COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Schwartzwalder Mine	**MINE/PROSPECTING ID#:** M-1977-300	**MINERAL:** Uranium	**COUNTY:** Jefferson
INSPECTION TYPE: Preoperation Inspection	**INSPECTOR(S):** Amy Eschberger, Michael Cunningham	**INSP. DATE:** September 14, 2021	**INSP. TIME:** 13:00
OPERATOR: Colorado Legacy Land, LLC	**OPERATOR REPRESENTATIVE(S):** Elizabeth Busby, Billy Ray	**TYPE OF OPERATION:** 112d-2 - Designated Mining Operation	

REASON FOR INSPECTION: Preoperation Inspection	**BOND CALCULATION TYPE:** None	**BOND AMOUNT:** $7,674,022.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:** Amy Eschberger	**SIGNATURE DATE:** September 23, 2021

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS---------- Y	(FN) FINANCIAL WARRANTY-------- N	(RD) ROADS---------- Y
(HB) HYDROLOGIC BALANCE---------- Y	(BG) BACKFILL & GRADING---------- Y	(EX) EXPLOSIVES--------- N
(PW) PROCESSING WASTE/TAILING---- N	(SF) PROCESSING FACILITIES------- N	(TS) TOPSOIL---------- N
(MP) GENL MINE PLAN COMPLIANCE- Y	(FW) FISH & WILDLIFE---------- N	(RV) REVEGETATION---- N
(SM) SIGNS AND MARKERS---------- N	(SP) STORM WATER MGT PLAN---- Y	(RS) RECL PLAN/COMP-- Y
(ES) OVERBURDEN/DEV. WASTE--------- N	(SC) EROSION/SEDIMENTATION--- Y	(ST) STIPULATIONS------- N
(AT) ACID OR TOXIC MATERIALS------- Y	(OD) OFF-SITE DAMAGE----------N	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This was a pre-operation inspection of the Schwartzwalder Mine (Permit No. M-1977-300) conducted by Amy Eschberger and Michael Cunningham of the Division of Reclamation, Mining and Safety (Division) in response to an Amendment application (AM-6) filed with our office on July 29, 2021. The operator was represented during the inspection by Elizabeth Busby and Billy Ray. The site is located approximately 6 miles northwest from Golden, CO in Jefferson County. Access to the site is off of Glencoe Valley Road. The affected lands are owned by the operator. This site is on a quarterly inspection frequency. This inspection serves as the 3rd quarter inspection for 2021 (as well as the pre-operation inspection for AM-6). **Photos 1-12** taken during the inspection are included with this report.

This is a 112d-2 underground uranium mine with a permit area of 76.22 acres (see Figure C-1 – Affected Lands, approved in AM-5). The site is situated at the bottom of a canyon, adjacent to Ralston Creek. Mine features on site include two large waste rock piles, referred to as the North Waste Rock Pile (NWRP; located on the north side of the creek) and the South Waste Rock Pile (SWRP; located on the south side of the creek), and eight mine openings in the hillside along the southern edge of the valley. Several structures are located on or within 200 feet of the affected lands, including: Glencoe Valley Road, two property access gates, an access bridge across the creek to reach an equipment storage area, a cut-off wall and bridge across the creek near the SWRP, a water diversion pipeline (adjacent to the creek), a stormwater diversion channel installed along the northern edge of the NWRP, a water treatment plant and associated infrastructure (e.g., generator, tanks, sea containers, pipelines), two mobile office trailers, a gravel parking area (near the treatment plant), a wench and cable housing located near the Jeffrey Air Shaft which supports the new 60 hp dewatering pump, overhead powerlines, a domestic well, 13 groundwater monitoring wells, an alluvial pumpback sump, and internal mine roads, including one that leads up the southern hillside to access some of the mine openings and monitoring wells located in the southern portion of the permit area. All of these structures are owned by the operator, except for the powerlines, which are owned by United Power Inc. (for which, a structure agreement was provided in AM-5).

