

POLLUTION PREVENTION PLAN

Jordan Gravel, LLC - Sand and Gravel Mining
Sand Creek Township, MN
Project #0901-00

Prepared for:

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1.0 FACILITY DESCRIPTION

1.1 Location and Activities of Site

The Site is located in portions of Sections 8 and 7, Township 114, Range 23, Scott County, Minnesota. Site location is shown on Figure 1. The proposed Site contains abundant, high-quality aggregate reserves which will be mined, crushed and used in redi-mix concrete, asphalt and as base material for private and public construction projects. Aggregate of this quality is highly sought after and cost-effective mining of these products has significant benefits to the community in better construction materials and lower construction costs. Upon completion of the mining, the Site will be restored for end uses including a large, deep water lake and residential home building sites with access to this water feature. Currently large portions of the Site are used for agricultural. It is anticipated the Mining Operation will displace those uses. A layout of the proposed mining plan can be found on Figure 2.

1.2 Site Area Calculations

The Site is situated on approximately 100 acres of property owned by Jordan Gravel, LLC. Approximately 85 acres of the Site will be mined for aggregate, including mining in the water table to a depth of approximately 80-100.

2.0 POTENTIAL POLLUTION SOURCES

2.1 Assessment of Activities

Excavation: Sand/Gravel Mining

Sand/gravel is mined from the Site via the use of heavy construction equipment, i.e. mobile excavators and loaders. The sand/gravel is stockpiled on-site for use at off-site construction sites. The sand/gravel is mined on an as-needed basis.

Crushing and Screening

Portable crushers and screeners will be brought to the Site to process the mined material into useable aggregate. Crushing and screening is done on an as-needed basis.

Overburden and Product Stockpiles

Stockpiles will be created for fine and coarse aggregate, recycled asphalt and concrete, sand, topsoil and random fill soil.

Material Loading

Haul trucks are loaded with sand/gravel and/or topsoil at the Site for transport to off-site construction sites.

Site Access Road

Trucks will enter/exit the Site via the access road to Valley View Road. Exiting trucks will travel over a rock construction exit and head north on Valley View Road. Trucks will then take a right on 173rd St and exit onto Highway 169. No other access to the Site is available.

Vehicle and Equipment Maintenance, Washing and Fueling

All used oil from any oil changes performed onsite will be collected in a leak proof metal container and recycled offsite. No detergent or chemicals will be used to wash equipment onsite. Wash water will be directed to onsite infiltration areas and will not be discharged from the Site.

3.0 STORMWATER CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

3.1 Eliminating and Reducing Exposure

- Materials such as mined sand and gravel and topsoil shall be stockpiled to minimize stormwater contact.

3.2 Rock Construction Exit

- A rock construction exit shall be used at the entrance to the Site to eliminate sediment tracking to Valley View Drive.
- If the gravel construction entrance becomes nonfunctional (inundated with sediment) and sediment tracking is observed on Valley View Drive, it shall be replaced or repaired within 24 hours of discovery.

3.3 Temporary Sedimentation Basin

- Where five or more acres of disturbed soil drain to a common location, a temporary (or permanent) sediment basin must be provided prior to runoff leaving the construction Site or entering surface waters. The temporary (or permanent) basins must be constructed and made operational concurrent with the start of soil disturbance that is upgradient of the area and contributes runoff to the basin. Where the temporary sediment basin is not attainable due to Site limitations, equivalent sediment controls such as smaller sediment basins, and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures are required for all down slope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by individual Site conditions. In determining whether installing a sediment basin is attainable, the Permittee(s) must consider public safety and may consider factors such as Site soils, slope and available area on site.
- Temporary (or permanent) sedimentation basins shall be drained and the sediment removed when the depth of sediment collected in the basin reaches ½ the storage volume within 72 hours of discovery, or as soon as field conditions allow.

3.4 Stormwater Pond

- The gravel pit will perform as the stormwater pond receiving water from the Site. Water will be infiltrated through the pond bottom. Due to continuous mining, there is no danger of the mining pit becoming clogged by sediment. During flood conditions the lake level will overtop the mine edge. In order to mitigate the potential for erosion along the mine perimeter and re-channelization of Sand Creek during flood conditions a swale and spillway will be constructed at the natural saddle between Sand Creek and the mine boundary.

