



Greens Creek Mine Field Inspection Report

Inspection Date: June 8, 2026
Time: 8:30 AM to 3:30 PM
Weather: Overcast with low clouds in the morning clearing in the afternoon. Slight breeze throughout most of the day with an average temperature of ~55°F.
DNR Personnel: Aaron Kruse, William Groom
Hecla Personnel: Paula Lillesve
Inspection Objectives: Site Inspection

Operations:

The Greens Creek Mine is an underground polymetallic mine located approximately 18 miles southwest of Juneau on the northwest side of Admiralty Island within the Tongass National Forest. Hecla Greens Creek Mining Company (HGCMC) is the operator of the mine, a wholly owned subsidiary of Hecla Mining Company with 100% interest.¹ The mine's operational footprint resides both on private property and federal lands, including unpatented claims located within the Admiralty Island National Monument. Greens Creek Mine is the largest underground silver mine in the U.S. producing 8.7 Moz Silver, 59.3 Koz Gold, 18.2 Ktons Lead, and 51.3 Ktons Zinc in 2025.²

The Greens Creek deposit is a complex polymetallic, stratiform massive sulfide system hosted within deformed marine sedimentary and mafic to ultramafic volcanic and plutonic rocks. Underground operations produce approximately 2,300 tons of ore per day utilizing two primary mining methods: cut-and-fill and long-hole stopping.³ These mining methods are supported by a trackless underground fleet enhancing operational efficiency and flexibility in ore extraction. Extracted ore is transferred to the surface mill for processing through the SAG and ball mills, flotation circuits for base-metal-rich sulfide recovery, and gravity separation for precious metals generating approximately 1,800 tons of tailings per day. About 50% of the tailings are mixed with cement and used as backfill underground disposal with the rest of the tailings placed above ground in the Tailings Disposal Facility (TDF).⁴

¹ HGCMC. (2020). *General Plan of Operations*. Greens Creek Mine Admiralty Island, Alaska. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

² Hecla Mining Company. (2026). *Greens Creek, AK*. Online overview of operations, history, resources, and local insights. Retrieved: May 27, 2026. <https://www.hecla.com/operations/greens-creek-alaska>

³ *Id.*

⁴ *Ibid.* HGCMC. (2020).

Field Inspection Plan, Execution and Summary Schedule:

The Alaska Department of Natural Resources (DNR) primary objectives for this field inspection were to inspect areas of active disturbance, construction, waste rock storage (WRS), reclamation, and water management (Map 1). Additionally, the inspection plan was designed to allow for selecting additional sites to inspect in an opportunistic fashion, and as time allowed. DNR conducts site inspections to ensure compliance with Green Creek's Reclamation Plan Approval (J20202682RPA.01), as required under AS 27.19 and 11 AAC 97. The United States Forest Service (USFS) is the lead agency regarding mining activities in the Tongass National Forest and Admiralty Island National Monument.

DNR staff arrived via crew boat at Young Bay Dock at approximately 6:00 AM. From there, crew buses transported DNR personnel via the A-Road to the Hawk Inlet Facility where we met with HECLA personnel before attending a safety brief of the mine site and its facilities. Afterwards, DNR staff had a short meeting with Paula to review the inspection plan for the day and to address any additional questions or concerns regarding current mining operations.

The inspection began at 8:30 AM by traveling from Hawk Inlet Facility along the A-Road to Young Bay. From there we traveled back, stopping at MP 2.2 to check on a culvert replacement, and then moving on to Pit 7 and Sand Pit. Afternoon, the inspection continued along the B-Road, first stopping at the TDF to document active construction of its expansion and any active deposition before heading to Ponds 7 and 10 (Map 2). Continuing up the B-Road, DNR stopped at Site E and Site 23, before traveling to the Potable Water Treatment facility within the 920 mine/mill area (Map 3). Six drone flights were required to document each of the major facilities visited.

Findings:

A summary of findings can be found below with a description of active sites that were visited. Detailed route maps with areas of interest, including photos of all inspected sites with observations notes are in Appendix A.

