

Storm Water Pollution Prevention Plan

Superior Silica Sand Auburn Mine

Glaser/Pietz Site (DD)

August 10, 2017

Table of Contents

1.0 Introduction 3

 1.1 SWPPP Contact 4

 1.2 Site Description 4

 1.3 Facility Operations 4

 1.4 SWPPP Summary..... 5

 1.5 Change to Discharging Facility 5

 1.6 Drainage Base Map 5

2.0 Potential Sources of Storm Water Contamination 6

3.0 Non-Storm Water Discharges 6

4.0 Best Management Practices 7

 4.1 Source Area Pollution Prevention Best Management Practices..... 9

 4.2 Storm Water Treatment Best Management Practices 10

5.0 Site Inspections 11

 5.1 Annual Facility Site Compliance Inspections..... 11

 5.2 Quarterly Visual Site Inspections 12

 5.3 Quarterly Visual Outfall Inspections 12

 5.4 Inspection Reports 13

6.0 Impaired Water Bodies and Total Maximum Daily Loads..... 13

7.0 Amendment of SWPPP and SWPPP Summary..... 14

Figures

Figure 1 Drainage Base Map

Appendices

- Appendix A WPDES Permit WI-B046515-6
- Appendix B SWPPP Summary
- Appendix C Construction Site Erosion and Sediment Control Technical Standards
- Appendix D Storm Water Treatment BMP Standards
- Appendix E Blank Inspection Forms
- Appendix F Completed Inspection Forms
- Appendix G SWPPP Inspection Log

STORM WATER POLLUTION PREVENTION PLAN CERTIFICATION

Facility Name: Superior Silica Sand Auburn Mine – Glaser/Pietz Site (DD)

FID: 609139190

FIN: 44814

Receiving Water: Trout Creek (WBIC 2084000)
Groundwater
Wetlands

Facility Location: CTH DD just south of int of DD and STH 64
Township of Auburn
19952 County Hwy DD
Bloomer, WI 54757

Facility Authorized Representative: Superior Silica Sands LLC
1058 USH 8
Barron, WI 54812

SWPPP Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

Josh Clements, Director of Operations

Superior Silica Sands LLC

1.0 INTRODUCTION

Superior Silica Sands LLC received authorization dated August 26, 2016 from the Wisconsin Department of Natural Resources (WDNR) that its Glaser/Pietz Site (DD) facility (FIN: 44814, FID: 609139190) previously covered under a general permit was reissued and became effective as of August 1, 2016. The general permit is in Appendix A.

In accordance with Wis. Adm. Code NR 216.27 and 216.29(1), each nonmetallic mining operation for industrial sand mining and processing covered under the general permit WI-B046515-6 must prepare and operate in compliance with a site-specific Storm Water Pollution Prevention Plan (SWPPP) and SWPPP Summary. The SWPPP must be implemented continually until final site reclamation approval by the Chippewa County Land Conservation and Forest Management (LCFM). The SWPPP and any amendments to it are maintained at the mining site and are available upon request by the WDNR.

The purpose of the SWPPP is as follows:

- Identify sources of **contaminated storm water**.
- Identify and prescribe appropriate source area pollution prevention controls and Best Management Practices (BMPs) designed to prevent or minimize **contaminated storm water**.
- Identify and prescribe storm water BMPs to reduce pollutants in **contaminated storm water** prior to discharge.
- Identify non-storm water discharges regulated under the general permit or to remove the non-storm water discharges from the storm drainage system.
- Prescribe an implementation schedule to ensure that the storm water management actions in the SWPPP are carried out and evaluated on a regular basis.

Storm water means runoff from precipitation including rain, snow, ice melt, or similar water that moves on the land surface via sheet or channelized flow.

