

# **MNG490000**

## **Stormwater Permit**

### **for Nonmetallic Mining and Associated Activities**

**AGGREGATE & READY MIX**  
ASSOCIATION OF MINNESOTA

**Stormwater Workshop**  
**February 23, 2012**

# Background

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- Old Permit expired Sept. 30, 2011
- New Permit issued Nov. 30, 2011
- Activity began ~3 years ago
  - Initial move to eliminate the permit
  - MPCA Multi Sector General Permit
  - Industry Team formed to work w/ MPCA



# MNG49 Summary

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- Temporarily Inactive Site – mining and associated activities have occurred in the past, but currently are not being actively undertaken. Permit coverage is maintained for the possibility of mining in the foreseeable future
  - Maintain BMPs
  - No inspection report needed
  - Monitoring (stormwater monitoring) is not required.
    - DMR still required
    - Monitoring required if site becomes active



# Requirement Timeline

- January 13, 2012 – Supplemental Information Form Due
  - Existing MNG49 permit holders
  - MPCA will issue Permit Coverage Card
- January 31, 2012 – Submit Annual Report to MPCA as required under old MNG49 Permit
- Dec 2011- Feb 2012 – Collect Quarterly Sample under MSGP
- Jan 2012 – March 2012 – Collect Mine Dewatering Effluent Sample
- March 21, 2012 – Submit MSGP Quarterly SWMR
- March 31, 2012 – Submit MSGP Annual Report
- April 21, 2012 – Submit Dewatering Effluent DMR
- April 29, 2012 – Update SWPPP to address MNG49



# Requirement Timeline

- April 30, 2012 – Deadline to transition from MSGP to MNG49
  - Permit says 6 months = May 30
  - Permit Application or Site Inventory Report Form
  - Do not need NOT
- April / May 2012 – Collect first semi-annual MNG49 stormwater sample
- April 2012 – June 2012 – Collect Mine Dewatering Effluent
- July 2012 – Sept 2012 – Collect Mine Dewatering Effluent
- September / October 2012 - Collect second semi-annual MNG49 stormwater sample
- Oct 2012 – Dec 2012 – Collect Mine Dewatering Effluent
- January 21, 2013 – Complete and submit DMR for 2012



# Forms

<http://www.pca.state.mn.us/index.php/water/water-permits-and-rules/water-permits-and-forms/construction-sand-gravel-aggregate-and-hot-mix-asphalt-activities.html?menuid=&redirect=1>



Minnesota Pollution  
Control Agency

520 Lafayette Road North  
St. Paul, MN 55155-4194

## Nonmetallic Mining and Associated Activities Application NPDES/SDS Permit Program

Doc Type: Permit Application

Instructions on Page 6

**Purpose:** The National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program regulates stormwater and wastewater discharges to land and surface waters. This application applies to nonmetallic mining and associated operations that have stormwater that comes in contact with pollutants and may also have wastewater from the dewatering of pits and quarries, wash water from washing product or trucks, cooling cutting saws, or other sources.

For more information, please contact Theresa Haugen of the Minnesota Pollution Control Agency (MPCA) at 218-316-3920 or [theresa.haugen@state.mn.us](mailto:theresa.haugen@state.mn.us).

Permittee name: \_\_\_\_\_ Permit number: MN \_\_\_\_\_

### Nonmetallic Mining and Associated Sites by PLS Coordinates

Let this list serve as an inventory of all sites owned or operated at the same facility. Include the activities and the Public Land Survey (PLS) coordinates for each site. Consider this a comprehensive listing of all the sites you want covered under this permit. For all sites listed below, you must complete pages 2-5 of this application. You only need to complete this inventory once.

