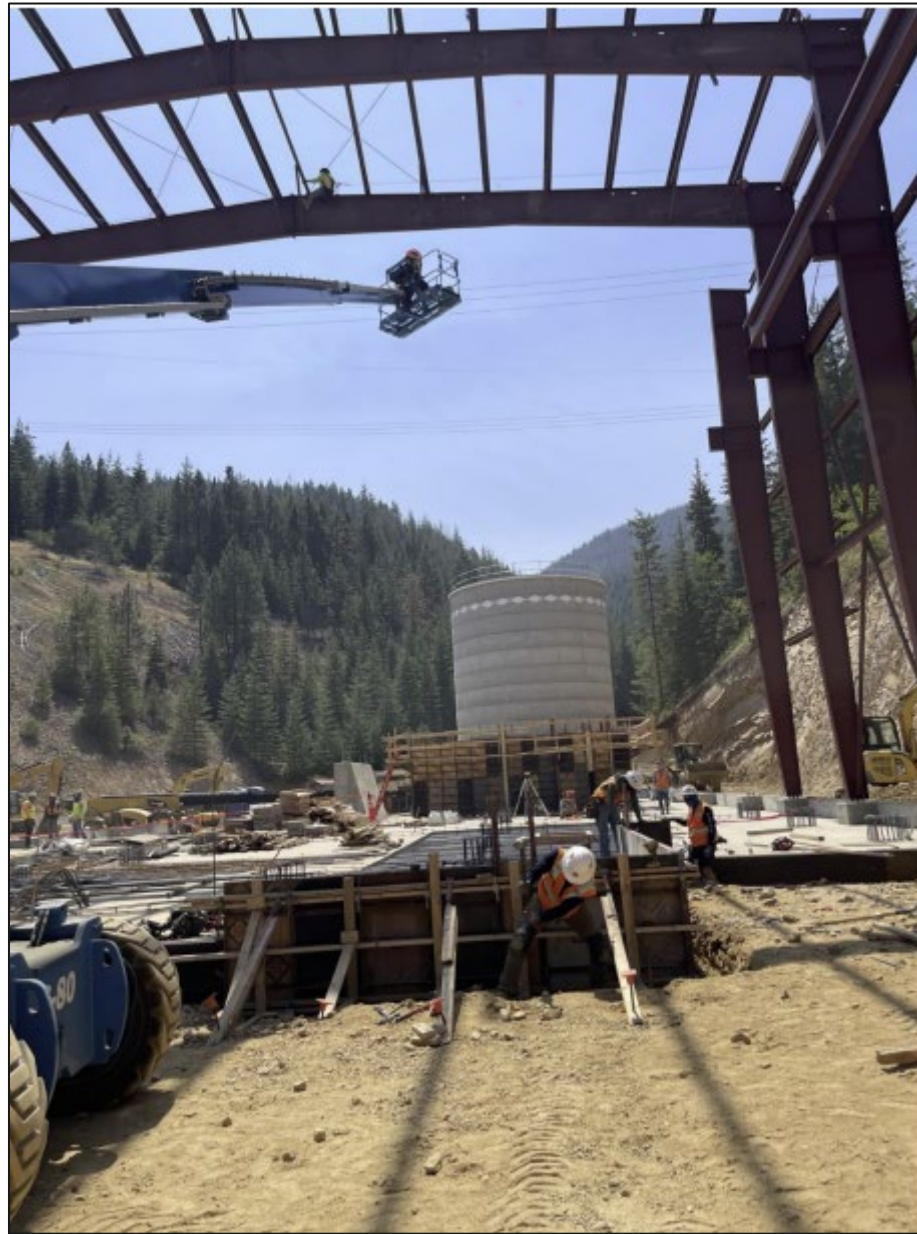
# Safety Share




**“Every Person Going Home Safe and Healthy Every Day”**

# Bunker Hill site activity

## Workspace deconfliction



	Document #:	2.4a	Revision #:	0	Revision Date:	
	Document Name:	Near Miss Report				
	Location:	Bunker Hill Mine, Kellogg ID.				