Contaminated storm water means storm water that contacts material handling equipment or activities, raw materials, intermediate products, final products, waste materials (including overburden), byproducts, material handling equipment or other industrial machinery in the source areas listed in Section 2.0 of this SWPPP. Storm water is runoff from precipitation including rain, snow, ice melt or similar water that moves on the land surface via sheet or channelized flow.

Wastewater as used in the general permit means a type of water associated with an activity described in Sections 1.1.2 through 1.1.7 of the general permit. Storm water commingled with a wastewater described in those sections of the general permit are considered wastewater. Additionally, storm water collected and used for washing, cleaning, separating, or processing nonmetallic minerals is considered process wastewater when discharged.

1.1 SWPPP Contact

Superior Silica Sands LLC (SSS) has contracted Fred Weber, Inc. to operate the site. The Environmental Director of Fred Weber, Inc., Lina Klein, is responsible for SWPPP development and implementation. This person is responsible for the coordination of the development, evaluation, maintenance, and revision of the SWPPP. This person is also responsible for the coordination and delegation of facility compliance with the specific management actions identified in this plan, including maintaining BMPs, conducting monitoring activities and inspections, preparing and submitting reports, and serving as the facility contact for the WDNR, upon approval of SSS. The Manager of Mine Planning & Industrial Relations of Superior Silica Sands LLC, Sharon Masek, serves as the facility's local contact person.

1.2 Site Description

The non-metallic mining site is located on County Highway DD just south of the intersection of DD and State Highway 64, in the Township of Auburn. The mine site is comprised of approximately 480 acres owned by Glaser, Pietz, Culver, Dobbs and Boese. Of the total acreage, a large portion is available for agricultural use. The remaining acreage is either wooded, water ways, or improved with structures.

Any discharge of water from the mine facility ultimately enters Trout Creek via one of its tributaries or groundwater. The section of Trout Creek (WBIC 2084000) that is the site's receiving water is currently considered neither an outstanding resource water (ORW) nor an exceptional resource water (ERW). The receiving water is considered a "fish and aquatic life water". Trout Creek is also categorized as a Class II trout stream.

1.3 Facility Operations

The facility mines and wet processes sandstone. The facility is best identified by Standard Industrial Classification (SIC) Code 1446 (Industrial Sand). Activities at the facility are comprised of stripping of topsoil and overburden, blasting and excavation of sandstone, washing and wet screening of the sand, stockpiling of finished product and use of associated haul roads. Mechanical washing and grading is conducted with water pumped from process water settling ponds, augmented with make-up water from storm water ponds and a high capacity well. The wash water, with the addition of drinking water quality flocculation chemicals, is recycled through the process water pond then returned to the process. Waste

wet fines are stockpiled to be used in the reclamation process. Equipment maintenance and storage also takes place on site. Personnel are on site continuously during operating periods.

1.4 SWPPP Summary

The SWPPP summary provides a brief overview of storm water management activities and a checklist to confirm that all required SWPPP elements have been addressed. A template SWPPP summary form (Form 3400-167) is available on the WDNR website at: <http://dnr.wi.gov/topic/stormwater/industrial/forms.html>. Amendments to the SWPPP summary are addressed in Section 7.0 of this SWPPP.

The SWPPP summary and its amendments for this operation are submitted to WDNR; copies are in Appendix B. The SWPPP summary and its amendments are also available upon WDNR request.

1.5 Change to Discharging Facility

A facility authorized to operate under Section 2.12.2 of the general permit was to have a SWPPP prepared as of the effective date of the general permit. However, under the previously active general permit for nonmetallic mining operations, the facility operated as a no-discharge facility and, as of drafting of this SWPPP, is still considered such by the Chippewa County LCFM in the facility's land reclamation plan. While the reissued general permit became effective as of August 1, 2016, the facility continues to operate as a no-discharge facility until drafting and implementation of this SWPPP could be accomplished, in addition to LCFM public notice for revision of the land reclamation plan that incorporates the general permit. Commencement of operation as a discharging facility is tentatively scheduled for the latter half of 2017, following the public notice period.

