MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
HARD ROCK MINING SECTION, MINING BUREAU
OPERATING PERMIT – FIELD INSPECTION REPORT

Operator: Montana Resources, LLC						Inspection Date: November 29, 2023				
Operating Permit #: 00030		Project: Montana Resources-Continental Mine Complex				County: Butte-Silver Bow				
Nearest City or Town(s): Butte, Walkerville										
Inspector(s): Don Danesi, Chris Romankiewicz, Garrett Smith						Company Rep(s): Mark Thompson, Jeremy Fleege				
Agencies w/overlapping permit jurisdiction:		USFS		BLM		Other (EPA)	✕	None		
Minerals: Copper, molybdenum, minor silver										
Status:	✕	Active		Inactive		Suspended		Other		
Weather: Mostly sunny, high temp 42°F										

Type of Operation:		Purpose of Inspection:	
✕	Open Pit		Initial (Pre-permitting)
	Underground		Regular Compliance
	Placer		Amendment # MR#
✕	Leach- *Leach pads near HSB not receiving solution*		Complaint Received
✕	Tailings Storage Facility: [✕] Active or [ ] Inactive		Bond Release
✕	Mill	✕	Other (tour, data collection, baseline, TSF, etc.): *Reportable spill incident*
	Other: (surface rock picking, trenching or excavation)		NON issued

DISCUSSION: DEQ staff arrived at Montana Resources (MR) offices around 10:00 AM. The site visit did not serve as a compliance inspection for the entire facility, rather it was coordinated between the DEQ Mining Bureau and the Water Protection Bureau to investigate an incident that was self-reported by MR on November 22, 2023. In addition to the inspection trip and the photos included below, MR provided information on December 8, 2023, that has been incorporated into this report narrative.

MR had a discharge event or "excursion" on November 22, 2023, during which process solution escaped containment areas and flowed into the Continental Roadside Channel (CRC), which surrounds the southern perimeter of the facility. MR reported the event to the DEQ Enforcement Division and the Mining Bureau on the same day. This process solution is also referred to as "return water," as it is returning to the concentrator and mill area from the Yankee Doodle Tailings Pond (YDTP). Much of the influent water to the YDTP has been previously treated with lime for metals removal, with further treatment/retention within the YDTP itself. In addition to being used in the Concentrator process, a portion of the return water is also the influent to the Butte Mine Flooding Operable Unit (BMFOU) Polishing Plant, where it goes through multi-media filtration, pH adjustment, and off-site discharge under the conditions of the BMFOU Consent Decree (CD). Figure 1 was provided by MR on December 8, 2023, to depict the water's flowpath and the segments that consist of open channels or buried culverts.

The source location of the process solution release was a truck fill station that is used for water trucks (52,000 gallons) conducting fugitive dust management throughout the mine permit area (Photo 1). At the fill station, the valve that controls water flow was not fully closed following a truck fill-up that occurred at approximately 05:00 on November 22. Flow was first noticed in an open channel near MR's guard shack at 08:15, then after determining the source, the

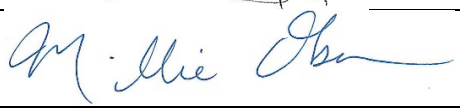
valve was fully closed at approximately 08:40. MR did not provide estimates for the flow rate or the total volume of water released during this time.
The flowing water entered a culvert near the fill station and was diverted beneath the nearby haul road (Photo 2). The water then continued to the south/southwest within existing channels and a series of culverts (Photo 3 and 4). To the east of the guard shack, the water escaped containment and flowed across the rail line and a flat area along the fence line. Within hours of discovery of the release, MR began implementing mitigation measures. MR mobilized equipment to excavate a trench to prevent any additional water from going outside of the mine permit boundary. During this inspection, additional earthwork was being performed to expand the trench and channel system and to raise the elevation of the adjacent berm/bank (Photos 5 through 7). The water observed during this inspection may have included remaining flow from the day of the release, but it also includes water that is routinely conveyed through the Clearwater Ditch (inside permit area) to the dredge pond near the mill.

Near the guard shack on Continental Avenue, the water flowed within the CRC along the railroad right-of-way outside of the permit area. The flow was contained within the open channel and segments that consist of culverts or concrete channels (Photos 8 through 11). The flowing water ultimately ended with pooling in the sediment pond located at the western end of the CRC. This location is the northern extent of the upper Silver Bow Creek channel, formerly known as Metro Storm Drain (Photos 12 and 13). This feature conveys runoff from the area but does not contain perennial flow.

SUMMARY: The inspection ended by 12:30 PM, with a brief meeting to recap the site observations and next steps. As observed on this inspection, MR will continue working on the diversion channel and berm features in this portion of the site to ensure that future runoff or process solutions are contained within the permitted area under unforeseen circumstances. In addition to further personnel training, MR may also evaluate other operational control measures to ensure that the filling station valve can be fully closed or potentially relocate the filling station.

