

October 20, 2014

This letter is to provide additional information to the co-lead agencies on PolyMet's plans for sewage treatment at the plant site. In summary, PolyMet will upgrade all facilities to meet current design and regulatory standards, and the treated effluent will be discharge to the Flotation Tailings Basin (FTB).

Prior to the closure of the LTVSMC taconite processing facility in 2001, a sanitary sewage treatment system was used to treat domestic waste water generated from restroom use, showers, wash facilities, and a lunchroom area, as well as waste water from the Heating Plant and the potable water treatment plant. This sanitary sewage treatment system consisted of two parts: a collection system and a mechanical sewage treatment plant. After closure of the LTVSMC facility, the mechanical sewage treatment plant was decommissioned. The waste water currently generated by the on-site administration building is routed to a drain field that was added in 2001.

PolyMet will update the sanitary sewage treatment system prior to re-opening the Plant Site for copper/nickel processing. Specifically, the existing mechanical sewage treatment plant will be removed and disposed of, the existing collection system will be refurbished, and a new stabilization pond facility will be constructed.

The existing collection system will be refurbished to meet current design standards to properly transport sewage to the treatment system. Existing piping will be refurbished to minimize infiltration and inflow (I/I) entering the treatment system. New piping and associated infrastructure will also be added to connect new Plant Site facilities to the system.

The stabilization pond facility will be designed in accordance with the MPCA *Recommended Pond Design Criteria* and will include lined ponds and a controlled discharge. The anticipated stabilization pond facility will consist of two primary ponds and one secondary pond with operating depths of four feet. The secondary pond will discharge to the FTB. The controlled discharge will occur in the spring and fall of each year. Each controlled discharge will typically last 10 to 14 days, depending on weather conditions.

The updated sanitary sewage treatment system will be designed to accommodate the anticipated sanitary sewage contributions from the re-opened facility. Design flow computations were completed using the MPCA *Design Flow and Loading Determination Guidelines for Wastewater Treatment Plants*. Based on these

computations, the system will be designed to treat an initial average daily flow (ADF) of 8,500 gallons per day (gpd) and an average wet weather flow (AWWF) of 21,500 gpd and a future ADF of 13,750 gpd and AWWF of 26,750 gpd. The stabilization ponds will be sized following MPCA guidelines for pond systems north of Brainerd, MN to store the future AWWF for up to 210 days prior to discharge.

Accompanying this document is a memo (NorthMet Documentation of Sewage Treatment) that describes the locations in all project documents, including the SDEIS, where sewage treatment is mentioned.

Please don't hesitate to contact me with any questions.

Sincerely,

Jennifer Saran

Jennifer Saran
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