1.6 Drainage Base Map

The drainage base map is shown in Figure 1 and Figure 2. The maps depict how storm water drains on, through, and from the mine site to surface waters, tributaries, wetlands, or infiltrates to groundwater. The map indicates the following:

- Site property boundaries;
- Natural and constructed storm water drainage ways, including all known surface and subsurface conveyances (with conveyances named), drainage swales, ponds;
- Any secondary containment structures;
- Roadways, identified as paved or unpaved;
- Groundcover features, such as grass, wooded areas, etc.;
- The location of all water discharge outfall pipes, numbered for reference, that discharge channelized flow to surface water, groundwater or wetlands;
- The drainage area boundary for each outfall;
- The approximate surface area in acres draining to each outfall;

- The name and location of any surface water features within ¼ mile of the site, including receiving water Trout Creek tributary;
- Source area pollution prevention controls;
- Storm water structural BMPs that are in place at the facility, including dikes, berms, flow diversion structures, retention ponds, vegetative swales, and sediment traps; and
- Any potential sources of pollution (materials or activities) and areas susceptible to erosion that have the potential to result in sediment-laden storm water, such as:
 - Disturbed areas with no stabilizing vegetative cover
 - Product or waste stockpiles
 - Truck loading and washing areas
 - Haul roads
 - Equipment storage and maintenance areas
 - Fuel storage areas.

2.0 POTENTIAL SOURCES OF STORM WATER CONTAMINATION

Pollutants of concern from industrial sand operations include Total Suspended Solids (TSS), pH and oil & grease. The following sources, identified in Wis. Adm. Code NR 216.27(3)(e), may be potential sources of storm water contamination at the facility:

- Outdoor manufacturing areas;
- Storage areas for material handling equipment;
- Immediate access roads;
- Material handling sites (storage, loading, unloading, transportation, or conveyance of any raw material, finished product, intermediate product, by-product or waste);
- Outdoor stockpiles for raw materials, finished and intermediate products
- Areas of significant soil erosion;
- Washing areas for equipment, vehicles, containers, or other material;
- Shipping and receiving areas; and
- Any other areas capable of contaminating stormwater runoff.

3.0 WASTEWATER DISCHARGES

The facility does not generate or produce any wastewater discharges that are not covered under the general permit. The site's sand-processing area and product stockpiles drain to interconnected wastewater ponds P2 and P1 (Figure 1) that currently do not drain off-site. Pond P1 is lined; Pond P2 is believed to be permanently sealed. These wastewater ponds also contain runoff from portions of the mine site during rainfall events; Pond P1 is designed to contain runoff resulting from the 100-year, 24-hour storm event.

The ponds must be designed to contain without discharge to waters of the state, all wastewater and direct precipitation resulting from a 10-year, 24-hour storm event that falls within the treatment facility, according to Section 2.2 of the general permit. Because the wastewater ponds also receive

contaminated storm water runoff from surrounding areas, the ponds are designed to contain all runoff resulting from the 100-year, 24-hour storm event to meet the standards within the Chippewa County Nonmetallic Mining Reclamation Ordinance. As such, the ponds exceed the sizing requirements of the general permit. Process water may be recycled through the plant. Transfer of process water to the pit may also occasionally occur.

Assessment of the presence of previously unidentified wastewater discharges occurs during the quarterly and annual facility inspections. The following wastewaters may be discharged, in accordance with Section 5. of the general permit:

- Process wastewater associated with washing, cleaning, separating or processing nonmetallic minerals,
- Contaminated storm water commingled with wastewater,
- Dewatering water (any water passed through a pump)
- Decanted water from sediment or product stockpiles,
- Equipment wash water runoff.

3.1 Wastewater Treatment

Wastewater is treated, as necessary, to remove solids prior to discharge to surface waters. The facility will utilize the existing settling ponds P1 and P2, in series, potentially supplemented by treatment with approved flocculants to lower solids content in discharged waters.