The site was mined by Cotter Corporation from the 1960's through 2000. Colorado Legacy Land, LLC took over the permit in 2018 (through Succession of Operators No. 1; SO-1) to complete reclamation of the site. The Division's approval of SO-1 included four conditions, which are outlined in its February 20, 2018 approval letter. AM-6 seeks to address conditions no. 2 and 3 of the SO-1 approval by providing a conceptual site model, a plan addressing the physical and chemical stabilization of the mine pool, specifically addressing concentrations of dissolved uranium and other constituents as required under the conditions of the permit, and updating the reclamation and environmental protection plans (condition no. 2); and providing a plan addressing the long term cost of operating the water treatment plant and managing the mine pool, based on 3 consecutive years of data which verify the physical and chemical stabilization of the mine pool (condition no. 3).

The operator published notice of AM-6 (in the Denver Post) once a week for four consecutive weeks as required by Rules 1.6.2(1)(d) and 1.6.5(1). The public comment period closed on September 15, 2021. During this period, the Division received two agency comment letters (from History CO and Division of Water Resources), and two objection letters (from Denver Water and City of Arvada) on the application. The operator must inform the Division how they intend to address all jurisdictional issues identified by objecting parties. The Division is currently reviewing the application for adequacy and will inform the operator if additional information or clarification is required.

The Division determined AM-6 to be "complex" pursuant to Rules 1.1(17) and 1.4.1(7), which extended the application decision date 60 days beyond the usual 90-day period set for this type of application. This gives a current application decision date of December 26, 2021. Because a timely objection was received for the

application, pursuant to Rule 1.4.9(2)(a), the Division will schedule the application for a hearing before the Mined Land Reclamation Board (Board). By the decision date, the Division will issue a recommendation to the Board for approval, approval with conditions, or denial of the application. During the formal public hearing, the Board will make a final decision on the application.

Because AM-6 does not propose an increase in the affected lands or any new facilities, there were no new areas to observe for the pre-operation inspection. Much of the inspection consisted of discussing the application (and other potential proposals) with the operator. The Division did observe active excavation activities occurring in the northern portion of the valley excavation project area (north of the mesa with the water treatment plant). The Division also observed the recent excavation located in the southern portion of the valley, where a pit has been dug adjacent to (and south of) the access road at a depth of approximately 5 feet. The operator may need to temporarily relocate Glencoe Valley Road and the bypass pipeline (which diverts water from Ralston Creek around the mine site) in order to excavate radionuclide-impacted alluvial materials from under the current road location. The operator may also need to abandon the alluvial groundwater monitoring wells MW-6 and MW-7 (located in the southern portion of the valley) in order to ensure the surrounding contaminated soils are appropriately excavated. The Division informed the operator this proposal will need to be submitted through a Technical Revision, as was done through TR-29 (approved on December 2, 2019) to abandon alluvial groundwater monitoring wells MW-1, MW-2, MW-3A, and MW-9. The valley excavation project is currently on schedule to be completed by January of 2022. After the final surveys are completed, the final grading plan for the valley will be submitted to the Division.

Per AM-5 (approved on January 13, 2021), the radionuclide-impacted alluvial soils excavated during the project can be disposed of inside the Black Forest Mine, located just south of the SWRP. The operator is also approved to dispose of this material inside the CV Glory Hole of the Minnesota Mine, located in the hillside above the water treatment plant. According to the operator, the CV Glory Hole has reached its capacity and the excavated material is now being placed inside the Black Forest Mine. The CV Glory Hole will continue to be used for disposal of RO membranes, cartridge filters, and incidental items related to the water treatment plant (per TR-26; approved on July 6, 2018). Upon final placement of these materials, the operator is required (per TR-26) to provide a map showing the location of disposed items in this mine.