3.5 Silt Fence

- Silt fence shall be used at the perimeter of stockpiles where stockpiles are located in an area that has a continuous positive slope off-site. If runoff from a stockpile is directed toward the temporary sedimentation basin, silt fence may not be required.
- Silt fence shall be installed on all down gradient perimeters before any upgradient land disturbing activities begin.
- Silt fence shall be repaired or replaced when sediment reaches one-third the height of the silt fence, the silt fence is damaged and/or the silt fence becomes nonfunctional. Measures shall be taken within 24 hours of discovery.

3.6 Erosion Prevention and Sediment Control

- Where practical, the mining area shall be excavated such that stormwater is directed to the mining pit.
- The adjacent sloping land shall remain vegetated with perennial vegetation that prevents erosion and filters stormwater.
- The topsoil stockpile shall be seeded as-needed to prevent excessive erosion.
- Stockpiles shall not be placed in surface waters, including stormwater conveyances such as curb and gutter, conduits or ditches.
- All exposed soil areas that have a continuous positive slope that pose a risk of sediment discharge to waters (excluding water inside the pit) must have temporary erosion protection cover for the exposed soil areas year round within 7 days of completion of land disturbing activities.
- Where nuisance conditions exist, silt fence, erosion control blanket or other BMPs shall be implemented within 24 hours of discovery.

3.7 Facility Inspection Requirements

- The facility shall be inspected at least once per month. See Appendix A.

3.8 Maintenance Requirements

- All stormwater BMPs shall be maintained to ensure proper function. If it is found that the BMPs are not functioning properly, the BMP shall be repaired or replaced within the timeframes shown in the above sections.

3.9 Spill Prevention and Response

- See Appendix B.

4.0 FINAL STABILIZATION AND CLOSURE

In order to be released from the inspection, recording and reporting requirements of this permit for a site where the Permittee no longer conducts the activities described above, the Permittee shall ensure and certify on the Annual Report/Site Inventory Form that:

- There is no stormwater runoff and/or pit dewatering from the Site; or
- The Permittee certifies that a new owner or operator has assumed responsibility for the Site; or
- The Site closure achieves final stabilization.

4.1 Final Stabilization

Final stabilization is achieved by the following means:

- The drainage ways that leave the Site are stabilized to prevent erosion with riprap or other protective material.
- The soil disturbing activities at the Site are completed and all soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent over the entire pervious surface areas, or other equivalent means necessary to prevent soil failure under erosive conditions.
- The drainage ditches constructed to drain water from the Site are stabilized to preclude erosion.
- The temporary synthetic and structural erosion prevention and sediment control BMPs (such as silt fence) are removed.
- The Permittee cleans out all sediment from conveyances and from stormwater ponds and temporary sedimentation basins that are to be used as permanent water quality management basins; sediment must be stabilized to prevent it from being washed back into the basin, conveyances or drainage-ways discharging off-site or to surface waters. The cleanout of permanent basins must be sufficient to return the basin to design capacity.
- The Permittee installs permanent stormwater treatment for new impervious surfaces created as a result of the activities covered under the MNG490000 permit. The permanent stormwater treatment for new impervious surfaces must be designed for 1.0 inches of runoff from all created impervious surfaces.
- Other BMPs as necessary are implemented so as to prevent erosion from the Site excavation areas and stockpiles that have been used by the Permittee.

Prior to seeking certification that a site complies with this part, the Permittee shall inspect the Site to verify compliance before providing certification to the MPCA.

After the Permittee has certified on the Annual Report/Site Inventory Form that a site complies with this part, the Site can be released and the Permittee is no longer required to inspect, record and report on that Site.

5.0 RESPONSIBLE PERSONNEL

The following person is responsible for the management and implementation of the Pollution Prevention Plan, inspections, maintenance and annual reporting:

Primary: **Steve Hentges**

650 Quaker Avenue

Jordan, MN 55352

Ph: (952) 492-5700

Fax: (952) 492-5705

There is currently no Site Manager. Contact information will be added as soon as one is hired.