It is anticipated that wastewater will move from the active pit to Pond P1 or P2, prior to discharge over existing overflow structures.

The ponds are designed so that Pond P2 flows into Pond P1. Pond P1 will be managed below its Maximum Operating Level (MOL) to retain sufficient capacity to store the 100-year, 24-hour event. The MOL for Pond P1 is 1081.52.

Discharge rates will be determined based on guidance from WDNR and the requirements of the general permit. Seasonal allowable discharge rates will be calculated based on approved Q7,10 rates from WDNR and the USGS and adjusted to meet temperature limits for the receiving stream. Temperature monitoring of the receiving stream will take place on a regular basis so that the discharge rate can be adjusted accordingly throughout the year.

Discharges over existing structures will be controlled to not cause erosion, or the existing structures will be redesigned to withstand increased discharge rates.

After a rain event, the operator will treat wastewater as quickly as possible, while continuing to meet required standards, to return Pond P1 below its MOL.

If treatment and discharge of wastewater prior to another anticipated rain event is infeasible, offsite discharge of untreated wastewater will be prevented by pumping to another pond or to the active pit.

Alternately, water may be directed through the drainage tile system located in the stockpile area prior to reaching Pond P1. Other options may be developed and employed, depending on monitoring results obtained during planning and testing stages. However, commencement of discharge to surface waters will not occur prior to obtaining sampling results for potential discharge waters that confirm adequate solids removal and approvals by the WDNR and LCFM.

3.2 Monitoring and Reporting

Representative samples collected to fulfill monitoring requirements are taken at the wastewater outfall following treatment processes but prior to discharge to a surface water. Monitoring is only required during sampling periods in which the site is discharging.

All discharges will meet the limitations and requirements found in Table 2 of the general permit. Monitored constituents include Total Suspended Solids (TSS), pH, oil and grease, water treatment additives, temperature, total phosphorus. Discharge flow, in gallons per day and days per period, is also recorded and reported. A correlation between TSS and turbidity may be developed to help monitor TSS to allow for daily monitoring of water quality during discharge periods. This correlation would be agreed upon with the LCFM before implementation.

To verify successful treatment, turbidity of the effluent will be tested on a daily basis during days when discharges are occurring. Records of turbidity readings will be maintained internally and will be available to the LCFM upon request.

An Annual Discharge Monitoring Report is submitted to the WDNR by February 15th each year for discharges occurring the previous year.

Additional monitoring is required dependent on the frequency the facility chooses to discharge, as outlined in Section 5.5 of the general permit. Prior to commencement of discharges, the facility will either develop a monitoring plan under Option A for WDNR's approval or conduct acute and/or chronic Whole Effluent Toxicity (WET) testing to determine an acceptable discharge rate. As Trout Creek is a cold-water stream, temperature restrictions on discharges may also be imposed by the WDNR. Upon determination of an acceptable discharge rate, the current overflow structures will be evaluated and modified to convey the wastewater discharge without scouring or erosion of the receiving water.

4.0 BEST MANAGEMENT PRACTICES

Implementation of BMPs is intended to eliminate or reduce pollution potential. BMPs can include processes, procedures, schedules of activities and other management practices. For industrial sand

mines, BMPs are used primarily to minimize sediment discharge. Control of other storm water pollutants, such as petroleum products, also rely on prudent use of BMPs. There are two types of BMPs: source area pollution prevention BMPs and storm water treatment BMPs.

4.1 Source Area Pollution Prevention Best Management Practices

Source area pollution prevention BMPs are those that are designed to prevent storm water on-site from being contaminated, including preventive maintenance, spill prevention, housekeeping, employee training and materials management. Erosion control BMPs should be implemented before any major site development occurs, to reduce the potential for off-site loading. Following implementation of identified source area pollution prevention BMPs, there should be no residual oil and grease in discharged storm water. However, residual TSS may be present.

