

Basin Environmental Improvement Project Commission

Summary Meeting Minutes

August 7, 2024, 9:30 AM – 3:30 PM
Panhandle Health District Office
35 Wildcat Way, Kellogg, ID 83837

These minutes are summary notes of the reports and presentations and are intended to capture key topics and issues, conclusions, and next steps and not every detail of discussion or individual quotes.

Attendees included the following:

Sharon Bosley (BEIPC Executive Director)

Commissioners and Alternates present:

Jess Byrne (IDEQ), Leslie Duncan (Kootenai County), Calvin Terada (EPA), Scott Fields (CDA Tribe), Dave Dose (Shoshone County), Brook Beeler (Washington State)

Staff present:

Gail Yost (BEIPC, Assistant to E.D., Note taker), Tamara Langton (EPA), Sandra Treccani (Washington State), Rebecca Stevens (CDA Tribe), Jerry Boyd (CCC), Andy Helkey (IDEQ)

Call to Order

Leslie Duncan welcomed everyone to the BEIPC meeting & tour and called it to order at 9:33 am. The Commissioners and Staff then introduced themselves.

Review and Approve Draft May 15, 2024, Meeting Minutes – Sharon Bosley (**Action Item**)

There were no corrections to the draft May 15th meeting minutes that were provided to each Commissioner prior to today's meeting. A motion was made by Brook Beeler to approve the minutes as provided. Jess Byrne seconded the motion; all Commissioners approved the meeting notes. **M/S/C**

Bunker Hill Presentation – Tom Francis, General Manager of Bunker Hill Mine

Tom thanked everyone who suggested and made today's update possible. This morning, he will give an update on what is happening at the Bunker Hill Mine and this afternoon everyone will get a chance to visit their construction site and see the progress being made in the main Kellogg yard. He will talk about their environmental obligations and what they're doing about permitting and their commitment to the Record of Decision (ROD), which are central to their ability to restart the mine.

The morning brief will consist of Safety Share; Restart Plan; Commitments & Actions; Payments; and Clean-up & Community. The afternoon site visit will include a tour of the infrastructure in the Kellogg Main Yard; Kellogg Tunnel & EPA Channel; Process Plant; and Filter Plant.

Safety Share – safety is critical to any industrial construction and right now they are very active in the Kellogg Yard, simultaneously constructing a large pre-engineered metal structure while also pouring concrete foundations at ground level. Their workers must continually work in conflicting physical spaces, working at heights above other operators, barricades and workspaces around the site. All activity will be stopped during our visit today so we can safely walk around. It is an active work site with uneven ground conditions, trip hazards, barricades and signage, so let's make sure we get through safely. Tom shared a couple of photos of their two operational footprints – at the Kellogg Yard and in Wardner.

Restart Plan – Tom shared a slide of a 3D model rendering what is currently in construction and buildings yet to be built. The Bunker Hill plans to restart the underground zinc, silver and lead mine that has been closed since the early 1980's. There is no intent to rebuild a smelter or zinc plant – just a processing plant and filter plant. The concentrate produced will be trucked to the Tech Trail Smelter in British Columbia which is consistent with the other operating mines in the Silver Valley – the Galena and Lucky Friday. Mining will be based at their Wardner site. The Russell Portal has been upgraded and made larger and has been connected to the main power grid by Avista which allows them to use lower cost hydroelectric power and not diesel generators. This is much more reliable and enables them to control emissions underground and provide power in a more sustainable way. A surface haul road has been established so trucks will not have to travel through town and will transport the ore from Wardner to the main Kellogg yard for processing. Two concentrates will be produced – zinc and silver/lead - for transport as discussed. The filter plant will recycle and clean the water back to the processing plant and dewater the waste stream to produce a kind of dry filtered product. This product will be trucked back up to Wardner to be disposed of as much as possible by backfilling underground into pre-existing voids to minimize any surface tailings depositions and surface footprint. A dry stack facility will also come online to store some of the filter tailings so there will be no tailings dams or surface ponds. They are currently working through the permitting process and hope to be in production toward the end of the first quarter of 2025.

