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: Revenue Mine	**MINE/PROSPECTING ID#:** M-2012-032	**MINERAL:** Lead, silver and gold	**COUNTY:** Ouray
INSPECTION TYPE: Monitoring	**INSPECTOR(S):** Lucas West	**INSP. DATE:** October 19, 2021	**INSP. TIME:** 10:10
OPERATOR: Ouray Silver Mines Inc.	**OPERATOR REPRESENTATIVE:** Todd Jesse	**TYPE OF OPERATION:** 112d-1 - Designated Mining Operation	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** None	**BOND AMOUNT:** $517,219.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:** 	**SIGNATURE DATE:** October 27, 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---------- N	**(FN) FINANCIAL WARRANTY-------- N**	**(RD) ROADS---------- N**
(HB) HYDROLOGIC BALANCE---------- N	**(BG) BACKFILL & GRADING---------- N**	**(EX) EXPLOSIVES--------- N**
(PW) PROCESSING WASTE/TAILING---- N	**(SF) PROCESSING FACILITIES------- Y**	**(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---- N**	**(RS) RECL PLAN/COMP-- N**
(ES) OVERBURDEN/DEV. WASTE--------- N	**(SC) EROSION/SEDIMENTATION--- N**	**(ST) STIPULATIONS------- N**
(AT) ACID OR TOXIC MATERIALS------- N	**(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 inspection was conducted as part of the incremental inspections for the installation of the Reagent Room Environmental Protection Facility (EPF) associated with Technical Revision 14 (TR-14). In addition to the incremental inspection of the Reagent Room, this inspection was to observe the condition in response to the two separate spill notifications received by the Division. The Revenue Mine is an active 112d (1) underground operation located approximately 5 miles southwest of Ouray, Colorado and is accessed from Ouray County Road 26 at nearly 10,600 Feet in Elevation. Public Access to the site is controlled by a locked gate at the entrance to the site. Todd Jesse represented the Operator and accompanied the inspection. The Division currently holds $517,219.00 in Financial Warranty for the site. A reclamation cost estimate was not performed as a result of this inspection. The site was active with various construction and site maintenance activities during the inspection. No mining or milling was taking place at the time of the inspection. Eleven Photos accompany this report to illustrate the current site conditions.

Reagent Room Inspection

The main focus of this inspection was to serve as the fourth incremental inspection during the construction of the EPF focused on the structural steel of the building. At this point in the construction all concrete work including floors, exterior walls and partitions for secondary containment structures have been completed. All structural steel elements have been installed and crews were actively installing the metal sheeting of the building. The structural steel appears to be installed in compliance with the approved designs, all pillars, load bearing beams and cross bracing has been installed and secured. Photos One through Three show examples of the structural steel. Where the pillars are anchored to the concrete foundations, a gap exists which will be grouted and sealed upon final completion. An example of this can be seen in Photo Four.

A slight deviation from the plans was encountered in the raised gable portion of the roof, located just above the access doors. Upon installation, crews found the pre-drilled bolt holes of the gable section did not line up with the approved bolt hole design. These junction points were welded, and conversation with the contractor indicate these welds will be subject to NDE testing to ensure proper strength. The NDE weld tests for these points and all other inspected welds will be incorporated into the QA/QC package submitted to the Division. This deviation does not comprise the design strength of the building and is not considered a problem. The weld points, can be seen in Photos Five and Six.

The items observed during this inspection are in accordance with the approved plans and designs, satisfying the requirements of the incremental inspection. Verbal approval of the continuation of construction was provided to the Operator at the time of inspection and the next incremental inspection point has been established. The overall footprint of the Reagent Room is in excellent condition and construction is proceeding well. No problems or possible violations were observed in relation to the Reagent Room construction.

Spill Response

On October 6 and 11, 2021 the Division received two spill notifications for separate events that occurred from the same area, the Process Water and Tailings Filter Water Tank room. Both spills were small, and response and cleanup was conducted immediately by the Operator. The root cause of the spills has been determined and investigated by the Operator. The first event was caused by an overflow of tailings in the tailings thickener, which was caught by secondary containment structures associated with the tailings thickener. That material was then pumped back to the Tailings Filter Water tank, however a runaway pump and faulty tank

level sensor caused the tank to overtop into the secondary containment of that area. The Tailings Filter Water Tank can be seen in Photo Seven. A breach in the secondary containment structure located adjacent to the access door of that area, allowed the material to flow out of the containment structure to the exterior pad and a small area outside the pad. The breach in the containment structure can be seen in Photo Eight. Immediate action by the Operator shut down the pumps eliminating the source of flow. Immediately following, the Operator cleaned up the spilled material as well as the impacted waste rock surrounding the exterior pad, collected a sample for analysis and placed the material within the compacted clay liner of the Revenue Tailings Storage Facility.