6.0 CERTIFICATION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.



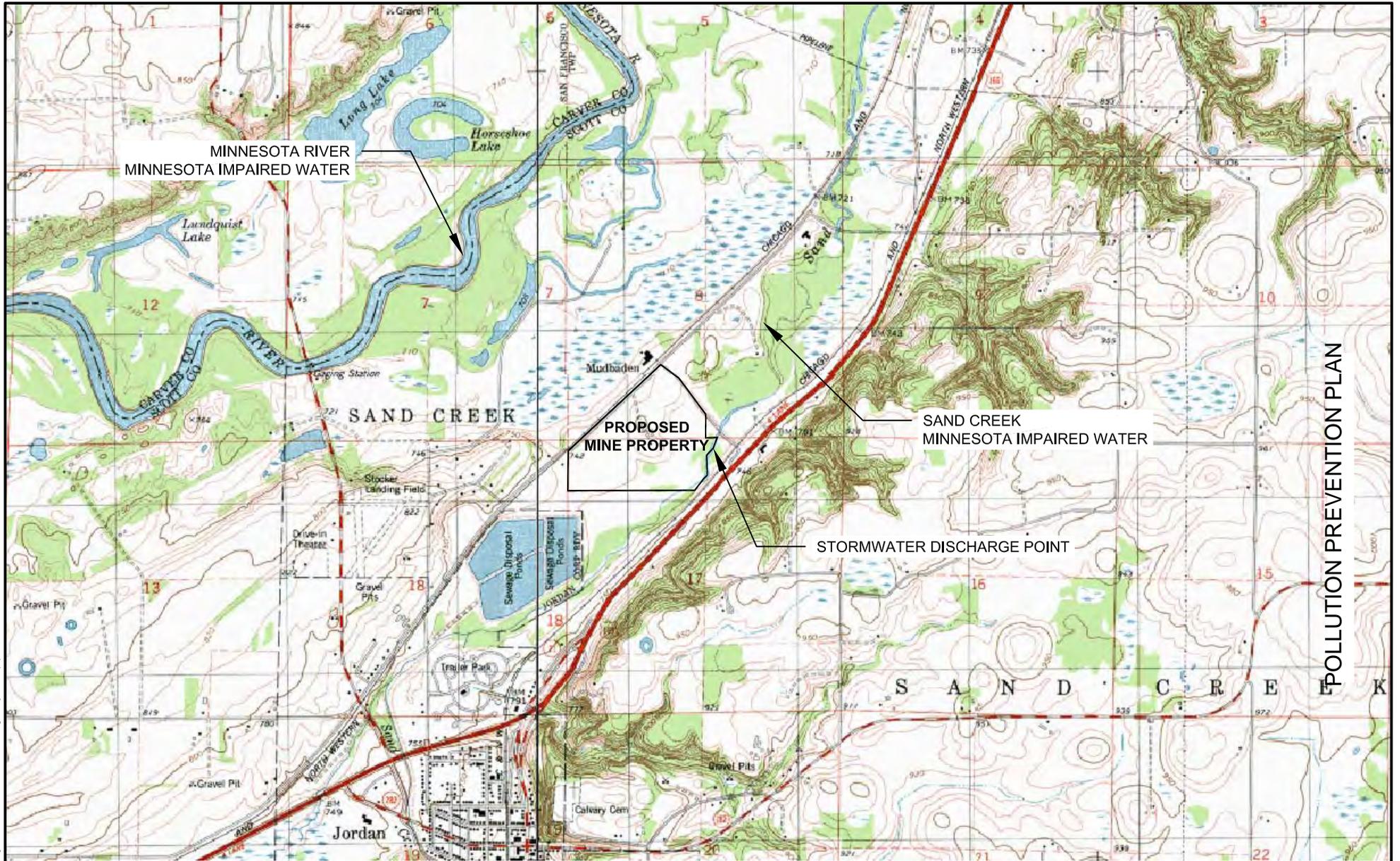
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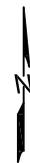
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Figures

P:\Projects\HENHEN0901 Keefe\dwg\Site Location-USGS.dwg, Layout1 (2), 11/6/2014 10:13:24 AM



