



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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June 1, 2023

Sent via electronic mail

Brian Erickson
Hecla Greens Creek Mining Company
PO Box 32199
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BErickson@hecla-mining.com

Re: ADEC Approves the “Greens Creek Mine Port Facility Concentrate Storage Building Sampling and Analysis Plan”, dated May 31, 2023

Dear Mr. Brian Erickson,

The Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Program (CSP) received the revised “*Greens Creek Mine Port Facility Concentrate Storage Building Sampling and Analysis Plan*”, dated May 31, 2023, and re-submitted to the department the same date. **The revised work plan is now approved.**

The work plan proposes to undertake site characterization activities to delineate the vertical and horizontal limits of lead and zinc impacted soils, in the summer of 2023. Field screening will occur on the north, south, and east of the concentrate storage building (CSB). Due to the sloped nature of the western side of the building, field screening and analytical sample collection will be conducted where possible in accessible unpaved areas. Field screening for lead will be undertaken using a NITON XRF, using a field screening value of 35 milligrams per kilogram (mg/kg) to account for variability in soil type and moisture. The NITON XRF cannot field screen for zinc, and so field screening for zinc will not be conducted. Analytical samples for zinc and lead will be taken based on field screening results for lead. If laboratory results indicate exceedances for zinc, additional delineation for zinc will be conducted at a future time. A five-by-five-foot grid that encompasses the CSB will be established and field screening via test pitting will occur at each grid point going away from the building, and every other grid point along the edge of the building. Field screening samples will be collected at 6 inches below ground surface (bgs), one-foot bgs, and one foot bgs thereafter until the vertical limits of the excavation are determined. A final field screening sample will be taken 6 inches deeper than the final vertical limit.

Two analytical samples will be collected from each test pit at the depth of the highest field screening result and the final test pit depth. Additionally, analytical samples will be collected to establish the northern, eastern, southern, and western extents of contamination. One field duplicate per ten samples, per matrix,

and per analysis methodology will be collected. Soil samples will be analyzed for total lead and total zinc via EPA Method 6020, and a subset of samples will be analyzed for the Toxicity Characteristic Leaching Procedure (TCLP) via SW-846 EPA Method 1311. Samples will be analyzed by SGS Environmental Services in Anchorage.

Soils excavated during field activities will either be stored on site in “half-high roll-off containers” or stockpiled on site. If the soil is stockpiled it will be stored on top of a 10-mil polyethylene liner, contained by a 12-inch berm on all sides, and covered with a 6-mil reinforced polyethylene cover when not in use. Samples from the stockpiled soils will be collected to ascertain whether they can be used as backfill. Stockpiled soil samples will be analyzed for total lead and total zinc via EPA method 6020. A subset of stockpiled samples will also be analyzed for TCLP. If results exceed the migration to groundwater cleanup level for Zinc (4,900 milligrams per kilogram (mg/kg)) or the human health cleanup level for lead (400 mg/kg) they will be disposed of at a Subtitle C landfill that accepts hazardous waste. If the samples exceed for RCRA leachability by TCLP, they will be handled in accordance with RCRA and disposed of at a Subtitle C landfill.

Surface Water

The CSP does not concur with Nortech’s characterization that surface water is not present at the site. Hawk Inlet satisfies the definition of surface water in 18 AAC 75.990 (128), is a reasonable distance and downslope from the CSB, and has the potential to be impacted by the release of the CSB via overland flow and/or wind deposition. A site, per by 18 AC 75.990 (115) is defined by the extent of contamination. The horizontal boundaries of the site have not been delineated and could include the tidal areas between Hawk Inlet and the CSB. **The CSP will consider Hawk Inlet in the site’s conceptual site model for migration and exposure routes.**

The CSP is aware of the long-term monitoring program that occurs in Hawk Inlet and is currently satisfied with those activities under management of the Division of Water. Sampling in the tidelands/ in the inlet will not be required by CSP at this time. This issue may be revisited if future findings indicate that human health, safety, or the environment are not adequately protected.

You can reach me by phone at (907) 465-5368 or by email at: Flannery.ballard@alaska.gov with any questions.

Sincerely,

F. Ballard

Flannery Ballard
Project Manager
Contaminated Sites Program

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