



## MEMORANDUM

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DATE: April 3, 2020

TO: Cindy Brooks and Jen Roberts, Montana Environmental Trust Group

FROM: Bob Anderson

COPY: Blain Cox, WTS  
Jodi Bingham, Hydrometrics

SUBJECT: Upper Blackfoot Mining Complex (UBMC) Water Treatment Plant COVID-19 Contingency Plan

This memorandum documents measures being taken to ensure that operation of the UBMC Water Treatment Plant (WTP) complies with applicable local, state and federal guidelines and requirements, while maintaining operator safety. This includes guidance from the Centers for Disease Control and Prevention (CDC) and the State of Montana Governor's Office intended to protect against and prevent exposure to and spread of the COVID-19 disease, as well as all regulations governing operation of the WTP such as the MPDES Permit discharge limits and monitoring/reporting requirements.

1. WTP Operations – Essential Business

Operation of the WTP is considered an essential business (within the meaning of the Governor's March 26, 2020 directive) for Essential Infrastructure. Long-term shutdown of the WTP could result in the discharge of untreated adit water to the Upper Blackfoot River and tributaries which could adversely impact surface water quality.

Sustained WTP operations are required to ensure compliance with the effluent limits set forth in the MPDES permit. If the Custodial Trust is unable to meet its obligations under the MPDES permit due to the COVID-19 pandemic, it may be necessary to seek relief from those provisions that cannot be safely implemented because of the coronavirus.

2. WTP Operator Protocols and Plans:

Blaine Cox of Water Treatment Services (WTS) is the primary WTP operator working under contract to Hydrometrics. In order to minimize the risk of exposure to or spread of COVID-19, the following practices have been implemented:

- a. Blaine (and family) is sheltering in-place at his home in Lincoln except when travelling to and from the WTP, to Helena to deliver water samples to Energy Labs, pick up needed WTP equipment and supplies, or for essential personal travel.
- b. Blaine will maximize remote monitoring and operation of the WTP to the extent possible.
- c. Visitation to the WTP is restricted to essential services (such as vendor and package deliveries) until further notice. With the delivery of additional hydrogen peroxide last week, current supplies of all chemical reagents are expected to last through June.

- d. The WTP is stocked with latex gloves, soap, hand sanitizer and other disinfecting materials, with the operator practicing strict hygiene practices upon arrival at the WTP, before eating, and throughout the day.
  - e. Because the WTP can typically be operated by one person, it is inherently self-isolating.
3. WTP Operator Contingency Plan
- a. If Blaine is unavailable to operate the WTP due to COVID-19 (or other sudden illness), Jodi Bingham, P.E. (Hydrometrics' water treatment specialist trained in UBMC WTP operations), with support from Rick Lane or other Hydrometrics' technicians, will take over operation of the WTP.
  - b. If Hydrometrics' personnel are required to operate or otherwise visit the WTP, all critical areas and frequent contact points (i.e., keyboards, door handles) will be disinfected prior to operations, and personnel will wear protective disposable gloves at all times.
4. Adjustments in WTP Operations
- a. To promote self-isolation and reduce the number of operator trips to the lab in Helena, we recommend the current weekly sampling requirement be reduced to bi-weekly. Due to the 7-day holding time requirement for TSS analysis, the weekly sampling requires weekly trips to the lab. Alternatively, eliminating just the weekly sampling requirement for TSS could also reduce the frequency of required lab deliveries. Under that scenario the weekly samples for metals analyses could be stored on site for delivery every other week (or even monthly) to the lab due to the longer holding time (six months) for metals. We believe reducing the monitoring schedule to bi-weekly to promote social distancing is consistent with the intent of the March 31, 2020 DEQ COVID-19 Compliance and Enforcement Discretion Notice. The Custodial Trust will not implement this recommendation without the prior approval of MDEQ.
  - b. The Mike Horse Adit pressure and Cell 5 water level will be sufficiently lowered to provide a minimum of one month storage capacity so the WTP can be shut down for an extended period if necessary. Based on stage/storage information obtained during the recent trial shutdown, there are approximately 3.5 million gallons of storage capacity within the Mike Horse workings between a pressure level of 5 and 25 psi. This equates to 30 days of storage capacity at a mine inflow (plus Upper Mike Horse seepage) of 90 gpm (compared to the 30.4 gpm mine inflow rate recorded during the wintertime trial shutdown). Assuming a conservative 600,000 gallons of available storage in Cell 5 (compared to the 840,000 gallon total cell capacity), the Anaconda Adit discharge can be stored in Cell 5 for at least 100 days at a discharge rate of 4 gpm.
  - c. If storage capacity in the Mike Horse Adit and Cell 5 is not sufficient to meet required storage volumes, Cell 7 could be utilized to store up to an additional 900,000 gallons of Mike Horse Adit discharge. At an adit discharge rate of 30 gpm, Cell 7 can provide approximately 21 days of additional storage. Cell 7 is currently being pumped down to ensure this additional storage is available.

All elements of the UBMC WTP contingency operations plan detailed above have either been or are in the process of being implemented. This plan will be updated and redistributed as appropriate if the current situation changes or contingency plans require modification.