

6.2 Storm Water Management (edited July 19, 2017)

The Mine Operator will be responsible for completing the storm water management and monitoring activities that are specified in the general storm water permit and will meet Chippewa County storm water standards as established in the following document: "Plan Content, Specifications, and Engineering Requirements for Non-Metallic Mines Constructed in Bedrock". Storm water will be managed to minimize runoff to surrounding properties. ~~During all phases of the mining operations, storm water will be contained within the active mining area or will be directed into one of the constructed storm water infiltration basins.~~ During low rate precipitation events, infiltration will occur more readily and a high percentage of storm water is expected to infiltrate before flowing into a storm water infiltration basin. During higher rate precipitation events, storm water that does not infiltrate within the active mining area will flow into a storm water infiltration basin by following natural contours and /or diversions.

Nine storm water infiltration basins are planned to be constructed at the proposed mine site over the life of the mine. The approximate locations and sizes of the storm water infiltration basins are included on Figure 4 (labeled A-1). The number, size, and location of the basins may change, based on the mine operator's intent to capture as much storm water as possible in each drainage area, and also based on direction and method of mining and clearing operations. The operator shall submit an engineered design for each storm water pond to Chippewa County LCFM prior to beginning any mining related activities in the drainage basin for that pond. The storm water pond design shall include engineering drawings sufficient to define the size and shape of the proposed storm water pond. Construction of the infiltration basins will be completed as mining progresses across the site. HydroCAD software was used to properly size the storm water infiltration basins that will be constructed at the proposed mine site, and the basins were sized conservatively to hold both a 10 and 100 year storm event, with no infiltration used in the calculation. Documentation of the HydroCAD calculation is included in Appendix E. Each storm water basin will have an overflow weir that would act as a discharge point for storms in excess of the 100 year event. The practice of pumping water from storm water basins for use in processing may be incorporated as a storm water management activity conducted on site.

6.2.1 Offsite Water Discharge (added July 19, 2017)

The Superior Silica Sands (SSS) Auburn Mine (Glaser/Pietz Site) was initially covered by WDNR WPDES General Discharge Permit No. WI-0046515-05 effective July 1, 2009, and was permitted as an internally drained facility. As such, all storm water that fell on the mine site and all water that drained from washed sand stockpiles was to be contained within the mine boundaries.

That WPDES permit has since expired and has been replaced by WPDES General Discharge Permit No. W/-8046515-06, dated August 1, 2016 (General Discharge Permit). This updated General Discharge Permit presumes that offsite discharge of storm water, contaminated storm water, and wastewater will occur, and provides conditions under which these discharges will be managed.

Under this Nonmetallic Mining Reclamation Plan Amendment, Superior Silica Sands proposes to discharge storm water, contaminated storm water, and wastewater (as defined in the General Discharge Permit) in accordance with the General Discharge Permit and the accompanying Storm Water Pollution Prevention Plan (SWPPP) for this mine.

The Storm Water Pollution Prevention Plan for the mine facility documents the methods that will be used by the mine operator to meet the General Discharge Permit requirements.

The current Storm Water Pollution Prevention Plan for the SSS Auburn Mine is provided as an attachment to this Nonmetallic Mine Reclamation Plan Amendment.

To meet the requirements of the General Discharge Permit, NR 135, and the Chippewa County Nonmetallic Mining Reclamation Ordinance, the Storm Water Pollution Prevention Plan will be systematically implemented to manage storm water, contaminated storm water, and waste water.

Storm water, contaminated storm water, and wastewater will be discharged from the mine to Trout Creek or to groundwater via infiltration. More than one discharge route may be used simultaneously.

The water that will be discharged from the mine will be analyzed prior to release as required in the General Discharge Permit. Monitoring and reporting of all discharges will be conducted in accordance to the General Discharge Permit and the Storm Water Pollution Prevention Plan.

The Storm Water Pollution Prevention Plan will be reviewed quarterly by the mine operator to evaluate 1) the adequacy of Best Management Practices (BMPs) being implemented to prevent storm water from becoming contaminated storm water, 2) the adequacy of BMPs being implemented to treat contaminated storm water to the maximum extent practicable, and 2) the effectiveness of wastewater treatment methods being used to meet General Discharge Permit discharge requirements.

The operator shall record, on an ongoing basis, any issues or complications that may prevent the implementation of specific activities, BMPs, or wastewater treatment methods as defined in the Storm Water Pollution Prevention Plan.

Proposed modifications to the Storm Water Pollution Prevention Plan that significantly affect the discharge of storm water, contaminated storm water, or wastewater shall be documented by the operator, and shall be reviewed and approved by the Department of Land Conservation and Forest Management prior to implementation.

The operator shall document all changes made to the Storm Water Pollution Prevention Plan during the preceding year, and any intended changes during the following year, in the Annual Reclamation Report, as referenced in Section 12.1 of the Reclamation Plan.