The operator indicated they are seeing more compaction in the Black Forest Mine than originally expected, which may allow them to dispose of slightly more excavated materials in this mine than the originally estimated 15,000 cubic yards. However, based on recent gamma radiation scans, the operator believes there may be approximately 5,000 cubic yards of additional material (besides what can fit in the Black Forest Mine) that will need to be excavated from the valley. The operator discussed possibly placing this material on one of the waste rock piles on site (once the Black Forest Mine has reached capacity). While this activity was approved in the permit, it is not the preferred disposal location at this point in time given the reclaimed state of the piles. If the operator proposes re-disturbing the reclaimed waste rock piles, the Division will require an updated plan for this activity be submitted (through a Technical Revision), to include updated maps showing the approximate location(s) of placement, an updated stormwater management plan (if needed), and an updated description of how this material will be "capped" for reclamation. If the operator proposes placing additional material on the NWRP, the updated plan must address how this material will be placed in relation to the new stormwater diversion channel constructed along the northern edge of this pile in 2020 (per TR-28), and whether the additional placement is expected to have any impacts on the functionality of this channel.

At the time of the inspection, the mine pool was more than 354 feet below the Steve Level, which is at least 204 feet below the required 150 foot depth. The actual depth of the mine pool was not known given the current transducer location does not allow for readings to be obtained below the 354 foot depth. However, when the water treatment plant was shut down for the winter last week, the estimated mine pool depth was known to be at

approximately 370 feet below Steve Level (based on pump rates). The operator plans to bring the water treatment plant back online in approximately 6 months or longer, depending on the mine refill rate. Mine pool levels are monitored on a daily basis, regardless of whether the treatment plant is online. The last in-situ injection treatment of the mine pool was completed in January of 2020, and included two tracers. The tracers were used to evaluate the mixing of the mine pool. The results of the tracer study were provided in AM-6. The operator plans to perform another injection treatment of the mine pool during the first week of October, which will include only ethanol (and no molasses). No tracers will be added to this injection. The upcoming injection treatment will be the 5th to occur at this site, including those completed in 2013, 2015, 2017, and 2020.

AM-6 includes an updated Exhibit E – Reclamation Plan which discusses the in-situ mine pool treatments and results, the physical and chemical stabilization of the mine pool, and the water treatment plant operating strategy. This application also includes an updated Exhibit L – Reclamation Costs which proposes a financial warranty of $3,858,293.54, which is $3,831,608.46 less than the currently held amount of $7,689,902.00 (last adjusted in February of this year, with the Division's approval of Surety Reduction No. 9). Exhibit E does not clarify remaining reclamation at the site in correlation with the updated bond estimate provided. Also, the updated bond estimate does not specify which reclamation tasks have proposed changes compared to the last approved estimate. The Division will require additional information in order to calculate the required financial warranty for the site. The operator should be advised, the Division will be unable to approve a reduction in the required financial warranty through the Amendment process. Only an increase in the financial warranty amount can be approved through an Amendment. The Division will reassess the required financial warranty for the site during the adequacy review process. In the event a reduction is warranted, the operator would need to submit a Surety Reduction request (after AM-6 approval). AM-6 also includes as attachments a conceptual site model and a discussion of the tracer study results. No other exhibits have proposed changes. As the Division reviews AM-6 in more detail, an additional site inspection may be necessary in relation to the bond estimate and surface reclamation tasks proposed. If this is the case, the Division could most likely combine this inspection with the upcoming 4th quarter (2021) inspection.

The Division is currently working to schedule a meeting in the near future with the operator and the objecting parties, Denver Water and City of Arvada, to discuss the AM-6 application.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS

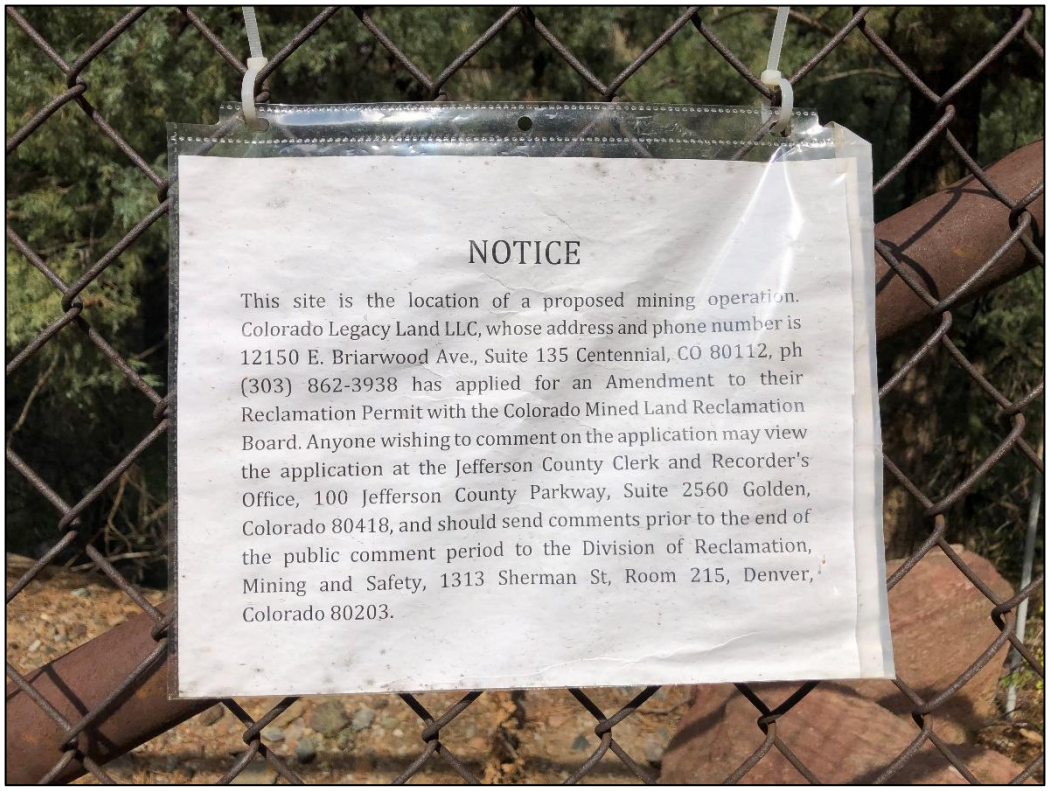


Photo 1. View of public notice of AM-6 application posted at main entrance to site in accordance with Rule 1.6.2(1)(b).

Photo 2. View looking southeast at reverse osmosis (RO) water treatment plant situated on top of mesa along southern edge of valley. Mine water is treated in this plant then discharged to Ralston Creek under a CDPHE discharge permit.

Photo 3. View looking west/southwest at Steve Adit, located just northwest of water treatment plant on top of mesa. Mine water was previously pumped from this adit to treatment plant. However, mine water is now pumped from Jeffrey Air Shaft located on hillside above treatment plant. It is not clear what continued use the operation has for this adit and what infrastructure remains inside.

Photo 4. View looking northwest (from top of mesa with water treatment plant) across northern portion of valley excavation project, in which, excavation activities were occurring during inspection. Radionuclide-impacted alluvial valley soils are excavated and disposed of underground per the approved permit.