- Soil erosion and sediment movement prevention/control practices: These practices stabilize soils, divert storm water from wastewater treatment facilities where storm water could be contaminated by process water that was dosed with polyacrylamides, and minimize erosion and sedimentation through use of sound engineering principles. These BMPs must be built in accordance with the WDNR's Construction Site Erosion and Sediment Control Technical Standards. These standards are available on the WDNR website at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html and in Appendix C. These measures are utilized throughout the site.
 - Potentially contaminated storm water is collected in storm water infiltration ponds.
 - Primary containment consists of grading activities to direct storm water toward the storm water infiltration ponds.
 - Runoff from unexcavated, unexposed areas is diverted around process and excavation areas by ditches and berms.
- Management and control of contaminants from outside washing of vehicles, equipment or other objects. Water from washing of these items is considered wastewater and should not be combined with storm water. Wash-water runoff, if generated, is directed to process water ponds.
- Storage and transfer of fuels and other oils according to the site's Spill Prevention, Control and Countermeasure (SPCC) plan. The facility's SPCC plan contains appropriate methods employed to minimize the threat of oils reaching surface waters.
- Good housekeeping measures to minimize storm water contamination by maintenance fluids, fuels, lubricants, and waste materials. Trash receptacles are

kept closed and emptied prior to overfilling; litter is regularly picked up on site; outdoor storage containers have lids that are adequately closed; materials such as paint, grease, lubricants are stored under cover or indoors; equipment and vehicles are regularly maintained. Maintenance schedules for vehicles and plant equipment are managed by Fred Weber, Inc. Equipment Department. These measures are utilized throughout the site.

- Minimize dust generation and track-out from unpaved haul roads. Storm water (and wastewater) containing only suspended solids can be used for road dust suppression. These waters can be used in quantities that prevent excess water from discharging to a surface water or running off the site. The facility utilizes an articulated water truck for stockpile and haul road dust minimization.
- Employee training. Training occurs on an annual basis during MSHA Annual Refresher training, and as needed, throughout the operating season.

4.2 Storm Water Treatment Best Management Practices

Storm water treatment BMPs are designed to eliminate storm water residual pollutant contamination when source area pollution prevention controls are either not feasible or cost effective or inadequate to control storm water contamination. Storm water BMPs for industrial sand facilities are intended to contain sediment to the maximum extent practicable to facilitate evaporation or infiltration prior to discharge. BMPs include:

- Construction and maintenance of asphalt approach to minimize track-out to the local road.
- Construction and maintenance of sediment traps, wet detention ponds, and sediment basins. Guidance is available on the WDNR website at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html for the construction of these controls. Post-construction guidance is located at: http://dnr.wi.gov/topic/stormwater/standards/postconst_standards.html. This information is also included in Appendix D.
- Dewatering water associated with sediment removed for maintenance of storm water BMPs cannot be directly discharged to surface water.
- Storm water coming into contact with sediment removed for maintenance of storm water BMPs cannot be directly discharged to surface water.

Storm water runoff from the site collected in ponds located as shown in Figure 1. Ponds that are designated by an “S” contain only storm water runoff. These ponds are designed to hold a 100-year storm event to meet the standards within the Chippewa County Nonmetallic Mining Reclamation Ordinance. The guidelines for construction of sediment basins, referenced above, is used during design and construction of the ponds.

Historically, infiltration to groundwater of water contained within ponds has been minimal or nonexistent at this site. Even newly constructed ponds excavated down to sandstone have shown very low infiltration rates. Given the lack of infiltration at the site, storm water ponds are sized to allow adequate settlement of fines and facilitate evaporation.