The second event, occurring days later was caused by decant water from the Tailings Thickener being manually pumped back to the Process Water Tank. The Process Water Tank can be seen in Photo Nine. Due to an inadvertent oversight, the piping system was set to recirculate, causing that decant water to be released from the overflow pipe, shown in Photo Ten, and into the secondary containment structure of that room. As was the case with the first event, that water flowed out of the breach in the containment structure and onto the pad and exterior area immediately in front of the tank area. The source of the spill was immediately eliminated and the water was pumped back to the Process Water Tank. In addition, the Operator took samples of the water to understand its makeup and the impacted waste rock was excavated and stored in the temporarily lined portion of the Revenue Tailings Storage Facility. The storage location of all impacted materials can be seen in Photo Eleven.

Since the time of both events, the Operator has installed measures to prevent future release. The measures include automation of the pump and tank level controls that are tied back to the Mill Control Room for monitoring. In addition the sump pump located in the Process Water and Tailings Filter Water tank room has been repaired and also automated for monitoring. The breach in the containment of the room was temporarily repaired with sandbags, and the day of the inspection, permanent concrete curbing was installed. As of October 22, 2021 the Division has received written notification of the corrective action, and the problem has been resolved. Mill commissioning and testing has resumed and no further action is necessary.

All responses to this report should be directed to Lucas West at the Colorado Division of Reclamation, Mining and Safety at 1313 Sherman Street, Room 215, Denver CO, 80203. Direct contact may be made at the Division's Grand Junction Office, by phone at 303-866-3567 Ext. 8187 or by email at lucas.west@state.co.us.

Inspection Contact Address

Todd Jesse
Ouray Silver Mines Inc.
P.O. Box 564
Ouray, CO 81427

CC: Travis Marshall, Senior Environmental Protection Specialist
Amy Yeldell, Environmental Protection Specialist