Commitments & Actions – Tom will cover what their commitments are as a result of the ROD and specifically with regards to Acid Mine Drainage (AMD). There are four areas they are required to deliver on daily for AMD management – source control, collection, storage, and conveyance to the Central Treatment Plant (CTP). The critical commitment that must be maintained at Bunker Hill is the only exit point that mine water leaves the mine is through the mouth of the Kellogg Tunnel (KT). If there are other exit points, they have failed. There have been some good partnerships with the University of Idaho including isotope tracking of water passing through the mine to help them understand how water gets into the mine, where AMD happens, and to give them the best chance to successfully deliver and reduce those AMD creation spots in the future, and over time mitigate and reduce the problem.

- AMD source control – will be a work in progress when they get into production. They want to decrease flow rates, improve water quality and execute on other relevant projects.
 - The first project is the West Fork Milo Creek diversion project which aligns in priority with the EPA. This creek disappears into underground mine workings, so a large part of the mine water problem is because the creek is flowing right into the mine. As they begin production, they will be ready to reduce the quantity of water at risk of AMD.
 - Phil Sheridan raise rehabilitation and/or equivalent impact projects – one of the advantages of restarting a historic mine is you have enormous amounts of open voids and caves and disadvantages in where to put your tailings and waste. Bunker Hill plans to paste pump tailings back underground into those existing cavities and voids and get into a rhythm as they are mining and creating voids to fill them back up. One advantage of this project is it reduces your service need for tailings impoundments; secondly if you can reduce large caves and voids where AMD is happening by backfilling them it should significantly reduce the problem; and thirdly it supports the underground development and be less likely to have ground issues for a safer operating mining area.

- AMD collection – in terms of collection responsibility, to ensure that wherever AMD occurs and mine water is flowing in the mine, that it is collected and channeled to all come out at the nine level at the mouth of the KT. Tom shared a slide taken from the University of Idaho paper for isotope tracking which summarizes the fact that they have a working and improving understanding of how water is traveling through the mine, where the priority zones are and where the generation of acid is happening. This ensures that they are collecting all the right water and informs them how to execute future mitigation in these areas for substantial reduction in AMD.
- AMD storage – in terms of storage, this is really where the CTP and IDEQ do all the hard work, but what they do is maintain the infrastructure of the pre-existing channel where the water flows to ensure that channel does not get disrupted during our construction in the Kellogg yard. They work closely with IDEQ when work is being conducted at the CTP so that the water is diverted to a lined pond or held in a controlled way until the CTP is back online.
- AMD conveyance – they spend a lot of time making sure the water can safely get out of the KT and know where it's coming from. Mine pumps are maintained, raised and lowered to make sure they are pumping water out in sometimes congested and constrained areas underground to maintain the infrastructure and ensure the water has a natural kind of flow and not getting trapped behind sediments or ground collapses. Tom showed a before/after slide of an AMD pool of water and how the after picture shows these areas being cleaned up and reduction of stagnate pools.

Tom showed a time lapse video that further explained some of the improvements that have been made.

Payments – to date, Bunker Hill has paid about \$8.9 million to EPA and IDEQ for water treatment costs and for cost recovery. They are committed to pay another \$17 million over the next 5-6 years and have a schedule agreement in place. Brook Beeler asked if there were performance bonding requirements or just cost recovery. Tom answered that there were bonds in place until such time when they start production.

Clean-up & Community – in 2022, they set up their own pilot water treatment plant on a much smaller scale than the CTP. This plant is not capable of dealing with the whole mine water flow, but they did want to improve their understanding how to treat the water, how to separate the sludge from the water, and to incorporate some recent developments in water treatment using a lamella clarifier. Bunker Hill plans to employ 200 to 300 people as direct employees, right now they are at 25. They also were able to help the Lead Man Triathlon bike portion of the race by allowing them to use the haul road, so before there were trucks on this road, there were mountain bikes.

Tom shared slides of how the Kellogg main yard has changed, buildings that have been taken down or repurposed and updated, and what to expect on the afternoon tour. There was quite a lot of remediation that took place for asbestos tiling, lead paint and 50 years of hidden reagents stored in some of the buildings. They partnered with companies to dispose of these items responsibly and safely.