1. Inspection of Active Areas of Disturbance and Reclamation

- 1.1. Pit 7 is currently used for storage of stockpiled aggregate, including super sacks filled with finer material for culvert replacement, scrap metal, piping, and construction material (Photo 1). Road construction material was recently excavated from around the base of the slope and has since been contoured and hydroseeded. Minor sloughing of the slope is noted from water draining along a ditch flowing along the top of the excavation and a catchment has been placed at the base of the cut to contain any material sloughing down the slope from the instability (Photo 2). Peat excavated from the TDF expansion is currently stockpiled just below the old highwall at the upper elevations of the facility (Photo 3). The peat will later be used for reclamation requirements. DNR staff observed best management practices (BMP's) to combat invasive plant species that were placed just off the access into Pit 7. These areas were covered with black plastic sheeting tightly pinned along its edges using sandbags (Photo 4).
- 1.2. Sand Pit has remained consistent in its footprint with little change from previous inspections. Its primary use is now a laydown yard where culverts, piping, and other construction materials are stored (Photo 5). The surrounding slopes are well vegetated and in stable condition. Currently there is ponded water within the basin, but it is still well below the spillway on the western extent of the facility (Photo 6). This site is also proposed to be used as peat storage from deeper excavations expected to be encountered from the TDF expansion, which contains a higher saturation of water.

- 1.3. Expansion of the TDF was currently underway at the north end of the facility. Active drilling was observed across a temporary bridge on the western edge of the expansion for the installation of depressurization wells (Photo 7). The bridge will be removed once all the geotechnical drilling has been completed. Installation of the cut-off wall adjacent to B-Road has been finished, which will be used to mitigate ground water (Photo 8). The proposed area for waste rock placement will begin from the western edge of the cut-off wall. The current power station (Photo 9) will be moved onto a newly cleared pad at the junction between A- and B-Roads next to the Hawk Inlet Camp and facilities (Photo 10).

Active tailings deposition was observed from drone imagery within the center of the TDF. A dozer was observed spreading material in constructing a new lift (Photo 11). Slopes along the western extent of the TDF have been graded and contoured with fresh placement of organics above the storm water collection ditches. Organics have only been spread along the lower portions of the slope (Photo 12). Several active material sites were noted to be well kept and organized located within the northeastern end of the TDF and one just to the east side off the B-Road. Most of the material is used for road construction or base material for the TDF expansion (Photo 13).

- 1.4 Site E is currently used for storage of aggregate road material, equipment, and explosives (Photo 14). Piping, utility poles, and woody debris has been staged off the access route to the storm water pond located at the northern end of the facility. A pump was observed within the storm water pond which manages runoff water by pumping it into treatment facilities during non-freezing months (Photo 15).⁵ The overall site is well maintained and organized. While at Site E, DNR took the opportunity to fly the drone across the B-Road to document an older material site that has been reclaimed. The site has well established vegetative cover, including many saplings taking root providing good stability to slopes (Photo 16).
- 1.5 Site 23 Waste Rock Storage (WRS) has reached its maximum footprint of disturbance but not its maximum elevation. Ongoing deposition of class 1, 2, and 3 waste rock placement was noted along the sides with fresh piles of material placed on top of the facility. Waste rock, type 2-3 material, is planned for relocation underground, or transported to the TDF for disposal at mine closure.⁶ No active depositional work was observed at time of inspection (Photo 17). Storm water ponds were partially full along the outskirts of the facilities access route which are downslope from a pile of wood debris staged to be burned (Photo 18). Surface water runoff is managed through a series of pipes and ditches which flow to the Site 23 water management pond.⁷ Lower slopes along the facility have been contoured to an angle of repose with well-established vegetative growth.