EC: Brian Briggs, OSMI
Poppy Staub, OSMI
Todd Jesse, OSMI

PHOTOGRAPHS

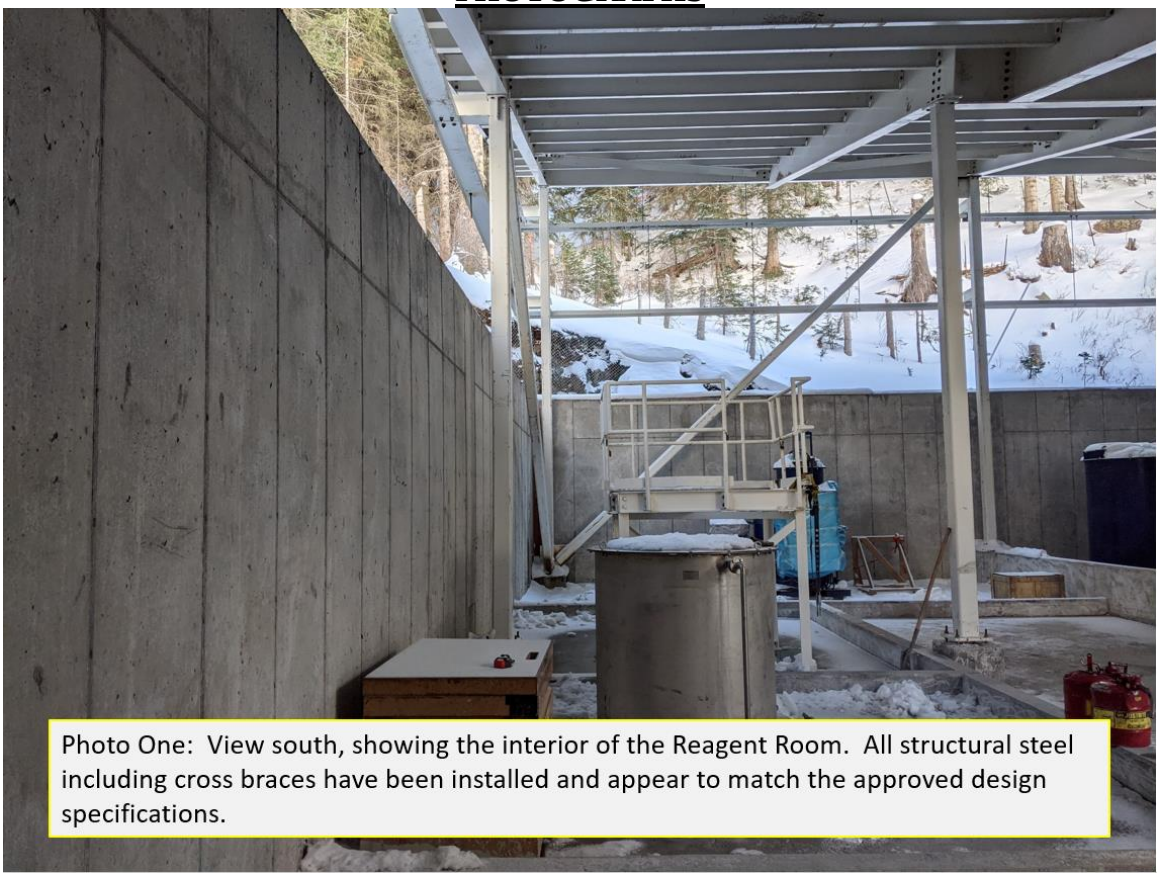

Photo One: View south, showing the interior of the Reagent Room. All structural steel including cross braces have been installed and appear to match the approved design specifications.

Photo Two: View southwest, showing another view of the installed structural steel. All pillars and horizontal support elements are in place and in good condition.

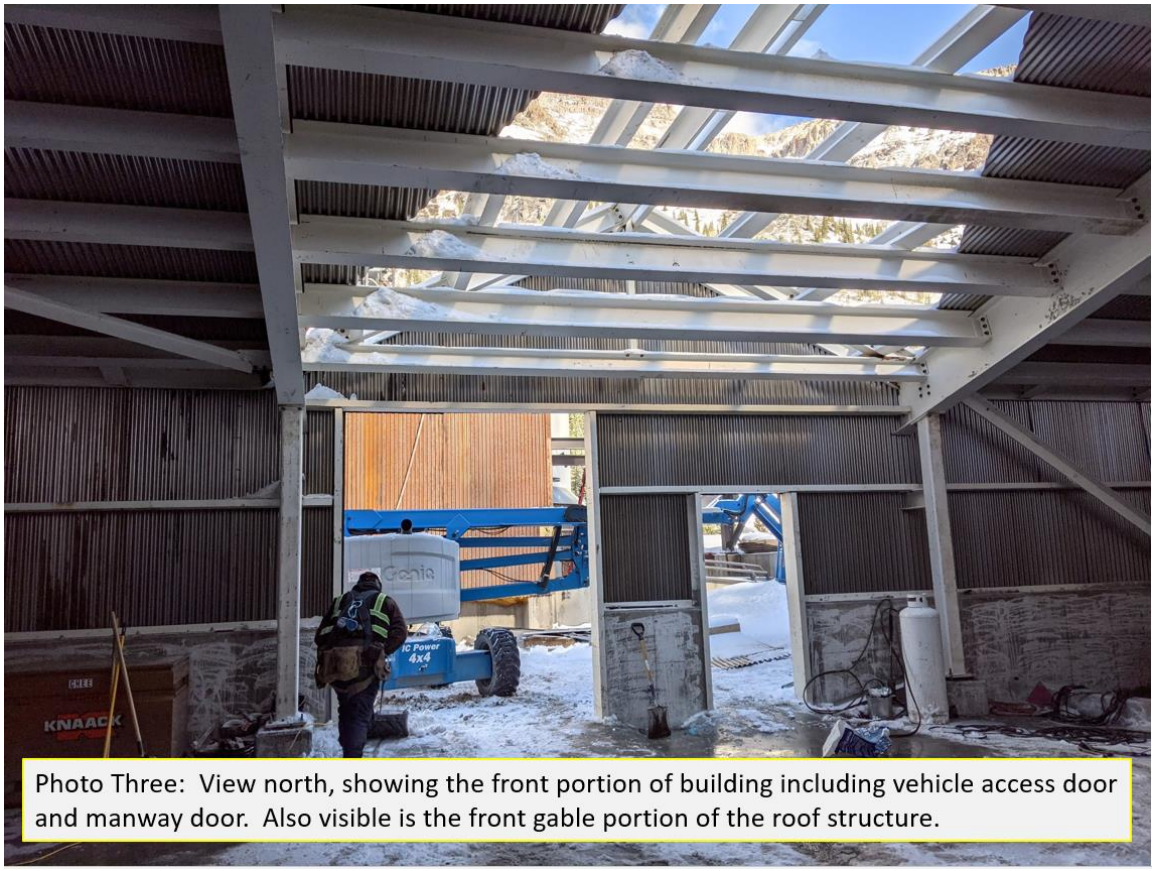

Photo Three: View north, showing the front portion of building including vehicle access door and manway door. Also visible is the front gable portion of the roof structure.