Scott Fields asked about Bunker Hill's NPDES permit as they have been working on their own wastewater treatment plant – there was conflicting information he found on their website stating they needed the permit by March 2023 and other information indicates they are in negotiations and will use

the CTP permanently. Tom answered they were in negotiations before March 2023 to find the right solutions and are still in discussions with IDEQ and EPA in this regard. There are several options still on the table to make sure they are regulated and have the correct permits to become operational. Currently they are working under a CERCLA shield for historic remediation. Active discussions are still happening to identify what all parties are comfortable with and appropriate solution going forward.

Dauielle Touina with the University of Idaho (U of I) was very intrigued by the pilot study that was done and asked if there were any reports and data published. Tom replied that it published in a scientific journal called 'Water' by Jeff Langman of the U of I and he will get him the details and send him a copy of the report.

Leslie Duncan asked about their processing of waste up at Trail, what kind of measures are they taking to make sure that the ore is properly processed and not ending up in the Columbia River and back into the United States. Tom stated they are responsible for making sure the permitted and appropriate trucking gets the ore to that location without any problems or issues. Tech is a fully permitted smelter - he cannot speak on behalf of them or their practices. Bunker Hill is looking into the option for hydrogen fueled trucks for hauling to reduce the carbon footprint. He can get her in touch with their partners at Tech Trail if she is interested. He added there are not many smelters located in North America any longer and he believes they continue to operate very seriously.

Lead Health Screening update – Mary Rehnborg, PHD (Institutional Controls Program Manager)
Mary wanted to make sure everyone is aware that next week they are kicking off the annual blood lead screening event. It will be held August 12th through the 17th at the Shoshone Medical Center building in Pinehurst. This program is free for anyone who lives or recreates in the Superfund site, children ages 6 months to 6 years will be paid a \$50 incentive. They have worked hard this year to make it a fun family friendly environment based on a carnival theme. There will be games, toys, and all kinds of stuff to do to hopefully make it a less sterile and medical feeling and a little bit more warm and friendly. Please help spread the word – there are flyers on the table to take with you -

Overview of today's agenda and dismiss meeting to board bus for Tour – Sharon Bosley
Sharon updated stops and times on the afternoon tour agenda that changed slightly. She also wanted to point out that even though we are touring the Box area today, there is still a lot of work going on in the Upper and the Lower Basin. A construction season preview flyer is available on the back table for those interested in what is going on throughout the site. We could not get a bus to the Upper Basin this year but hopefully we can next year so you can see all of what is going on. Grays Meadow in the Lower Basin is also in full construction mode and should be finishing up this year. We have our Basin Bulletin that is put out with our friends at EPA, so please grab a copy along with the Tour Guide for today.

Rebecca wanted to know if the fire up the Eastfork Nine Mile had any impact on the construction, and it was answered that there was no impact. The crews were able to extinguish the fire quickly.

Meeting was adjourned at 10:15 am

August 7, 2024 BEIPC Afternoon Tour Agenda:

Arrive at School District stormwater site

- Leading Idaho funded stormwater upgrade presentation - Felicia Cassidy (Engineering Division Manager Alta Science & Engineering)

Arrive at East Smeltonville Flats

- East Smeltonville Flats project area is a 16 Acre remediation site –Andy Helkey (Kellogg Remediation Program Manager IDEQ) & Ed Hagan (EPA)

Arrive at Kellogg Park for lunch

Lunch provided for Commissioners, alternates and staff

General attendees bring own sack lunch

Arrive at Bunker Hill Yard

- Discuss building upgrades, startup plans, Milo creek capture, partnerships with U of I, and paste backfill – Tom Francis (General Manager of Bunker Hill Mine)

Arrive at Galena Ridge

- Remediation plans via the ICP Galena ridge – (IDEQ)
- Silver Mountain development within the Superfund Site - Jeff Colburn (General Manager Silver Mountain Resort)
- Government Gulch Pre-Design Investigations – (EPA)
- CIA sludge pond closure – Jocelyn Carver (EPA)

Arrive at Moon Gulch

- Discuss the success of the remedy and restoration of the site and how ongoing O&M is necessary–Wade Jerome (Forest Service) & Rebecca Stevens (CDA Tribe)

Arrive at Panhandle Health District in Kellogg. Adjourn.