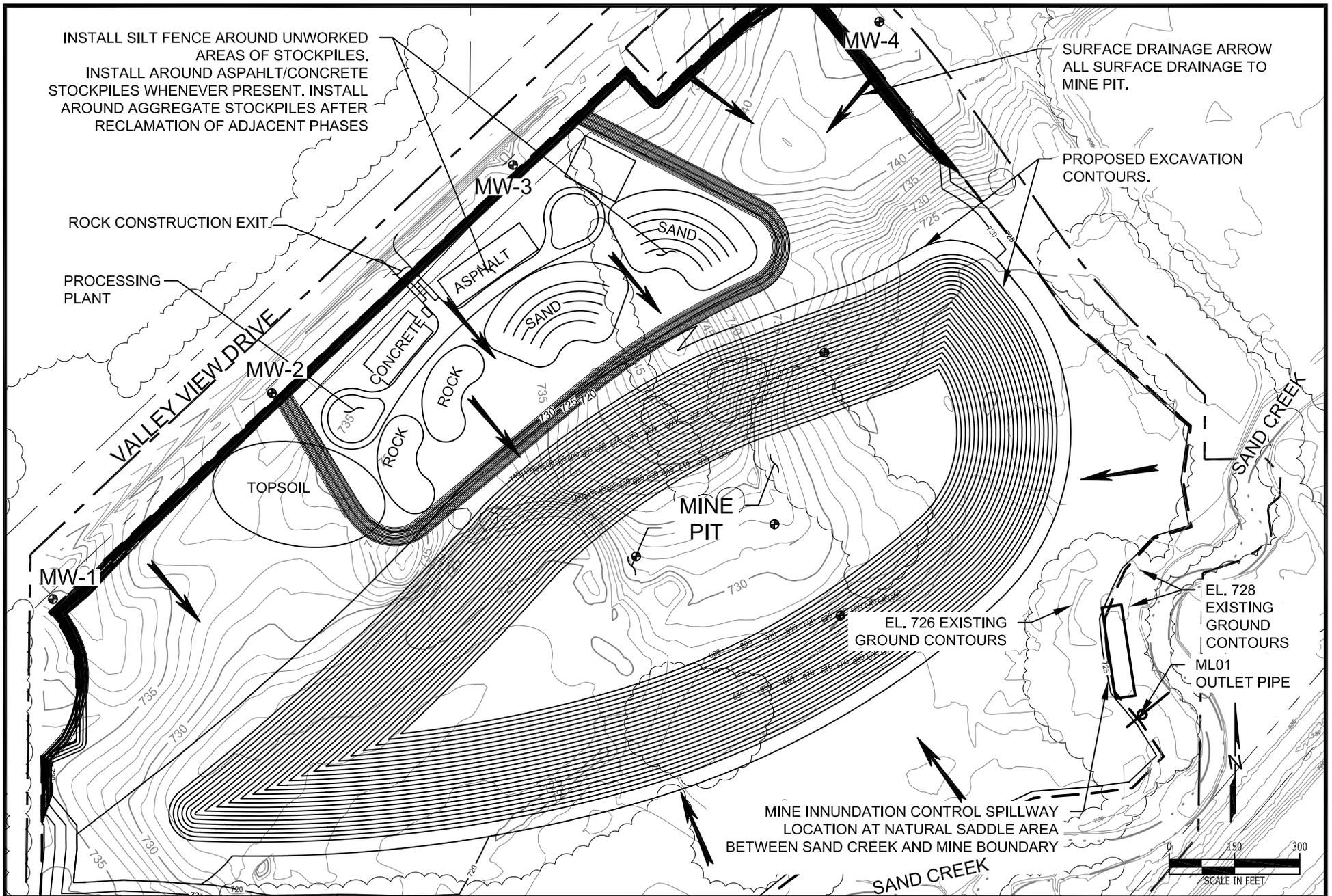
BACKGROUND MAP: USGS 7.5 MINUTE QUADRANGLE - JORDAN EAST



1" = APPROXIMATELY 1/2 MILE

FIGURE 1
SITE LOCATION MAP

POLLUTION PREVENTION PLAN
SAND CREEK TOWNSHIP, MN
JORDAN GRAVEL PROPOSED SAND AND GRAVEL MINE



Appendix A

Inspections and Maintenance

INSPECTIONS

One inspection shall be completed at the Site every two weeks during active operations. The inspector shall evaluate the Site to determine that the Site is in general compliance with this Pollution Prevention Plan.

The inspector shall record the date and time of the inspections on the inspection log on the following page. Additionally, the inspector shall inspect and record the findings under each location/item listed on the inspection log. If a BMP requires maintenance or replacement, it shall be noted on the inspection log. Corrective actions taken shall be noted on the inspection log with the dates, times and party completing the maintenance activities. Omissions and additions to the Pollution Prevention Plan shall be clearly noted on the modification log. The date and time of all rainfall events greater than ½ inch in 24 hours shall also be recorded.

At least once per year the Permittee shall review the current EPA approved list of impaired water and the TMDLs to determine if, and to what extent, the Site's plan must address these impairments and TMDLs.

MAINTENANCE

All stormwater BMPs are to be properly maintained so as to ensure proper function. Due to the nature of the BMPs on-site, the BMPs will be maintained on an as needed basis. If it is determined that the effectiveness of a BMP is compromised, corrective action shall be taken within the timeframes listed in Section 3. This shall include, but is not limited to: maintenance, repair or replacement of the BMP. If corrective action cannot be taken within the allotted timeframes of discovery, additional temporary or permanent BMPs shall be implemented until the original BMP is restored. The date and time of any BMP maintenance, repair or replacement shall be noted on the maintenance log.