2. Water Management

- 2.1. MP 2.2 along the A-Road and access to Pit 7 at MP 1.8 are two locations scheduled for culvert replacement to improve fish habitat. Work has not begun, but replacement culverts have been delivered to each location (Photos 19 and 20).
- 2.2. Lined storm water runoff ditching around the TDF is mostly clean of debris and overall, well maintained. No standing water was observed within ditches along the periphery of the TDF (Photo 21).

⁵ HGCMC. (2019). *General Plan of Operations Appendix 5 Best Management Practice Plan*. Section 3.5, Pg. 05-11.

⁶ HGCMC. (2019). *General Plan of Operations Appendix 14 Reclamation and Closure Plan*. Section 6.6, Pg. 14-24. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

⁷ HGCMC. (2019). *General Plan of Operations Appendix 11 Waste Rock Management Plan*. Section 3.3, Pg. 11-10. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

- 2.3. Ponds 7 and 10 were observed with only Pond 7 containing impounded water, which was well below its culvert's spillway into Pond 10. Sediment buildup in Pond 7 was above the water level, most noticeably by the inflow (Photo 22). At time of inspection there was no dredge operating in Pond 7, nor were sediment bags staged in the basin of Pond 10. Old debris had been removed near the north embankment of Pond 10 and was recently hydroseeded (Photo 23).
- 2.4. Storm water ditches along B-Road were being mucked out during the time of inspection with most of the length of B-Road already completed. Hydroseeding of the ditch and newly placed mucked material, usually placed above the ditch, was observed to begin at approximately MP 3.7 and continued up the road to the mill facilities.
- 2.5. Potable Water Treatment Facility, near the 920 Portal, with walkways to Greens Creek for sampling were in good condition and well maintained (Photo 24). Active treatment matches the documentation emphasis on sustained water treatment needs for the mill and surrounding buildings during operations.

Conclusion and Recommendations:

HGCMC facilitates their mining activities in a manner which prevents unnecessary and undue degradation of private and Federal lands and State water resources. All observed activities conform with the Reclamation Plan Approval, and current activities meet the state's requirements under AS 27.19 and 11 AAC 97. DNR finds Greens Creek Mine operations are in good condition and consistent with industry standards.