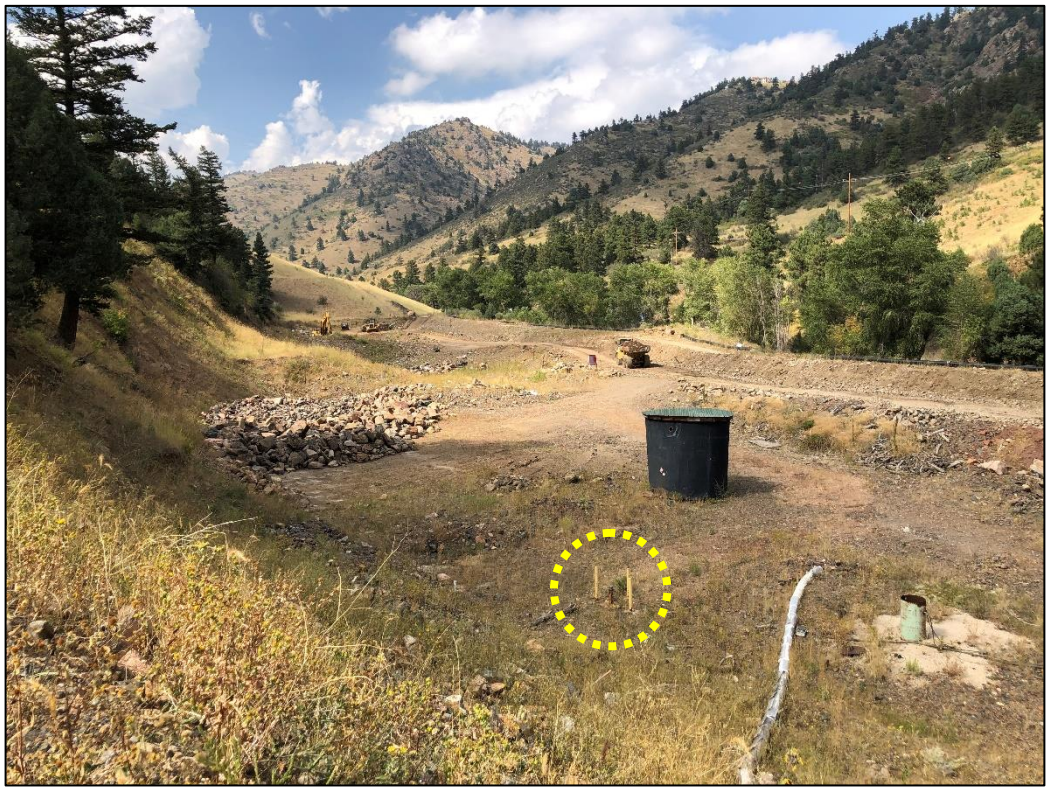


Photo 5. View looking northwest across northern portion of valley excavation project, in which, excavation activities were occurring during the inspection. Bedrock groundwater monitoring well MW-18 (circled) is visible in foreground.

Photo 6. View looking southeast across central portion of valley excavation project at base of mesa with water treatment plant (plant visible at top, right).

Photo 7. View looking northwest at central portion of valley (east of mesa with water treatment plant) which may need to be excavated to remove radionuclide-impacted soils. The access road and adjacent bypass pipeline (indicated) may need to be temporarily relocated during this project.