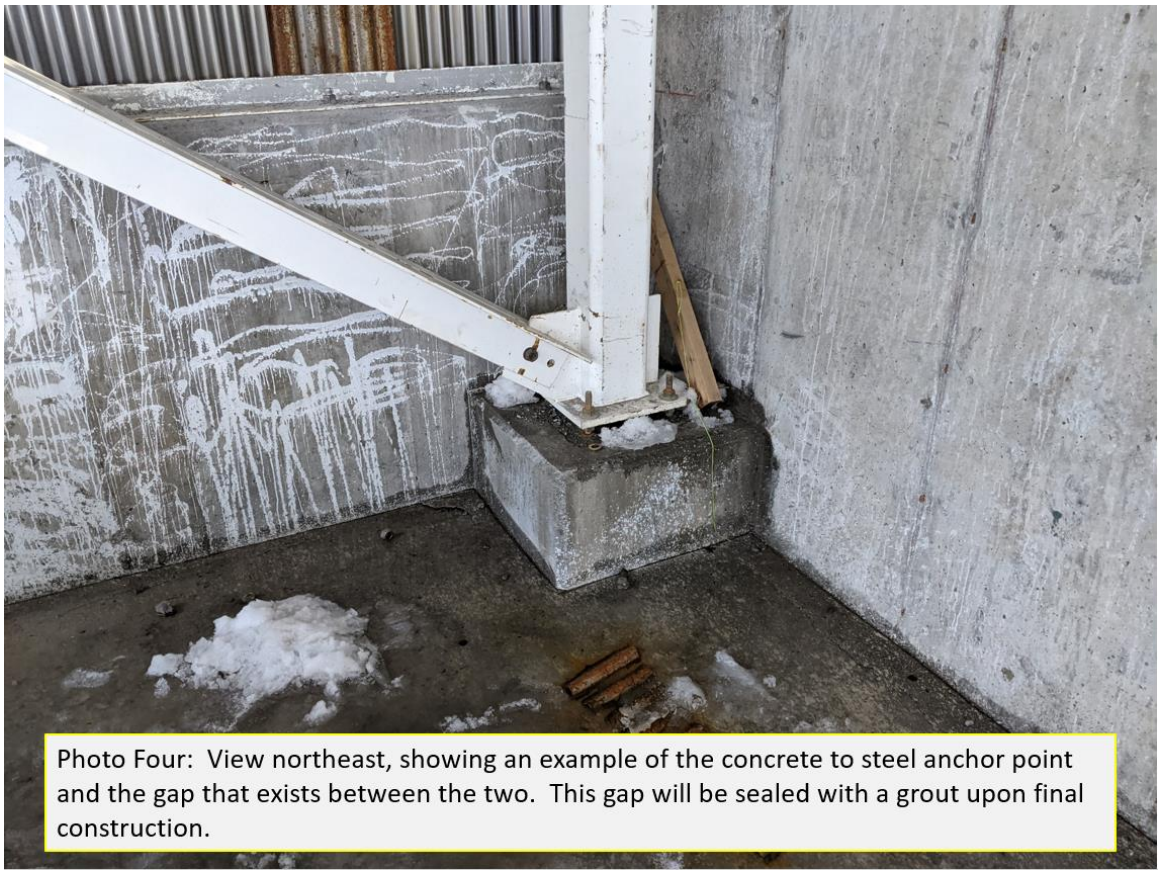

Photo Four: View northeast, showing an example of the concrete to steel anchor point and the gap that exists between the two. This gap will be sealed with a grout upon final construction.

Photo Five: View northwest, showing the intersection of the structural steel beams that had to be welded rather than bolted due to misalignment of the bolt holes from the manufacturer.