Controlled discharges will take place to lower the water levels in each pond after visual and/or analytical testing demonstrates that the water quality is at an acceptable level. Each storm water pond will have a discharge pipe installed through the dam at or just slightly below the pond's MOL elevation. This discharge pipe will have a valve at the end that will normally remain closed. During storm events, runoff will be collected in each storm water pond. After the rain event, an inspection will be conducted to assess the water elevation and water quality. Once water quality is at an acceptable level in a pond, the pond's valve will be opened to allow the water to discharge from the pond. The outlet of each pond will be lined with rip rap or other BMP to prevent erosion. Discharge rates will be at a level that minimizes excessive ponding of water and prevents surface erosion beyond the discharge point. Following discharge, the valves will be closed.

This method of controlled water release is defined as "dewatering" in the WPDES permit and therefore classifies this storm water as wastewater. A variance will be obtained from WDNR under Section 4.1 of the WPDES permit so that this water will be monitored under the guidelines of Table 2 only prior to initiation of initial discharge commencement.

5.0 SITE INSPECTIONS

5.1 Annual Facility Site Compliance Inspections

The facility will be inspected on an annual basis each calendar year and document the results of that inspection no later than February 15th the following year. The timing of the annual facility site compliance inspections (AFSCI) should consider seasonal or cyclical activities at the facility so the inspections are representative of the full range of activities at the site. The SWPPP contact will perform and/or coordinate the inspections. The inspection will:

- Verify that all pollution sources are correctly identified, including non-storm water contributions, and that the site drainage pattern description remains accurate, and
- Check that appropriate source area pollution prevention controls and storm water BMPs have been chosen, and the practices are being implemented, properly operated and adequately maintained.

The AFSCI should also include results of an annual check to determine whether the facility discharges a pollutant of concern to an impaired water body or to a total maximum daily load (TMDL) allocated water body. If the receiving water is identified as either an impaired water or having a TMDL, Section 6.0 of this SWPPP outlines what must occur.

The current list of impaired waters is available on the WDNR website at: <http://dnr.wi.gov/topic/impairedwaters/>. The current State and Federal approved Final TMDLs can be found at: <http://dnr.wi.gov/topic/tmdls/>. Searching can be done by looking for “Trout Creek - 2084000”. As of the date of this SWPPP, Trout Creek in Chippewa County is neither an impaired water for any pollutant nor does it have a TMDL.

5.2 Quarterly Visual Site Inspections

Quarterly visual site inspections are performed by the SWPPP contact or his designee. During these inspections, the inspector will verify that:

- Site drainage conditions and potential pollution sources identified in the SWPPP, including non-storm water contributions, remain accurate, and
- Appropriate storm water pollution prevention controls and storm water BMPs are being implemented, properly operated and adequately maintained.

5.3 Quarterly Visual Outfall Inspections

Once per quarter, triggered by a storm event, the SWPPP contact or his designee perform visual inspections of storm water discharge at each outfall. These inspections are conducted within the first 30 minutes or as soon thereafter as practical, after runoff begins discharging at an outfall. In no event should inspection take place more than 60 minutes after runoff begins. The inspection will note the following:

- Discharge outfall location,
- Observations of the following in storm water being discharged from the site:
 - Color,
 - Odor,
 - Turbidity,
 - Floating solids,
 - Foam,
 - Oil sheen, or
 - Other obvious indicators associated with contaminated storm water.

Quarterly visual outfall inspections are not required if any of the following apply:

- The SWPPP contact or his designee could not reasonably be present at the time of a storm water event,
- Attempts to complete the inspection would endanger employee safety or well-being,
- No storm water events large enough to cause a discharge at an outfall occurred, or

- The source of contaminated storm water observed outside the site's property boundary was determined not to be associated with the site's activities.

5.4 Inspection Reports

AFSCI and quarterly visual site inspection reports should be prepared for each inspection and should include:

- Inspection date,
- Inspection personnel,
- Scope of the inspection,
- Major observations,
- Possible sources of any observed contaminated storm water,
- A schedule for implementing any further actions needed to control storm water contaminants, and
- Explanation of why any quarterly visual site inspections or outfall inspections was not performed (see

The AFSCI report form (Form 3400-176) is used for the annual inspection and is available on the WDNR website at: <http://dnr.wi.gov/topic/stormwater/industrial/forms.html>.