Report prepared by: Aaron Kruse

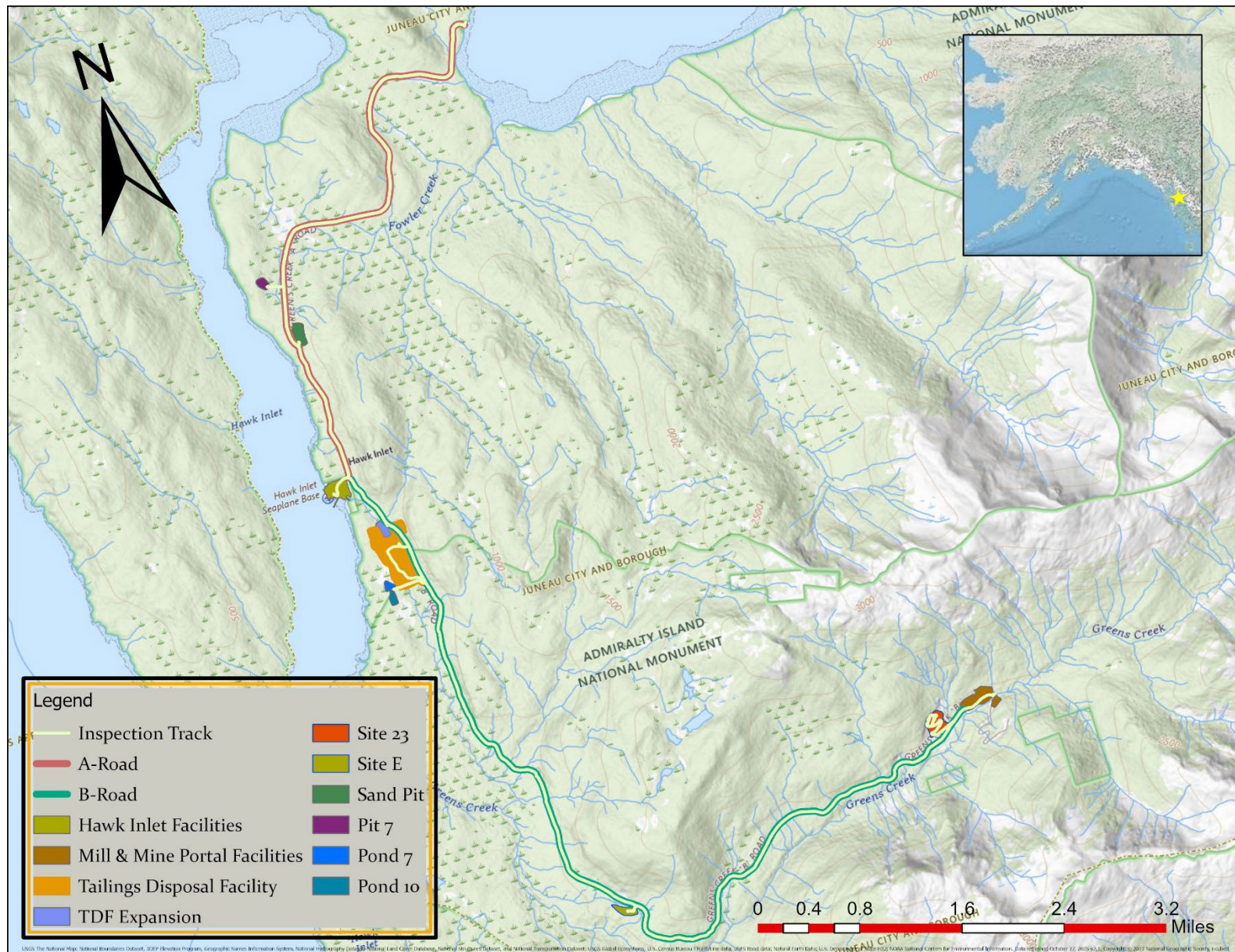
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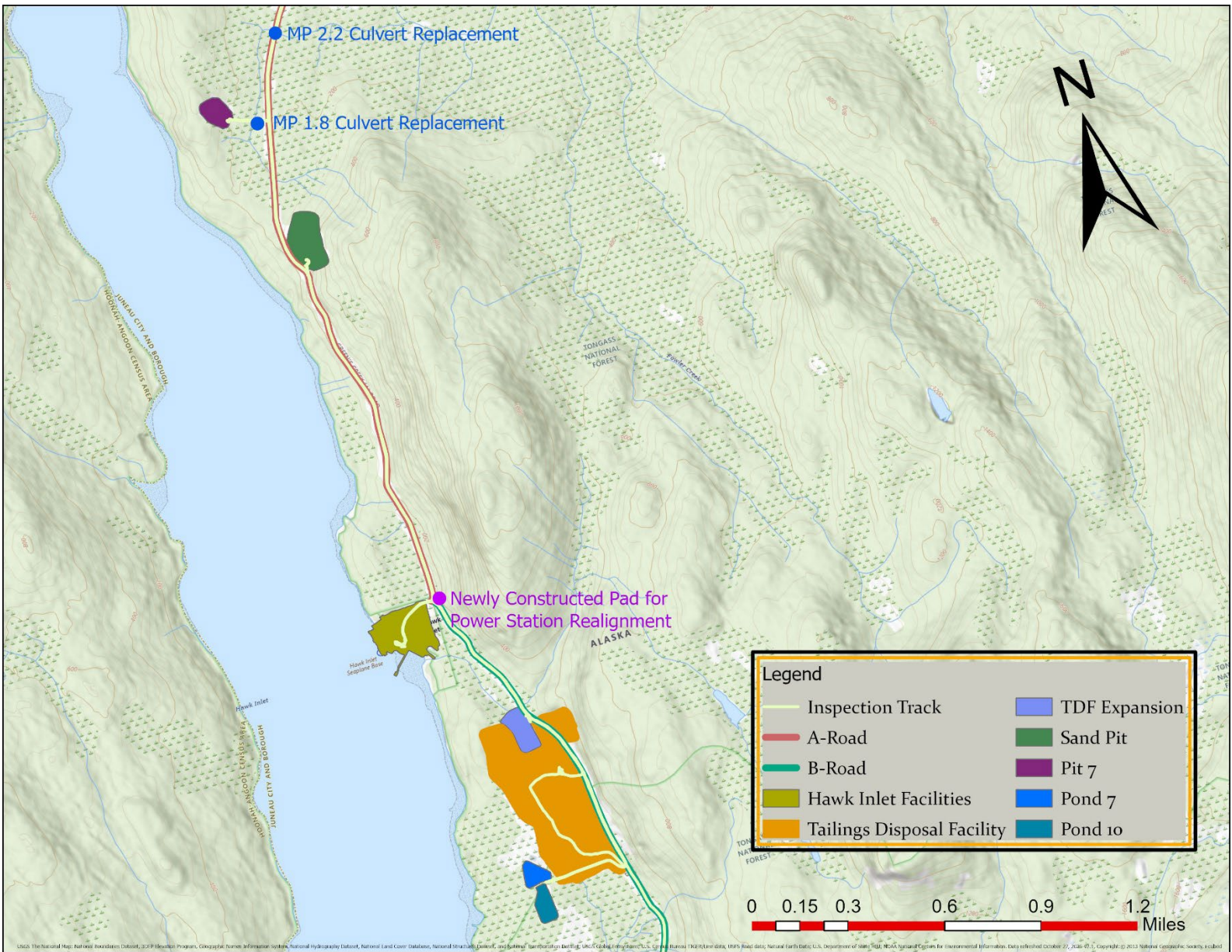
Steve Buckley (DNR)
William Groom (DNR)
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Jesse White (DNR)
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Ben Wagner (DNR)
Kim Bustillos (DNR)
Jenny March (DNR)