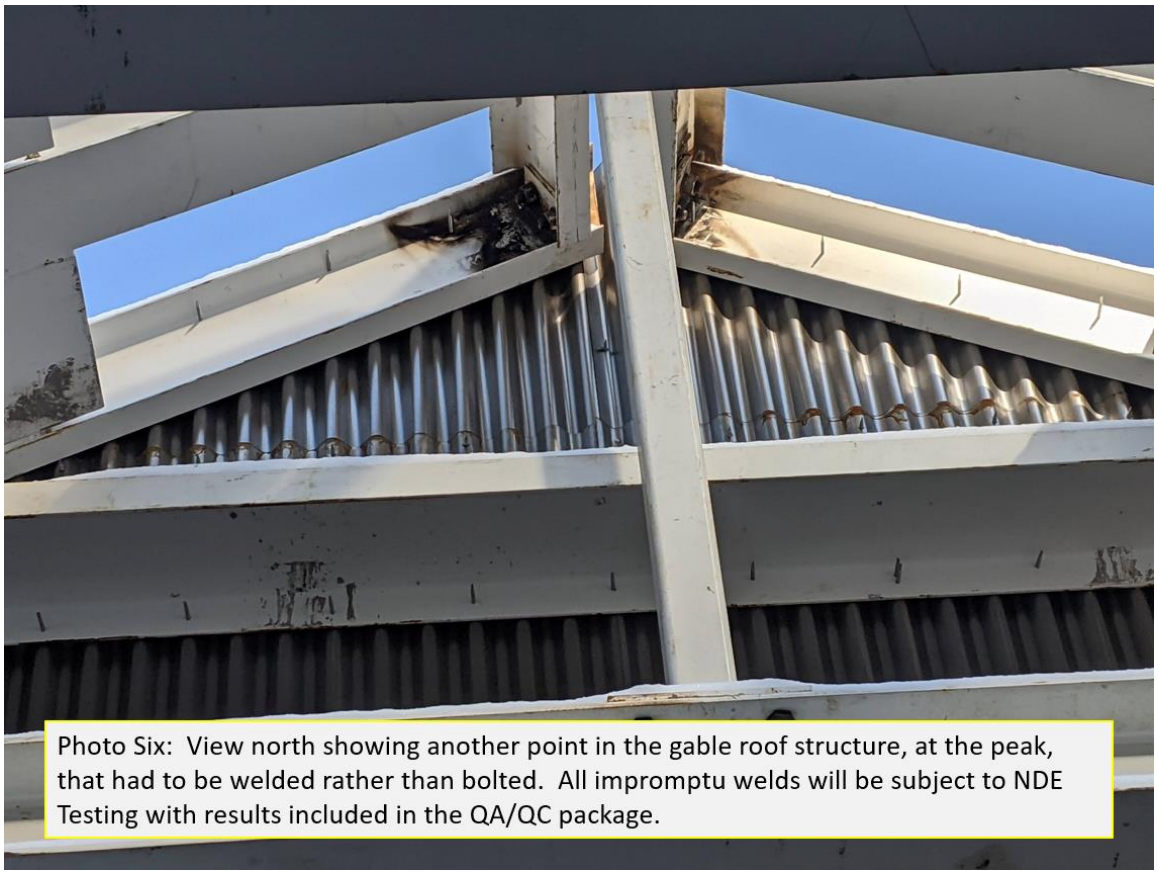

Photo Six: View north showing another point in the gable roof structure, at the peak, that had to be welded rather than bolted. All impromptu welds will be subject to NDE Testing with results included in the QA/QC package.