NEAR MISS REPORT	
<b>1. Incident Information</b>	
Date of Incident:	07/23/2024
Location/Project:	
Start Time of Incident:	
End Time of Incident:	
<b>2. Describe the Near Miss or Incident:</b>	
A 1 1/2 inch size bolt fell from approximately 45 feet near one of our employees. The Performance Energy Services (PES) employee stated it fell within 5 feet of him onto the ground level.	
<b>3. Suspected Cause: (Be as specific as possible.)</b>	
A Mavrick Steel employee inadvertently dropped a bolt while performing work overhead on top of the steel structure.	
<b>4. Corrective Actions Taken:</b>	
<b>a) Temporary:</b>	
An immediate shutdown took place with the near miss discussed with the entire crew. Performance employees were told not to work overhead, and Mavrick Steel was instructed not to work over any employees below.	
<b>b) Permanent:</b>	
Performance Energy employees will stay away from overhead work as conducted by contractors, subcontractors, and PES employees thereby physically avoiding the line of fire. Areas where overhead work is being conducted will be cordoned off or physically monitored to prevent entry. Overhead work / line of fire will be placed onto the JSA and discussed daily.	
<b>5. Client and/or Sub-Contractor Injury/Involvement:</b>	
<input type="checkbox"/> Client / Sub-Contractor Company Name:	No Injuries sustained involving contractor- Mavrick Steel.
<input type="checkbox"/> Client / Sub-Contractor Injury / Involvement (describe below):	N/A

