

November 9, 2020

Project No. 9231000006.5000

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## **LANDSBURG MINE SITE REMEDIATION CONSTRUCTION ACTIVITIES SUMMARY REPORT OCTOBER 2020**

Construction activities completed at the Landsburg Mine Site (the Site) during the period of September 28 to November 6, 2020 are summarized as follows:

- Deploying, seaming, and seam testing of the geomembrane cover liner was completed over all required areas (Areas 7, 8 and 9). The geocomposite drainage layer was installed over the geomembrane. Toeing-in of the liner into the anchor trenches and overlaying the geocomposite drainage layer into the stormwater ditches were also completed.
- All stormwater ditches, including both rock-lined and grass-lined ditches, were installed. These were constructed along the east sides of Areas 7 and 8 and the west side of Area 9. A rock-lined stormwater ditch west of Areas 7 and 8 was also installed. The stormwater infiltration ponds were constructed at the north end of the Site. The stormwater conveyance pipe and catch basins/dissipation vaults that transfer stormwater down the hill from the north end of Area 9 to the infiltration ponds were installed.
- A 1.5-foot-thick layer of general fill cover soil was placed across all of Area 7, 8, and 9, and a 0.5-foot-thick layer of topsoil was placed over the general fill.
- Hydroseeding was started on the topsoil layer at the Trench Areas, at the infiltration ponds, at intended grass-lined stormwater ditches, and at other portions of the Site that require re-vegetation.
- As reported in the September 2020 progress report, five highly rusted and broken drums were discovered on the surface along the eastern edge of Area 9 as the crew was clearing brush and dragging out some blackberry bushes. The drums and a few inches of the underlying soil were removed from the approximate 10-foot by 10-foot area. During the month of October, approximately 6-inches of additional soil was removed from the area where the rusted drum material was located and removed. To confirm the native soils beneath the area where the drums were located were not impacted, soil samples were collected and analyzed for Target Analyte List (TAL) metals, cyanide, VOCs, pesticides, polychlorinated biphenyls (PCBs), semi-volatile organics, and Total Petroleum Hydrocarbons. All analytical results for the soils remaining in place after excavation was complete were below cleanup levels for unrestricted land use. A summary of the soil sampling results will be provided to ecology in a technical memorandum.

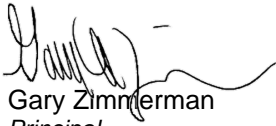
- Golder continued to conduct the required short-term groundwater monitoring in accordance with Table A-2 of the Construction Management Plan (CMP). Groundwater monitoring data for these events will be validated and compiled into monitoring reports for submittal to Ecology.

Anticipated Construction Tasks to Occur During November:

- Complete hydroseeding of all required areas.
- Demobilize all equipment and material from the Site.
- Continue short-term monitoring in accordance with Table A-2 of the CMP.

Please contact Gary Zimmerman at (425) 883-0777 if you have any questions.

**Golder Associates Inc.**



Gary Zimmerman  
Principal

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Attachments: Site Photographs

## Site Photographs

Photograph 1 – View of geomembrane and geocomposite installed at Area 9.



Photograph 2 – View of general fill soil placement over geomembrane and geocomposite at Area 9. Note the rock-lined ditch at the foreground of the photo.



Photograph 3 – View of general fill soil placed over geomembrane and geocomposite at Areas 7/8.



Photograph 4 – View of rock-lined ditch being installed at east side of Area 7/8. This ditch ties into the rock-lined ditch west of Area 9.



Photograph 5 – View of Area 9 with topsoil installed. Note the rock-lined ditch that is installed west of Area 9.





Photograph 6 – View of topsoil installed at Areas 7/8.



Photograph 7 – View of Infiltration Pond installed at the North End.



Photograph 8 – View of Infiltration Pond after hydroseeding.



Photograph 9 – View of hydroseeding completed at Area 9.



Photograph 10 – View of hydroseeding being completed at Areas 7/8.