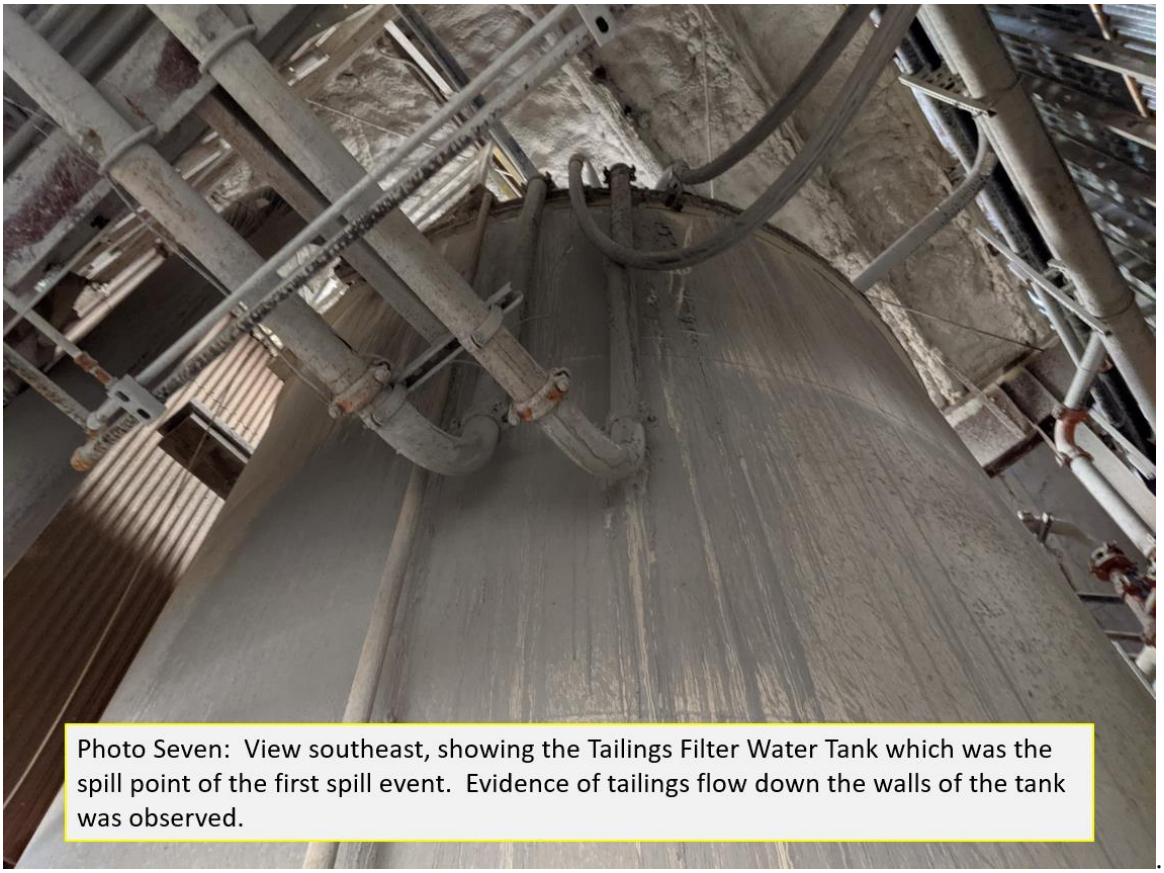

Photo Seven: View southeast, showing the Tailings Filter Water Tank which was the spill point of the first spill event. Evidence of tailings flow down the walls of the tank was observed.