**Example:** JTs Aggregate owns and operates four pits and quarries throughout southern Minnesota. Three of the pits are construction sand and gravel pits, and one is a limestone quarry with a portable hot mix asphalt plant. The company dewateres from two pits in Fillmore County, but is unable to contain everything on site in one of the pits. The remaining pits are able to contain all stormwater on site. The chart below would be filled out as follows:

Site name, county PLS coordinate (Twp, range, section, Qtr-section)	Station ID (if applicable)	Dewatering			Stormwater				Treatment and disposal			
		Constr. sand/ gravel	Indl. sand	Sub. J2	J1	J2	D1	E2	Dewatering contained on site	Stormwater contained on site	Discharged Dewatering to surface Water	Discharged stormwater to surface water
Sample S&G 1, Mower (TxxxN, RxxW, secxx, SE ¼)					X					X		
Sample S&G 2, Fillmore (TxxxN, RxxW, secxx, NE ¼)		X			X						X	X
Sample S&G 3, Fillmore (TxxxN, RxxW, secxx, NW ¼)		X			X				X	X		
Sample S&G 4, Olmsted (TxxxN, RxxW, secxx, SW ¼)				X		X	X			X		



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# Forms



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Control Agency**

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## Site Inventory Report Form

**NPDES/SDS Permit Program**

Doc Type: Notification

**Directions:** Instead of completing an application to add or delete sites from existing permit coverage, the Minnesota Pollution Control Agency (MPCA) is offering this Site Inventory Report Form to existing Permittees to make these changes easier. For each new site to be covered or for each site that is inactive and you wish to terminate coverage, complete the information below. Make additional copies of this form as needed.

**Submittal:** Submit the completed form to the MPCA at the above address on this form at least 10 days prior to initiation of land disturbing activities at the new site(s). For the 'Special Waters' section, the MPCA has several documents and an interactive map called "Special Waters Search" available electronically on the MPCA website at <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html#specialwaters> to help identify special waters near the proposed site. Listings of calcareous fens (Minn. R. 7050.0180, subp. 6b), trout streams (Minn. R. 6264.0050, subp. 2 and 4) and ORVW's (Minn. R. 7050.0180) can be accessed electronically at <http://www.revisor.leg.state.mn.us>.

Permittee name: \_\_\_\_\_ Permit number: MN \_\_\_\_\_

### Inventory of Nonmetallic Mining and Associated Sites by PLS Coordinates

Let this list serve as an inventory of all sites owned or operated. Include the activities and the Public Land Survey (PLS) coordinates for each site. Consider this a comprehensive listing of all the sites you want covered under this permit. For all sites listed below, you must complete pages 2-5 of this application. You only need to complete this inventory once.

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Sample S&G 1, Mower (TxxxN, RxxW, secxx, SE ¼)					X					X		
Sample S&G 2, Fillmore (TxxxN, RxxW, secxx, NE ¼)		X			X						X	X
Sample S&G 3, Fillmore (TxxxN, RxxW, secxx, NW ¼)		X			X				X	X		
Sample S&G 4, Olmsted (TxxxN, RxxW, secxx, SW ¼)						X	X			X		



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# Forms

## Basic Information

Complete the following for each site:

Site name: \_\_\_\_\_

Facility site street/road address (not P.O. Box): \_\_\_\_\_

City: \_\_\_\_\_ State: MN Zip code: \_\_\_\_\_ Telephone: \_\_\_\_\_

## Activity Information

1. Select the Primary Activity and Secondary Activity (if applicable) at the site:

Subsector J1	Primary	Secondary
Construction sand and gravel mining (Standard Industrial Classification [SIC] Code 1442)	<input type="checkbox"/>	<input type="checkbox"/>
Industrial sand mining (SIC Code 1446)	<input type="checkbox"/>	<input type="checkbox"/>

5. Have you updated your Pollution Prevention Plan for this site? ☐ Yes ☐ No

*You must do so prior to submittal of this form.*

6. List below all chemical additives that are used or proposed to be used at the facility.

*This must include all process reagents, flocculants, biocides, wastewater treatment chemical additives, chlorine or other disinfectants, detergents, cleaning products, chemical dust suppressants, freeze conditioning agents, etc.*