As can be seen by the requirements outlined in Sections 5.1 and 5.2 of this SWPPP, the requirements of the quarterly visual site inspections are nearly identical to the AFSCI requirements. As such, the AFSCI report form is also utilized for these quarterly inspections.

The Quarterly Visual Inspection Field Sheet (Form 3400-176A) is used to document the quarterly visual outfall inspections and is available on the WDNR website at: <http://dnr.wi.gov/topic/stormwater/industrial/forms.html>. All required criteria listed in Section 5.3 of this SWPPP are incorporated into this form.

Blank inspection forms are in Appendix E. Completed inspection reports are maintained in Appendix F and are available to the WDNR upon request.

5.5 Additional Inspections

Fred Weber, Inc. conducts additional inspections on a daily and monthly basis. These inspections are implemented to identify BMPs in need of maintenance or repair and monitor the water level in site retention/detention ponds. Copies of the templates used for these inspections are found in Appendix E. Completed inspection reports are maintained in Appendix F.

6.0 IMPAIRED WATER BODIES AND TOTAL MAXIMUM DAILY LOADS

Annual checks for impaired water body designation or total maximum daily load (TMDL) allocation are included as part of the AFSCI inspection as described in Section 5.1 of this SWPPP. If the annual

check identifies Trout Creek to be an impaired water body, this SWPPP must be revised according to Section 2.8.3 of the general permit within 180 days of the annual check.

If Trout Creek is included in a State or Federal total maximum daily load (TMDL) allocation, an assessment must be completed per Section 2.8.5 of the general permit and, within 180 days of the annual check, a proposed implementation plan must be submitted to the WDNR per Section 2.8.6 of the general permit.

7.0 AMENDMENT OF SWPPP AND SWPPP SUMMARY

The SWPPP will be amended as appropriate during the term of the operation. An updated SWPPP summary should be provided to the WDNR prior to commencing any work needed by the SWPPP amendment. The amended SWPPP is available to the WDNR upon request.