Appendix B
Spill Prevention and Response Plan

SPILL PREVENTION AND RESPONSE PLAN

Potential Spill Areas

- Vehicle fueling areas
- Loading and unloading areas
- Vehicle storage areas
- Vehicle maintenance areas

Material Handling Procedures

- Label all containers to show the name and type of substance, expiration date, health hazards, handling procedures and first aid considerations.
- Use filling procedures for tanks, vehicles and other equipment that minimize the risk of spills.
- Ensure proper security.

Spill Response Procedures

- Secure the area to protect all personnel and public from immediate danger.
- Attempt to contain the spill using absorbent materials, earthen berms and/or brooms only if it is safe to do so.
- If necessary, call 911 to alert the fire department or other emergency services.
- Contact the Facility Manager.
- If the spill is five gallons or more, the Safety and Regulatory Compliance Department will notify the Minnesota Duty Officer, and the National Response Center if required.

The Minnesota Duty Officer

651-649-5451

800-422-0798

The National Response Center

800-424-8802

- Contact environmental consultant for disposal options, investigation, sampling and closure requirements.

Appendix C
Monitoring Requirements

MONITORING REQUIREMENTS (See Section 8 of Permit No: MNG490000)

Location

The monitoring location for the Site is at the outlet pipe near the natural saddle between Sand Creek and the mine boundary, located on the southeastern edge of the Site. The monitoring location is denoted on Figure 2 as ML01.

Sampling

The pipe facilitates and regulates drainage from the mine after flood water recedes to a level below the spillway elevation. For this reason it is possible that there will be no water present in the pipe for sampling. Two Samples shall be collected each calendar year from the Monitoring Location in order to determine an annual average concentration for each intervention limit parameter. The two samples shall be collected on two separate runoff events, preferably one in the spring and one in the fall.

Samples shall be collected within the first 30 minutes of a measurable runoff event. Sampling events shall be at least 72 hours apart.

If there is no discharge during the sampling period, the Permittee shall check the “No Flow” box and note the conditions on the Discharge Monitoring Report Form. The Discharge Monitoring Report Form can be found and completed online on the MPCA’s website: <http://www.pca.state.mn.us>. The Discharge Monitoring Report Form shall be submitted 21 days after the end of each calendar year for the first full year following permit issuance.

Analysis

The samples shall be analyzed by a laboratory certified by the Minnesota Department of Health. The following table lists the parameters and limits that are to be analyzed.

Monitoring Values

Parameter	limit
Total Suspended Solids (TSS)	100 mg/L

Mine Dewatering Sampling

If the mine pit requires dewatering, additional sampling is required. Quarterly sampling of the dewatering activity shall be completed and the Discharge Monitoring Report Form shall be submitted to the MPCA 21 days after the end of each calendar quarter.

See attached portions of Section 8 of the permit for mine dewatering sampling requirements.

Chapter 1. General Non-Metallic Mining and Assoc. Act.

8. Monitoring Requirements

- 8.12 Submit the annual Discharge Monitoring Report Form 21 days after the end of each calendar year for the first full year following permit issuance (January 21, 2013).

Mine Dewatering to Surface Waters - Effluent Limit Monitoring

- 8.13 If dewatering flows do not discharge to surface waters, no monitoring will be required. If there is no discharge during the sampling period, the Permittee shall check the "No Flow" box and note the conditions on the Discharge Monitoring Report Form.
- 8.14 If the Permittee submits documentation in compliance with Section 5.3 of this permit and receives approval from MPCA, overflows from the mine pit dewatering control devices are not required to be sampled. This shall include overflows caused solely by direct rainfall and groundwater seepage.
- 8.15 One sample shall be collected quarterly from each monitoring outfall identified and analyzed for each required effluent limit parameters specified in the Limits and Monitoring Section of this permit. The sample(s) shall be collected each calendar quarter the Permittee is authorized to discharge under this permit.
- 8.16 For active mine dewatering, samples shall be representative of the discharge and collected during any measurable event at an outfall.
- 8.17 If the discharge event is an overflow caused by a rainfall event, the sample(s) shall be collected within the first 30 minutes of the measurable runoff event. If it is not possible to collect the sample(s) within the first 30 minutes, the sample(s) shall be collected as soon as practicable after the first 30 minutes and documentation must be included with the Comments field of the Discharge Monitoring Report Form that explains why it was not possible to collect the sample(s) within the first 30 minutes.