David Khan (DEC)
Nick Waldo (DEC)
Matthew Reece (USFS)
Scott Leslie (USFS)
Kate Kanouse (ADF&G)
Jennifer Stoutamore (HGCMC)
Paula Lillesve (HGCMC)

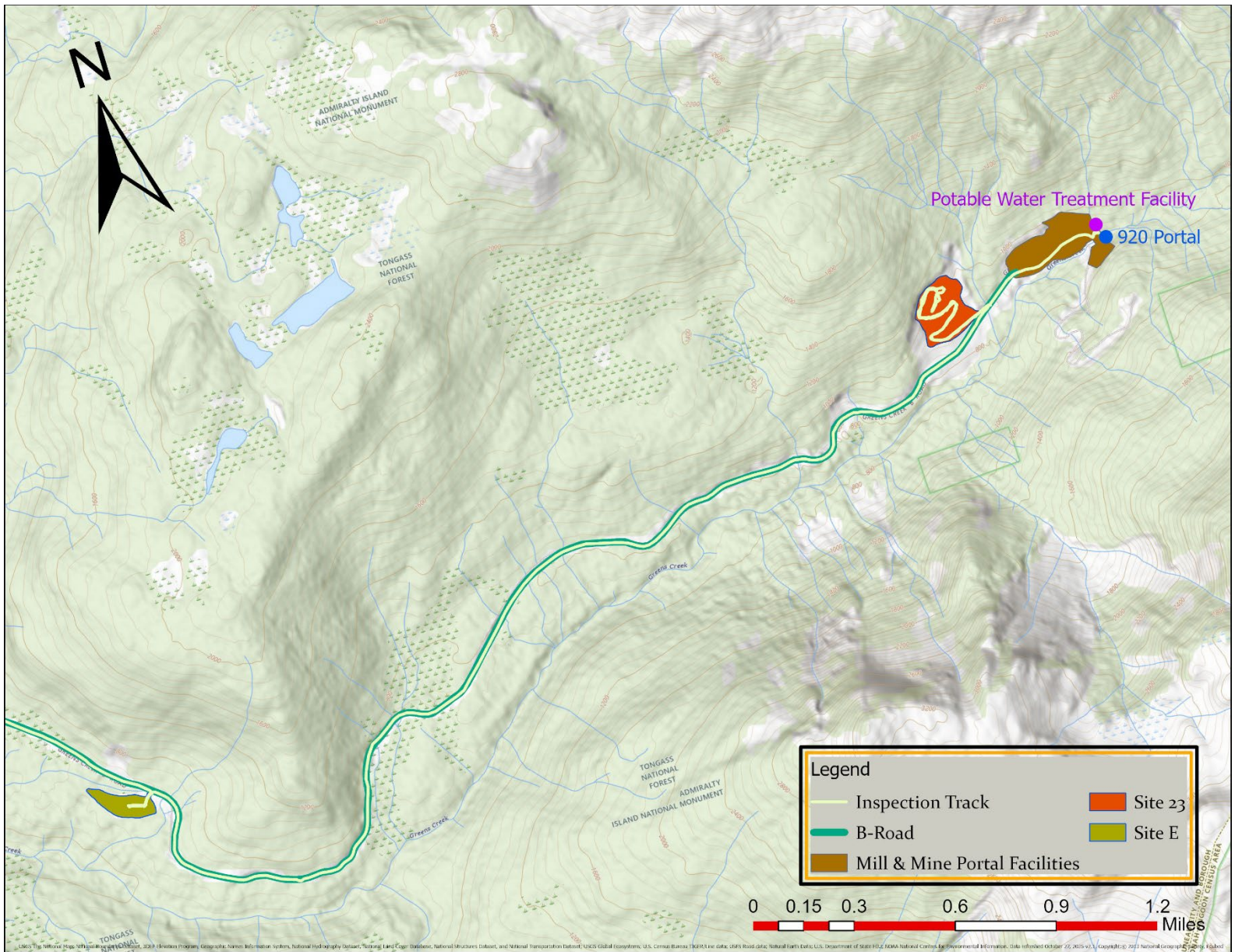
Appendix A

Inspection Maps, Photos, and Observations of Note





Map 2: Facilities inspected along A- and B-Roads which include the facilities at the TDF, Sand Pit, and Pit 7.



Map 3: Site 23, Site E, and associated water management sites within the 920 mill and mine portal facilities.

Field Inspection Photos with Observations of Note

Photo 1: Stockpiled aggregate, super sacks, and miscellaneous construction materials stored in Pit 7. Recent area of excavation that has been hydroseeded (circled). Water seep ditched above excavation with a catchment below to mitigate soil sloughing.



Photo 2: Pit 7 area of excavation looking at the top where water is seeping through from the above flow. Catchment is directly below slope instability.



Photo 3: Stockpiled peat excavated from the TDF expansion, stored below the highwall of Pit 7.



Photo 4: Invasive species BMP's near Pit 7 entrance, using black plastic sheeting pinned with sandbags.



Photo 5: Sand Pit laydown yard with stored culverts, piping, and construction materials. Viewed near the entrance looking northwest.



Photo 6: Pondered water in the Sand Pit basin below the spillway elevation. Spillway drains into ditch along A-Road. Well established vegetation on contoured slope. View looking north.



Photo 7: Northern aerial view of the TDF expansion. Active drilling across from the temporary bridge for installation of a depressurization well. The extent of the cut-off wall is circled.



Photo 8: Completed cut-off wall near B-Road for groundwater control.



Photo 9: Current power station that will be relocated to a newly cleared pad near A- and B-Roads.



Photo 10: New pad at the junction of A- and B-Roads cleared to construct the new power station. View is to the southeast.



Photo 11: Active tailings deposition with dozer spreading material to build a new lift within the TDF. Aerial view to the southeast.



Photo 12: Final grade along the western TDF slope. Fresh organics have been placed on lower slope contours just above the lined stormwater ditch.