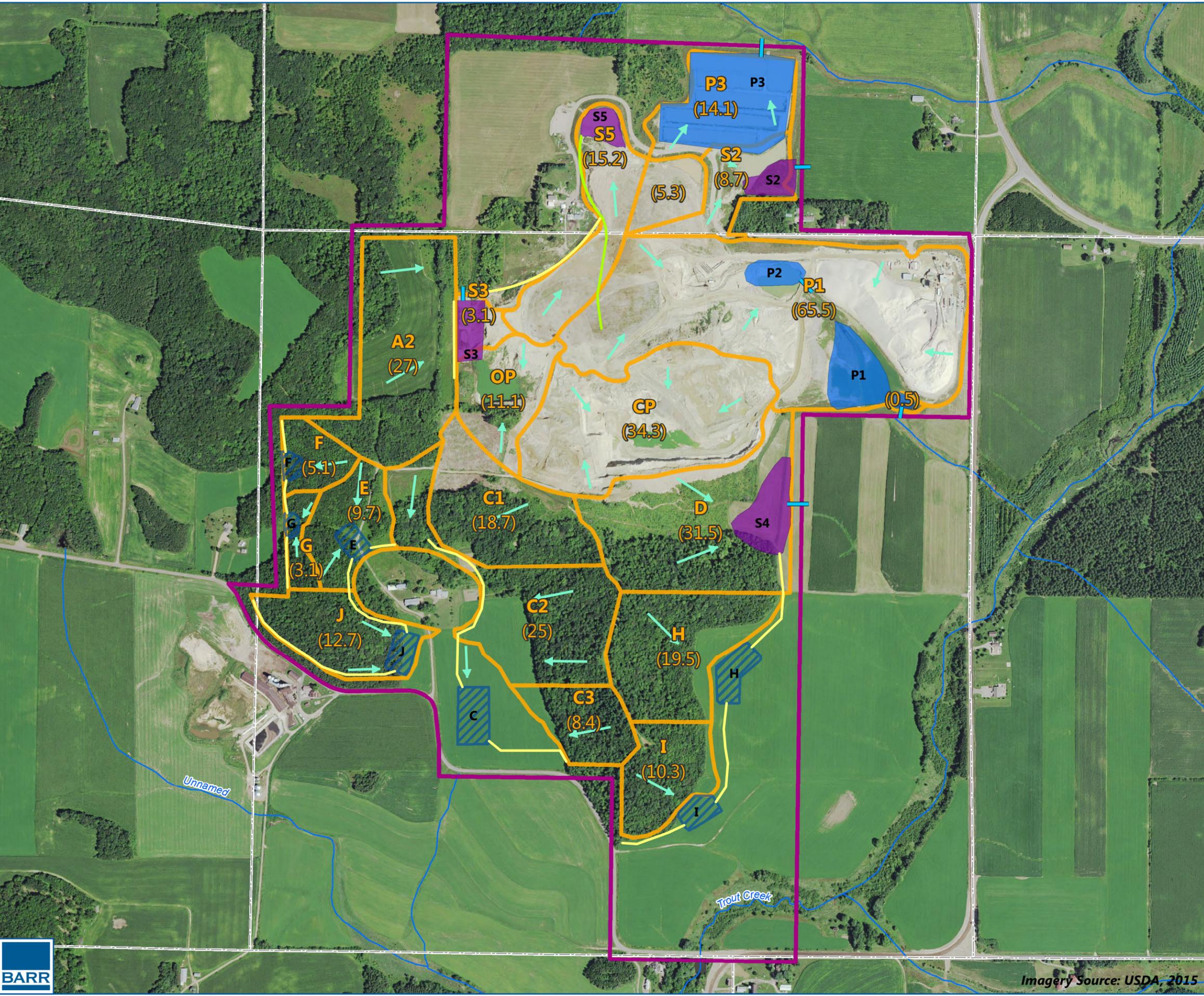
The SWPPP will be reviewed, at a minimum, and amended as necessary when:

- Expansion, production increases, process modifications, changes in material handling or storage or other activities are planned that will result in a significant increase in the exposure of pollutants to storm water discharged to waters of the state or to storm water BMPs.
- The comprehensive AFSCI, quarterly visual inspection of storm water quality, or other information reveals that the provisions of the SWPPP are ineffective in controlling storm water pollutants discharged to waters of the state.
- Upon written notice from the WDNR that storm water controls are ineffective in achieving the conditions of the general permit.

Any amendment should contain a description of new activities that contribute to the increased pollutant loading, planned source control activities that will be used to minimize pollutant loads, and estimate of the new or increased discharge of pollutants following treatment, and a description of any treatment system modifications needed to manage the storm water contaminants.

A SWPPP amendment is not required for areas of the mining operation where storm water containing only sediment is entirely captured and contained within the facility or is infiltrated in a manner that traps and removes sediment from storm water within the facility.

Barr Footer: ArcGIS 10.4, 2017-08-02 14:22, File: I:\Projects\49\09\1032\Maps\Report\2017\SWPPP\Figure 1 Drainage Base Map.mxd User: SALZ



- Mine Property
- Existing Swale
- Proposed Swale
- Process Water Pond
- Proposed Pond
- Stormwater Pond
- Outfall Structures
- Drainage Direction
- Basin Boundary (Area, acres)
- Stream



DRAINAGE BASE MAP
 Storm Water Pollution Prevention Plan
 Chippewa Sands
 Chippewa County, WI



Imagery Source: USDA, 2015

FIGURE 1