Non-stormwater Limits and Monitoring

- 8.18 Mine Dewatering to Surface Waters Limits and Monitoring
- a. All Dewatering Activities from Subsector J1 and J2:
 - i. Flow, Million Gallons (MG), Calendar Quarter Total, 1 time per quarter
 - ii. Flow, million gallons per day (mgd), Calendar Quarter Average, 1 time per day
 - b. Dewatering from Construction Sand and Gravel (1442)
 - i. Total Suspended Solids (TSS), 30 mg/L, Daily Maximum, 1 time per quarter
 - ii. pH, 6.5 SU, Calendar Quarter Minimum, 1 time per quarter
 - iii. pH, 8.5 SU, Calendar Quarter Maximum, 1 time per quarter
 - c. Dewatering from Industrial Sand Mining (1446)
 - i. TSS, 45 mg/L, Daily Maximum, 1 time per quarter
 - ii. TSS, 25 mg/L, Calendar Quarter Average, 1 time per quarter
 - iii. pH, 6.5 SU, Calendar Quarter Minimum, 1 time per quarter
 - iv. pH, 8.5 SU, Calendar Quarter Maximum, 1 time per quarter
 - d. Dewatering from Subsector J2 facilities (1411, 1422, 1423, 1429)
 - i. TSS, 30 mg/L, Daily Maximum, 1 time per quarter
 - ii. pH, 6.5 SU, Calendar Quarter Minimum, 1 time per quarter
 - iii. pH, 8.5 SU, Calendar Quarter Maximum, 1 time per quarter
- 8.19 Submit the quarterly Discharge Monitoring Report Form 21 days after the end of each calendar quarter following permit issuance (first sampling event will be January 1 to March 31, 2012, and is due April 21, 2012).

Chapter 1. General Non-Metallic Mining and Assoc. Act.

8. Monitoring Requirements

Mine Dewatering to Surface Waters - Monitoring for Permit Reissuance

- 8.20 The following parameters shall be sampled and analyzed prior to permit expiration and submitted with the application for permit re-issuance. Samples shall be representative of mine dewatering discharge activity, and must comply with Sections 9.14, 9.16 and 9.17 of this permit:
- Total Dissolved Solids.
 - Hardness.
 - Oil & Grease and surfactants.
 - Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc.
 - Aluminum, barium, boron, cobalt, iron, magnesium, manganese, molybdenum, total tin, and total aluminum.

9. Total Facilities Requirements

- 9.1 Incorporation by Reference. The following applicable federal and state laws are incorporated by reference in this permit, are applicable to the Permittee, and are enforceable parts of this permit: 40 CFR pts. 122.41, 122.42, 136, 403 and 503; Minn. R. pts. 7001, 7041, 7045, 7049, 7050, 7052, 7053, 7060, and 7080; and Minn. Stat. Sec. 115 and 116.
- 9.2 Permittee Responsibility. The Permittee shall perform the actions or conduct the activity authorized by the permit in compliance with the conditions of the permit and, if required, in accordance with the plans and specifications approved by the Agency.
- 9.3 Toxic Discharges Prohibited. Whether or not this permit includes effluent limitations for toxic pollutants, the Permittee shall not discharge a toxic pollutant except according to Code of Federal Regulations, Title 40, sections 400 to 460 and Minnesota Rules 7050, 7052, 7053 and any other applicable MPCA rules.
- 9.4 Nuisance Conditions Prohibited. The Permittee's discharge shall not cause any nuisance conditions including, but not limited to: floating solids, scum and visible oil film, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water.
- 9.5 Property Rights. This permit does not convey a property right or an exclusive privilege.
- 9.6 Liability Exemption. In issuing this permit, the state and the MPCA assume no responsibility for damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under this permit. To the extent the state and the MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act.
- 9.7 The MPCA's issuance of this permit does not obligate the MPCA to enforce local laws, rules, or plans beyond what is authorized by Minnesota Statutes.
- 9.8 Liabilities. The MPCA's issuance of this permit does not release the Permittee from any liability, penalty or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit.
- 9.9 The issuance of this permit does not prevent the future adoption by the MPCA of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the Permittee.
- 9.10 Severability. The provisions of this permit are severable, and if any provisions of this permit or the application of any provision of this permit to any circumstance, are held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.
- 9.11 Compliance with Other Rules and Statutes. The Permittee shall comply with all applicable air quality, solid waste, and hazardous waste statutes and rules in the operation and maintenance of the facility.