Photo 13: Organized material sites (circled) near the northeastern TDF and along B-Road, used for road construction and base material for TDF expansion area. Aerial view to the north.



Photo 14: Site E storage area with aggregate, equipment, and explosives.



Photo 15: Stormwater pond at Site E with pump used during non-freezing months for runoff management.



Photo 16: Reclaimed older material site with well-established vegetation and growth of young saplings. Aerial view to the north just off the B-Road across from Site E.



Photo 17: Aerial view looking north of Site 23 Waste Rock Storage. Recent deposition of waste rock was observed on top of the facility (circled). Well-established revegetation has occurred along the base of the facilities southern facing slopes.



Photo 18: Site 23 aerial view to the south looking at stormwater ponds and staged wood debris planned for burning. Site 23 Water management pond can be seen in the background (circled).



Photo 19: Replacement culvert staged at MP 2.2 of A-Road awaiting installation.



Photo 20: Replacement culvert staged at MP 1.8 just off Pit 7 access road awaiting installation.



Photo 21: Lined stormwater
ditches around the TDF.
Aerial view looking to the
east.



Photo 22: Pond 7 Inlet
exhibiting incising into
sediment delta .



Photo 23: Hydroseeded area just north of Pond 10 embankment where old debris had been removed (Circled). Pond 10 has some standing water just below spillway. Aerial view looking to the south.

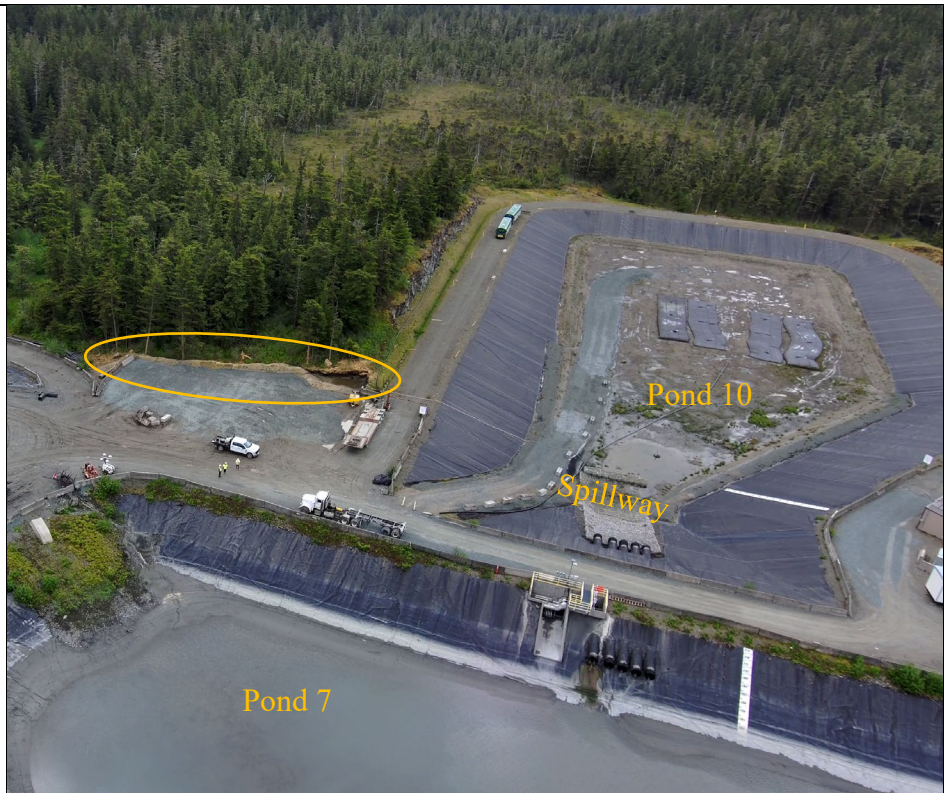


Photo 24: Potable Water Treatment Facility near the 920 Portal. This facility is well maintained. Photo of walkway to one of Greens Creek sampling points.