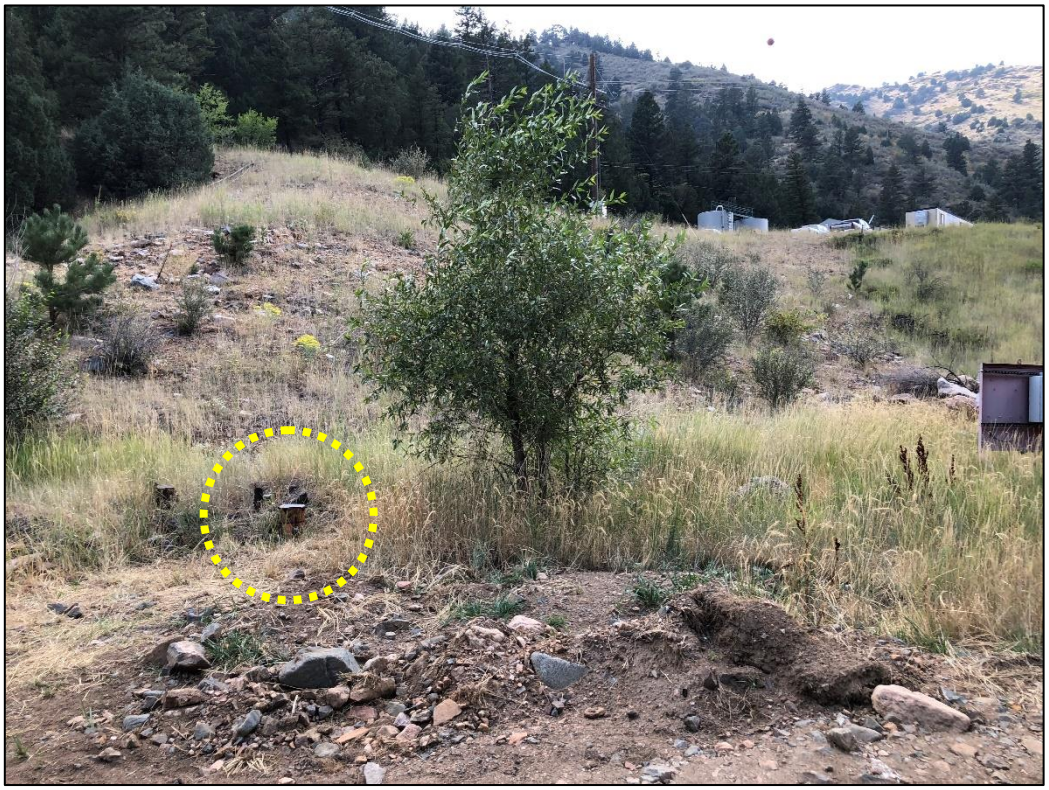


Photo 8. View looking west/northwest at alluvial groundwater monitoring well MW-6 (located southeast of mesa with water treatment plant), which operator may propose (in an upcoming Technical Revision) to abandon, if alluvial material surrounding well must be removed for valley excavation project.

Photo 9. View looking southeast across southern portion of valley excavation project, which was recently excavated. Radionuclide-impacted alluvial valley soils are excavated and disposed of underground per the approved permit.

Photo 10. View looking northwest across southern portion of valley excavation project, showing recent excavation along south side of access road. Road and adjacent bypass pipeline (indicated) may need to be temporarily relocated during this project.

Photo 11. View looking northwest across southern portion of valley excavation project. Note alluvial groundwater monitoring well MW-7 (circled) which operator may propose (in an upcoming Technical Revision) to abandon, since alluvial material surrounding well must be removed for valley excavation project. Sump #1 (at left; the last functional sump on site) may also become redundant.

Photo 12. View looking southeast across southern-most portion of valley inside permit area, which may need to be excavated for the valley excavation project. The access road and adjacent bypass pipeline may need to be temporarily relocated during this project.

Inspection Contact Address

Jim Harrington
Colorado Legacy Land, LLC
12150 E Briarwood Ave - Suite 135
Centennial, CO 80112