Product name	How often added	Where it is used	Average rate of use (weight or volume/yr)





# What Should I be Doing Now?

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- 2-Months to get prepared
- Review Permit
- Review Inventory Report Form / Application
  - Discharge to ORVW / Trout Waters / Wetlands
  - Discharge to Impaired Water / TMDL
  - Discharge within 2000 ft. of ORVW
- Update the facility SWPPP
- Adding New Sites (future)
  - Complete Site Inventory Report Form
  - Submit at least 10 days prior to operations



# Permit Requirements

- Prepare / Update a SWPPP
  - Assess the sources of pollutants
  - Document all Best Management Practices (BMPs)
    - E – prevent discharge of cement, aggregate, fly ash, etc.
    - E – sweep at least weekly if materials present
  - Employee Training Program
  - SPCC
  - Create a site map (location, surface waters, dewatering points, stormwater runoff, tanks, materials, etc).
- Maintain SWPPP on-site and update annually



# Inspections

Issue	New MNG49	Old MNG49	MSGP
Site Inspections	Monthly While Active	Monthly	Monthly

- Develop and implement an inspection schedule
- Minimum of one inspection per month
- One inspection per year during runoff event
- One inspection per year during snowmelt event
- Record and retain with the SWPPP
- Specific requirements
  - E – Dust Collection Systems



# Monitoring

Issue	New MNG49	Old MNG49	MSGP
Stormwater Sampling	Yes Semi Annual Term of Permit	No	Yes Quarterly (Yr. 2 & 4)

- Starting May 2012
- Twice Each Year (Spring and Fall)
- Locations
- Timing: first 30 min. of measureable runoff event
- No monitoring if no discharge to surface waters



# Monitoring Parameters

Issue	New MNG49	Old MNG49	MSGP
<b>Monitoring Parameters</b> •Mining and Asphalt–D1, J1, J2 TSS •Ready-Mix / Concrete – E2 TSS Iron	<b>Intervention</b>  100 mg/l  100 mg/l 1.0 mg/l	None  None None	<b>Benchmark</b>  100 mg/l  100 mg/l 1.0 mg/l

- Two samples (spring and fall) will be used to determine an annual average concentration
- An exceedance of the intervention limit is not a violation, but you must perform corrective actions



# Monitoring Waiver

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- Stormwater Management Devices
- A professional engineer must design (for new facilities) or verify (for existing facilities) that the stormwater control device and/or the dewatering control device can contain the volume from a 10-year, 24-hour storm event
- Requires MPCA approval
- No monitoring is required
- Effluent Limits still apply



# Effluent Monitoring

- Required for Mine Dewatering to Surface Waters
  - Frequency: Quarterly
  - All sector dewatering activities must monitor for Flow
  - Construction sand and gravel facilities
    - TSS – 30 mg/L daily maximum
    - pH: 6.5-8.5
  - Industrial sand facilities
    - TSS – 25 mg/L monthly average
    - TSS – 45 mg/L daily maximum
    - pH: 6.5-8.5
  - Stone / Quarry facilities
    - TSS – 30 mg/L daily maximum
    - pH: 6.5-8.5



# Process Wastewater

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- Facilities need to take measures to ensure process wastewater is not discharged to surface water and is adequately contained on-site (basin design)





# Reporting

Issue	New MNG49	Old MNG49	MSGP
Monitoring Reports	Required w/ Annual Report (one submittal)	No	Quarterly
Annual Report	Yes (combined w/ DMR) (first due 1/21/13)	Yes	Yes <b>Required by 3/31/12</b>

- If stormwater does not discharge to surface water, no monitoring is required.
- DMRs are still required to be submitted.
- Check “No Flow” on DMR



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# Compliance Notes

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- MPCA Email November 22
  - 349 of 565 Permittees did not submit a required monitoring report.
  - New requirement
  - Forms available on MPCA Web Site
- Facilities missing inspections during precipitation and snow melt events



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