

January 10, 2018

Jerry Zieg, Vice President of Exploration Tintina Montana, Inc. PO Box 431 White Sulphur Springs MT 59645

RE: Notice of Deficiency for Montana Pollutant Discharge Elimination System permit application for permit number, MT0031909

Dear Mr. Zieg:

On December 11, 2017, the Montana Department of Environmental Quality (DEQ) received a Montana Pollutant Discharge Elimination System (MPDES) permit application (Forms 1, 2D, and 2F) and associated permit fees for the Black Butte Copper Project.

To review the permit application fees DEQ assigned a preliminary score to the facility based on the NPDES Permit Rating Work Sheet. The facility scored as a major facility, and therefore the fees submitted are correct.

DEQ reviewed the application forms and determined the application is incomplete. Please address the application deficiencies as listed below:

Form 1, Form 2D and Form 2F

The forms submitted to DEQ are photocopies, with photocopied signatures. Please resubmit the signature page of all three forms with an original signature and date.

• Form 2D, Part I. – Receiving Water

Application narrative, Section 3.2 states, ... groundwater flows generally parallel to Sheep Creek throughout most of the aquifer. Please provide additional discussion that specifically identifies any seasonal, or other, variations in groundwater flow direction throughout the aquifer.

Section 3.2 also states, Coon Creek typically enters the alluvial valley after being diverted to the east of its natural channel. The potentiometric surface and the synoptic surveys indicate Coon Creek intercepts groundwater when it flows through the diverted channel. The diverted channel is much lower in elevation than the original channel of Coon Creek, which likely creates a man-made pinch point for the alluvial groundwater system. If Coon Creek flows in its

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natural channel it would likely discharge water to the alluvial groundwater system as the natural channel is about 10 feet higher in elevation than the diverted channel. Please provide clarification of this statement. DEQ is uncertain what the flow scenario will be for Coon Creek when the mine is operating. Provide more specific explanation for why Coon Creek will not be the nearest surface water affected by the discharge from Outfall 001.

Form 2D, Part III.A

The flows listed here as contributing to the discharge at Outfall 001 are the total of all flows reporting to the wastewater treatment plant. The average flow proposed for discharge at Outfall 001 is 185.5 gallons per minute (gpm) less than the total flow reported on Form 2D. This difference appears to be accounted for on the line drawing (Figure 3.5). Please also clarify this difference on this section of the form to show that the average flow proposed for discharge at Outfall 001 is 404.2 gpm (treated water plus unused freshwater).

In application narrative Section 3.3, please provide additional explanation for how you arrived at the maximum discharge rate of 597 gpm at Outfall 001.

• Form 2D, Part III.B – Line Drawing / Water Balance

DEQ understands that Mill Catchment Runoff will consist of runoff from the mill, portal pad, and temporary waste rock pad. Please clarify what materials or processes this runoff will come in contact with on the mill site, prior to discharge to the water treatment plant.

For purposes of properly applying New Source Performance Standards from the Effluent Limit Guidelines, please clarify what components of the facility are considered the "treatment facility." The WPB interprets the Process Water Pond to be part of the mill process and not wastewater treatment.

DEQ understands that many of the flow rates shown on the water balance will be episodic in nature, e.g. the proposed surface water transfer will occur in response to precipitation events to prevent excess water in the process water pond. Please clarify which flows on the water balance are episodic and which will be operated more continuously.

• Form 2D, Page 3 of 5

The "Outfall Number" blank at the top right of this page lists 001, 002, and 003. Please correct to indicate Outfall 001 only.

Form 2D, Part V

All pollutant or parameter levels must be reported in both concentration and mass. Please provide the mass values.

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Please indicate whether the estimated effluent concentrations for metals are total recoverable or dissolved. Based on the treatment technology presented in the application these two analyses should be equivalent, however it is important to note that permit limitations will be expressed in terms of total recoverable metals.

• Form 2D, Part VII

The mixing zone request proposes dilution in both surface water and ground water. Revise all references to "source specific surface water mixing zone" to read "source specific mixing zone."

The mixing zone request proposes dilution with an estimated ground water flow rate of 177 gpm (0.39 cfs). Please provide additional explanation for how you arrived at this ground water flow estimate and how it addresses seasonal variation.

Please provide the additional information and clarifications requested above by February 15, 2018.

Thank you for your patience and cooperation during the permit process. If you have any questions or concerns, please contact me at (406) 444-5326 or at jmay@mt.gov.

Sincerely

Water Protection Bureau

Montana Department of Environmental Quality

CC: Greg Bryce, Project Manager

Hydrometrics, Inc. 3020 Bozeman Ave. Helena MT 59601