Near Miss Report



# BUNKER HILL

MINING CORP



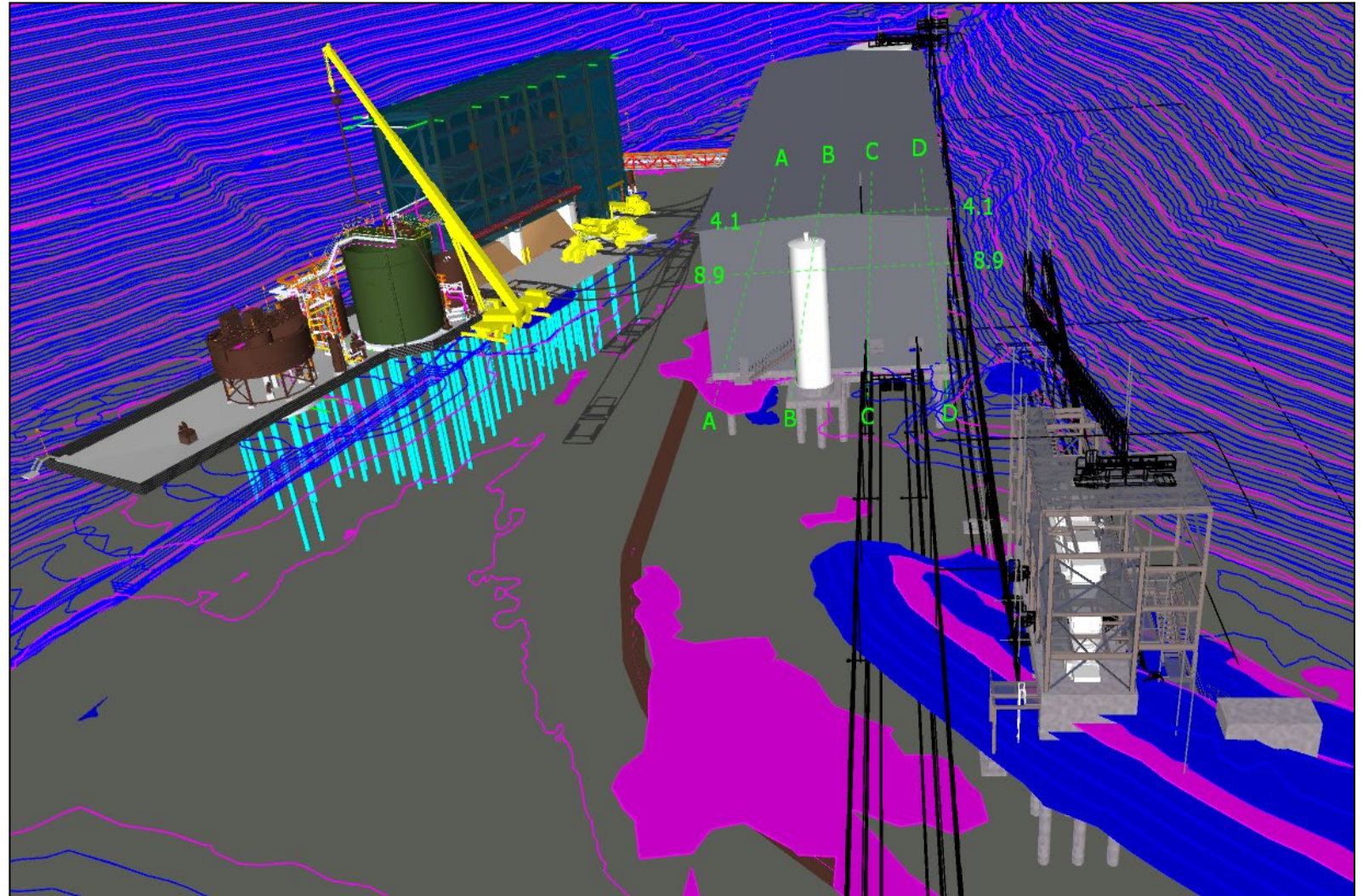




# Bunker Hill Restart Plan

High-level summary of plan, process flow, timeline

- Restarting an UG Zinc, Silver, Lead Mine
- No Smelter
- No Zinc plant
- Mining to be based at 'Wardner' site
  - Russell Portal upgrade, mainline power
- Ore to be transported to Kellogg
  - Via surface trucks
  - Using Haul Road (not through town)
- Ore to be processed at 'Kellogg' site
- Product is two concentrates
  - Zinc (*Critical Mineral*)
  - Silver/Lead
- Waste stream to go to Filter Plant
  - Recycle water
- Dried Tailings to be disposed of
  - UG paste backfill (initially & primarily)
    - Waste back up on haul road
  - Dry Stack facility
  - No tailings dams or surface ponds
- To be fully permitted
- Ramping up through Q1 2025







# Bunker Hill Restart Plan

## Our commitments & actions - AMD management

- **AMD source control** - *reduce quantity of water entering the mine*
  - West Fork Milo Creek diversion
  - Phil Sheridan raise rehabilitation and/or equivalent impact projects
  - Plugging-in mine drill holes
  - Tailings UG
- **AMD collection** - *collect & convey AMD within the mine to Kellogg Tunnel*
  - Greenhouse area
- **AMD storage** - *during plant down time*
  - Store untreated AMD in mine pool or lined pond at the CTP
- **AMD conveyance** - *ensure only exit point for water is from the Kellogg Tunnel*
  - Pipe and pump water out of the Kellogg Tunnel
  - Block/re-route flows from Reed/Russell portals
    - <https://youtu.be/eta4kOYNWz8>



Article

### Isotope Discrimination of Source Waters, Flowpaths, and Travel Times at an Acid-Generating, Lead-Zinc-Silver Mine, Silver Valley, Idaho, USA

Jeff B. Langman<sup>1</sup>, Ethan Gaddy<sup>1</sup>, Timothy Link<sup>2</sup>, Jan Boll<sup>3</sup>, Bradley Barnett<sup>4</sup>, Morgan Hill<sup>4</sup>

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<sup>2</sup> Department of Forest, Rangeland and Fire Sciences, University of Idaho; tlink@uidaho.edu

<sup>3</sup> Department of Civil and Environmental Engineering, Washington State University; j.boll@wsu.edu

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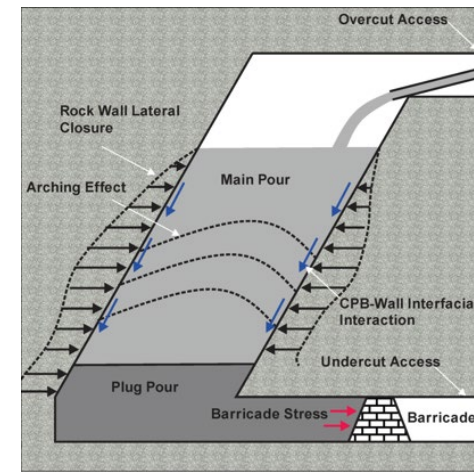