DEQ Water Protection Bureau requested that additional information be submitted by December 8, 2023, and MR complied with this request. The Water Protection bureau will issue additional correspondence and any findings in response to the MR submittal. Based on this inspection, the information submitted by MR, and a subsequent review of the Hard Rock Mine Operating Permit conditions, the Mining Bureau has concluded the following:

> The release on November 22, 2023, represents a deviation from the Hard Rock Mine Operating Plan due to incomplete closure of the return water valve at the truck fill station, the resulting flow of water not being adequately contained by control structures, and discharge of this water outside of the operating permit boundary. However, in compliance with ARM 17.24.116 (further defined in ARM 17.24.165), there is also a Contingency/Spill Plan within the approved Plan of Operations that addresses incidents that deviate from the normal operating conditions and result in spilled process solution. Based on the nature of the incident and the characteristics of the released process solution, MR implemented the spill response procedures in compliance with the Contingency/Spill Plan. Therefore, MR complied with the requirements of the Plan of Operations in accordance with ARM 17.24.117.

Signature of Inspector(s):		Date:	12/29/2023
Signature of Reviewer:		Date:	1/2/2024
Copy reports to:	Permittee (c/o Mark Thompson, Montana Resources); File 00030.3		

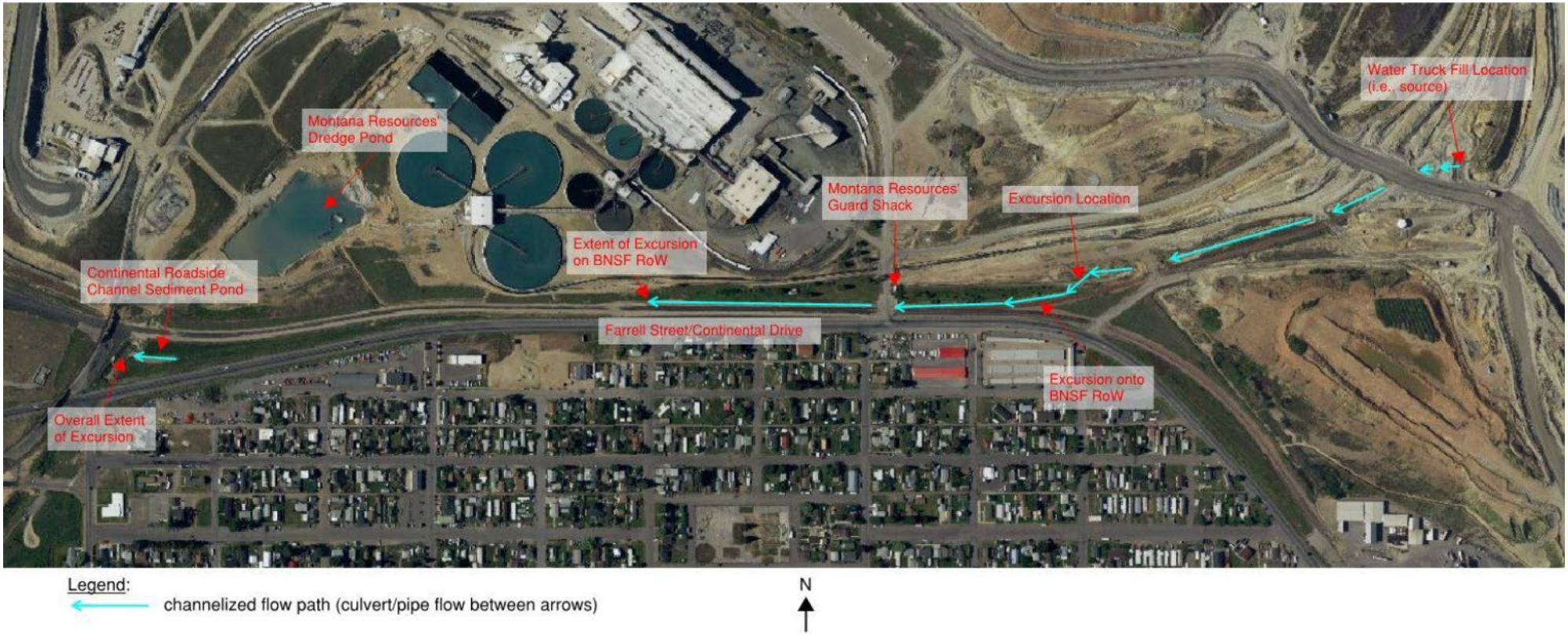


Figure 1: Provided by MR on 12/8/2023, this depicts the water's flowpath and the segments that consist of open channels or buried culverts.

Photo 1: The source location of the process solution release was a truck fill station that is used for water trucks (52,000 gallons) conducting fugitive dust management. **Photo 2**: The flowing water entered a culvert near the fill station and was diverted beneath the nearby haul road.

Photos 3 and 4: The water continued to the south/southwest within existing channels and a series of culverts.

Photos 5 and 6: In addition to the immediate response measures, further earthwork was being performed to expand the trench and channel system and to raise the elevation of the adjacent berm/bank (Photos 5 through 7).

Photo 7: Flows continue within the Clearwater Ditch as part of operational water controls. **Photo 8**: Near the guard shack on Continental Avenue, the water flowed within the CRC along the railroad right-of-way outside of the permit area.

Photos 9 and 10: The flow was contained within the open channel of the CRC and segments that consist of culverts or concrete channels.

Photo 11: The flow was contained within the open channel of the CRC and segments that consist of culverts or concrete channels. **Photo 12**: The flowing water ultimately ended with pooling in the sediment pond located at the western end of the CRC.

Photo 13: This location is the northern extent of the upper Silver Bow Creek channel, formerly known as Metro Storm Drain. This feature conveys runoff from the area but does not contain perennial flow.