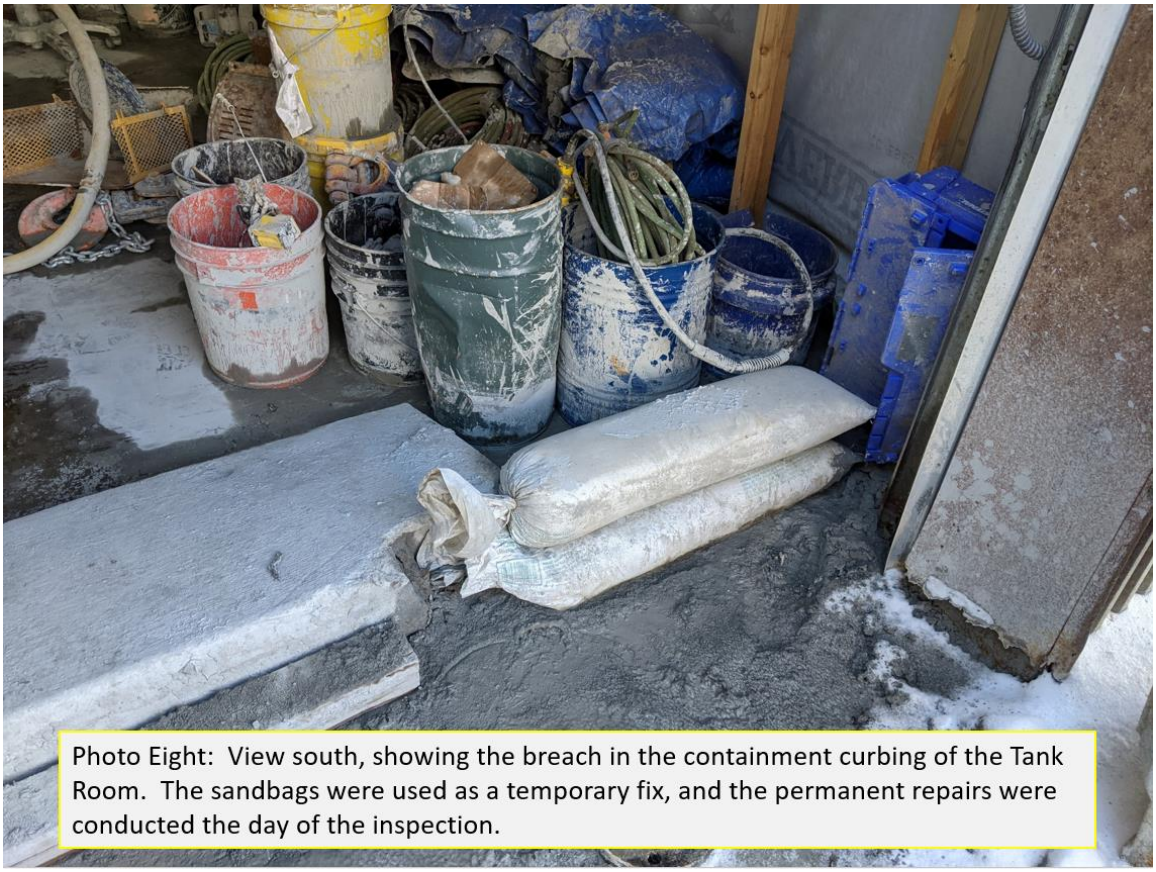

Photo Eight: View south, showing the breach in the containment curbing of the Tank Room. The sandbags were used as a temporary fix, and the permanent repairs were conducted the day of the inspection.