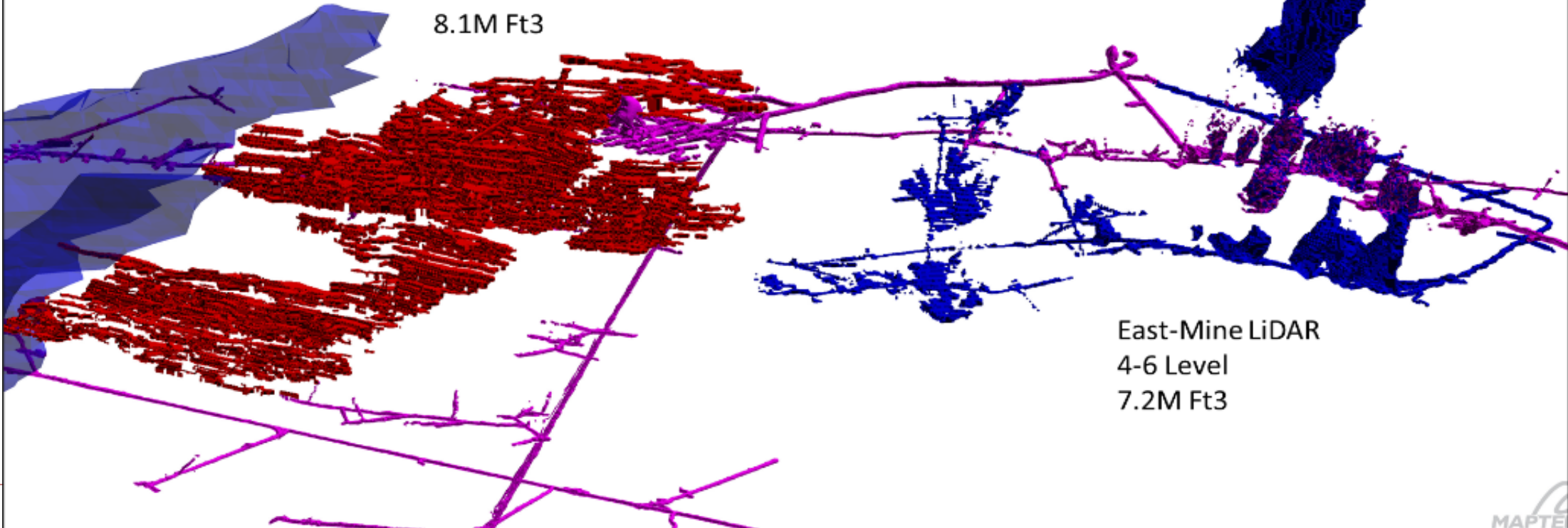
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East-Mine Digitized Stope Voids  
5-8 Level  
8.1M Ft<sup>3</sup>