Encl: Figure C-1 – Affected Lands, approved in AM-5

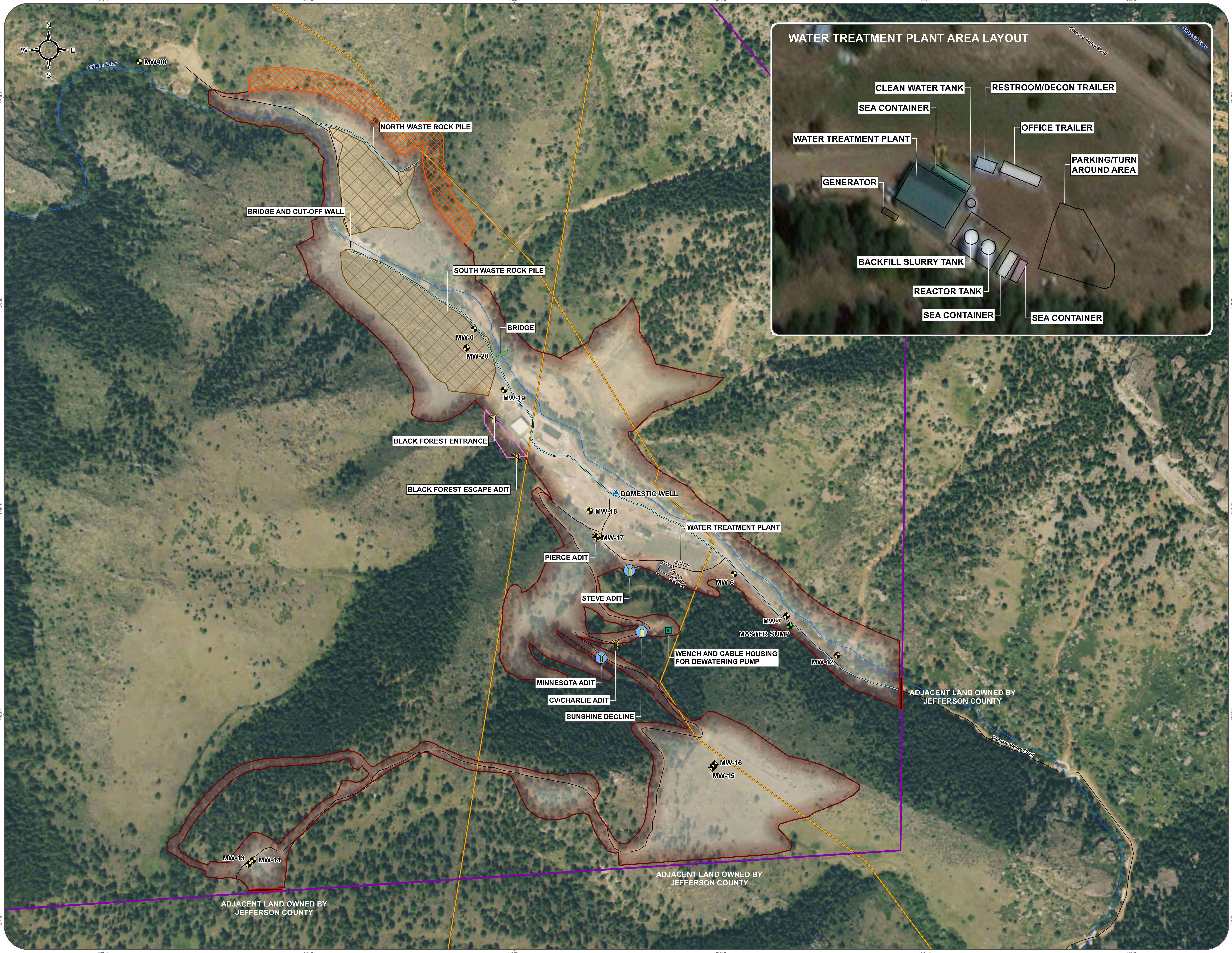
EC: Billy Ray, Ensero Solutions at: bray@ensero.com
Elizabeth Busby, Ensero Solutions at: ebusby@ensero.com
Paul Newman, Colorado Legacy Land, LLC at: paul@coloradolegacy.land
Eric Williams, Colorado Legacy Land, LLC at: eric@coloradolegacy.land
Michael Cunningham, DRMS at: michaela.cunningham@state.co.us

COLORADO LEGACY LAND
SCHWARTZWALDER MINE

FIGURE C-1
AFFECTED LANDS

DECEMBER 2020

COLORADO LEGACY LAND



- Groundwater Monitoring Well
- Pumpback Sump
- Domestic Well
- Adit - Backfilled with Rockfill
- Adit - Closed with Gate
- Wench and Cable Housing for Dewatering Pump
- Bridge
- Gate
- CLL Property Boundary (559.2 acres)
- Permitted Boundary, Schwartzwalder Mine M-1977-300 (72.24 acres)
- North Waste Rockpile Upland Area (3.6 acres)
- Former Black Forest Mine (0.38 acres)
- Waste Rock Dump
- Existing Mine Feature Footprint
- Diversion Structure
- Power Line
- Ralston Creek
- Glencoe Valley Road

Colorado Legacy Land LLC owns all of the structures onsite, except for the power lines which are owned by United Power, Inc.

1 inch = 200 feet

0 200 400 600 800 ft

ENSERO solutions

Aerial imagery acquired from King Surveyors on December 10th, 2018

Datum: NAD_1983_StatePlane_Colorado_Central_FIPS_0502_Feet

D:\Project\AllProjects\Schwartzwalder\Map\01-Overview\04-Special_Topics\Land_Tenure\Affected_Lands_Monit_Wells_36x24_20201215.mxd
(Last edited by: amatlashevska;2020-12-15/14:46 PM)