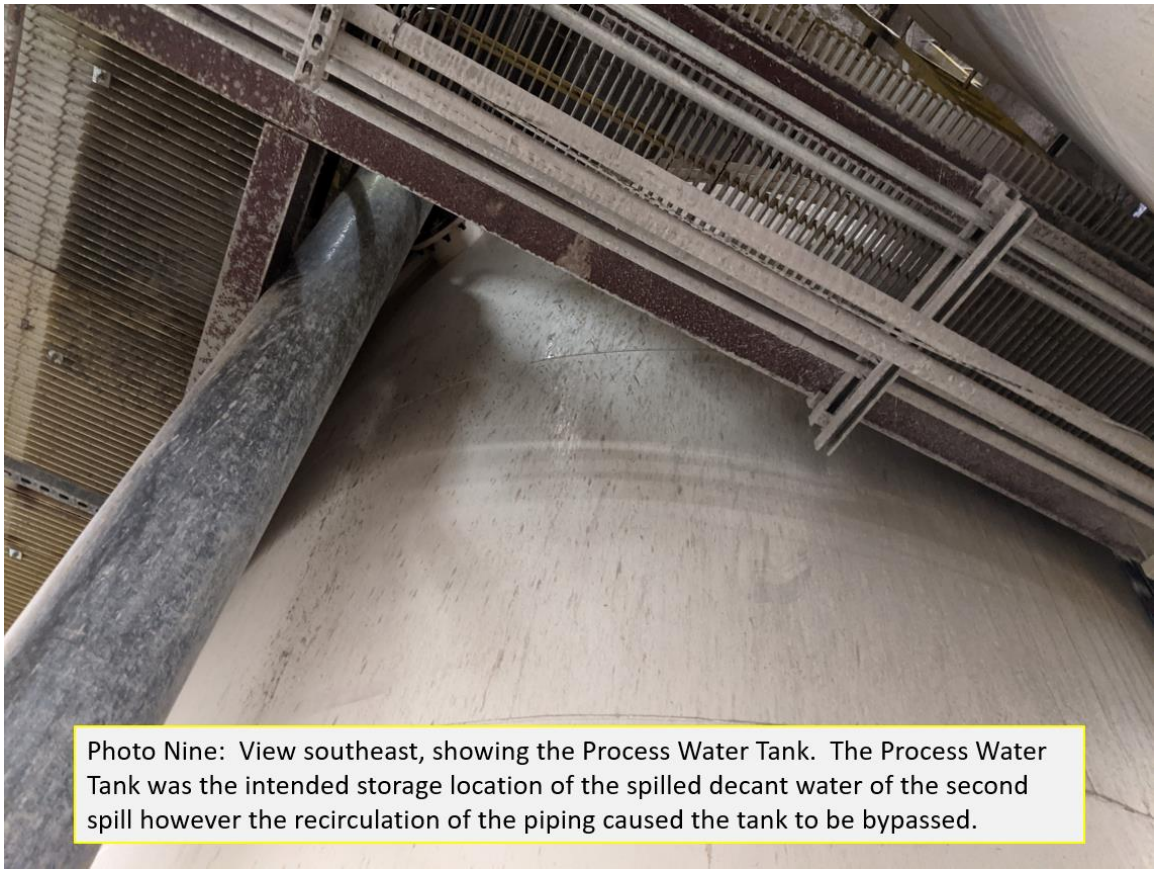

Photo Nine: View southeast, showing the Process Water Tank. The Process Water Tank was the intended storage location of the spilled decant water of the second spill however the recirculation of the piping caused the tank to be bypassed.

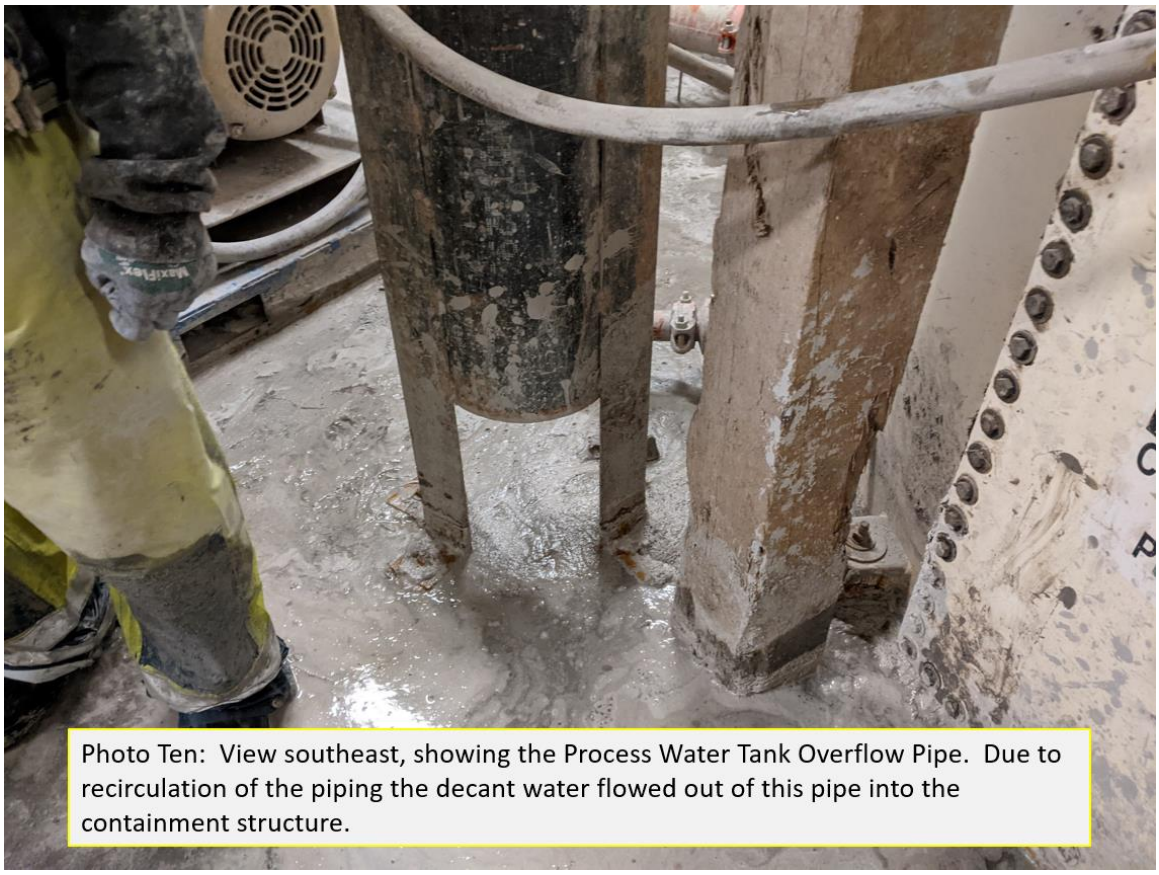

Photo Ten: View southeast, showing the Process Water Tank Overflow Pipe. Due to recirculation of the piping the decant water flowed out of this pipe into the containment structure.

Photo Eleven: View south, showing the location of the spilled tailings and impacted waste rock material that was excavated. All materials are stored on the temporary compacted clay liner within the Revenue Tailings Storage Facility.