East-Mine LiDAR  
4-6 Level  
7.2M Ft<sup>3</sup>

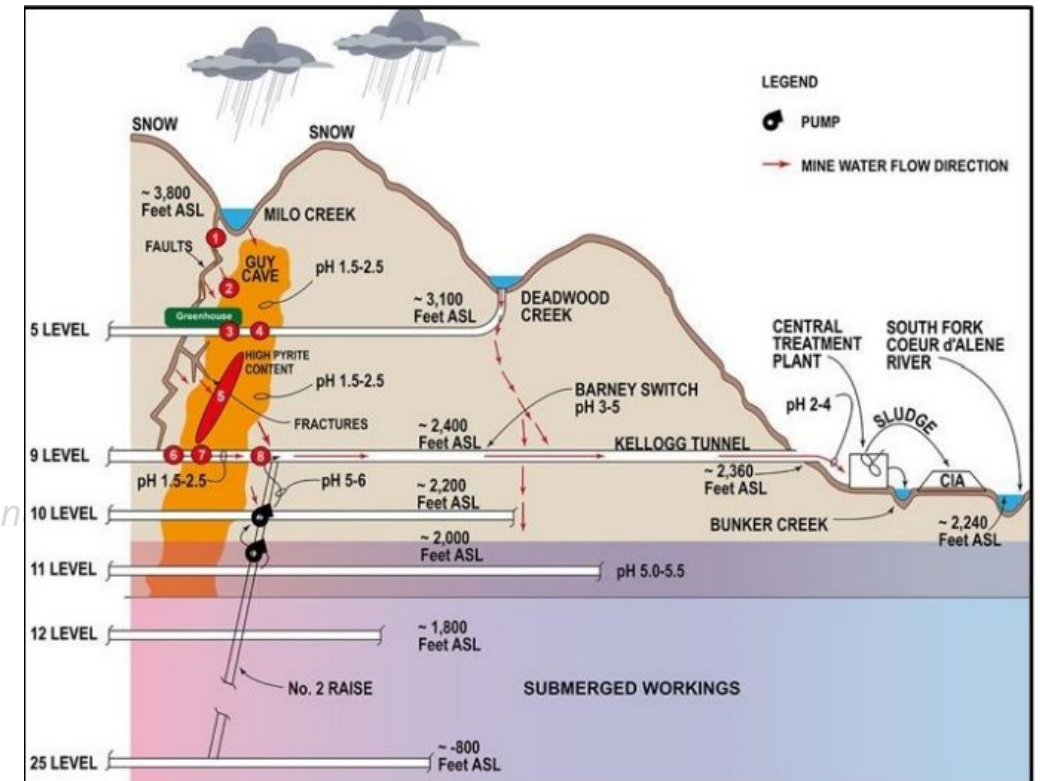




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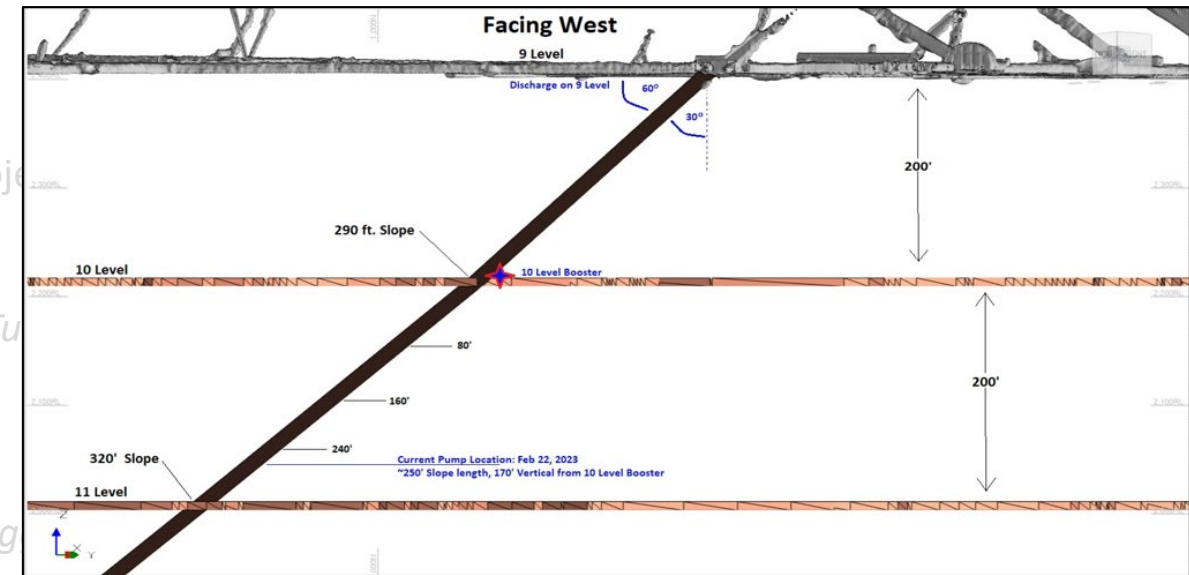
**Figure 2.** Simplified cross-section of Bunker Hill Mine and the likely pathways of infiltrating precipitation into the color-coded pyritic zone (from Germon et al. [8] courtesy of Bunker Hill Mining Corporation). Only select mine levels are presented. The Bunker Hill Mine consists of 29 levels.



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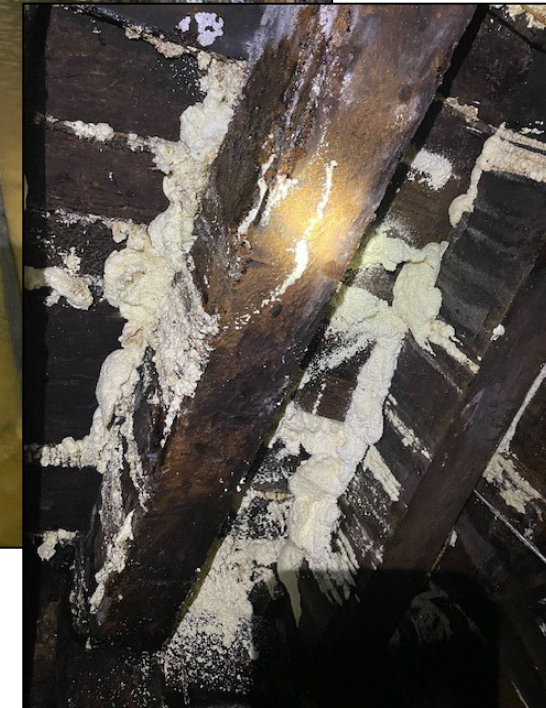




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# Bunker Hill Restart Plan

Our commitments & actions - AMD management

- AMD conveyance

Figure 2: Before and after pictures of ground water improvements

**BEFORE**



**AFTER**







# Bunker Hill Restart Plan

Our commitments & actions - payments

## Past EPA/IDEQ water payments:

From 2020 on

Vendor	Description of work	Actuals
EPA	EPA Cost Recovery	4,555,161
Idaho Department of Environmental Quality	Water Treatment Costs	4,360,210
	<b>Total</b>	<b>8,915,371</b>

## Future scheduled EPA payments:

- Nov 2024 \$3m
- Nov 2025 \$3m
- Nov 2026 \$3m
- Nov 2027 \$3m
- Nov 2028 \$3m
- Nov 2029 \$2m
- **Total \$17m**





# Bunker Hill Restart Plan

Our commitments & actions - clean-up & community







# Bunker Hill Restart Plan

Our commitments & actions - clean-up & community

