



**Minnesota Pollution
Control Agency**

520 Lafayette Road
St. Paul, MN 55155-4194

Nonmetallic Mining and Associated Activities Compliance Audit Checklist

NPDES/SDS Permit No. MNG490000

Environmental Audits

Doc Type: Self Audit

Purpose: The Minnesota Pollution Control Agency (MPCA) compliance audit checklists are designed to assist businesses and MPCA staff with the interpretation of Minnesota's environmental laws, rules, and permits. Because the laws, rules, and permits are numerous and often complicated, this checklist cannot be a complete guide to all your compliance obligations. If you have questions about the checklist, your obligations, or its conditions that you discover as you complete this evaluation, please contact:

Small Business Environmental Assistance Program (SBEAP)

651-282-6143 or 1-800-657-3938

<http://www.pca.state.mn.us/jsrife5>

Company Information

Company name: _____ Date of audit (mm/dd/yyyy): _____
Authorized representative name: _____ Title: _____

Activity Information

Nonmetallic mine facilities that produce dimension stone, crushed and broken limestone, crushed and broken granite, crushed and broken stone mining and quarrying areas, construction sand and gravel, industrial sand, hot mix asphalt production areas (including portable hot mix asphalt plants), concrete block and brick, other concrete products, and ready mix concrete may be eligible for coverage under National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit No. MNG490000 (Permit MNG49). The following audit is intended to be completed for facilities that conduct any of these activities- it is to be used by facilities that do not have permit coverage and wish to evaluate whether they should have coverage and it is to be used by facilities that do have permit coverage to assess if they are compliant with the permit's requirements. Permit MNG49 can provide coverage of multiple sites under one permit issuance—if you have many sites that potentially need coverage or have coverage under this permit, complete the audit by considering conditions at all sites or complete an audit for each individual site.

1. Is your facility just getting established or expanding, such that one or more acres of land will be disturbed by the start-up or expansion?

- ☐ **Yes** We will be disturbing one or more acres to establish our site or expand it. *You are required to have Permit MNG49 coverage or coverage under the General Stormwater Permit for Construction Activity, NPDES/SDS Permit No. MNR100001 prior to any land disturbing activities.*
- ☐ **No** We will not be disturbing one or more acres to establish our site or expand it.

2. Does stormwater and/or process wastewater discharge from your facility to a fen listed in Minn. R. 7050.0180, subp. 6.b.?

- ☐ **Yes** We discharge stormwater or process wastewater to a fen from our facility. *This type of discharge is not authorized under the Permit MNG49 and should be reported on the compliance table at the end of this form.*
- ☐ **No** We do not discharge stormwater or process wastewater to a fen from our facility.

Note: You can find the location of fens at the "Special Impaired Waters Search" tool found at the MPCA website at <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>.

3. Does stormwater or pit or quarry dewatering (pump-out water) discharge to surface waters (wetlands, streams, lakes, ditches, etc.)?

- ☐ **Yes** We discharge stormwater and/or pit or quarry dewatering to surface waters.
- ☐ **No** We do not discharge stormwater and/or pit or quarry dewatering to surface waters—it infiltrates into the ground and/or is recycled at the facility such that it does not at any time discharge to surface water.

4. Do any of the following types of process wastewater from your facility discharge to surface waters:

- Wash water from construction sand and gravel; industrial sand; dimension stone; crushed and broken limestone; crushed and broken granite; and crushed and broken stone, not elsewhere classified; mining and quarrying areas (Subsector J1 and J2 facilities).
- Dredging operations from Subsector J1 and J2 facilities.
- Installation, construction, and operation of wet scrubbers at hot mix asphalt production areas, also known as asphalt paving mixtures and blocks, including portable hot-mix asphalt plants (Subsector D1).
- Washing trucks, mixers, transport buckets, forms and/or other equipment at concrete block and brick, concrete products other than block and brick, and ready-mix concrete facilities (Subsector E2).
- Uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers.
- Stormwater and deck wash water collected in holding tanks under scales.
- Wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers.
- Waters used for dust control on crushers, conveyors, associated equipment, and site roadways.
- Sand and gravel, industrial sand, or dimension stone pit or quarry dewatering discharge to Minnesota Department of Natural Resources (DNR)-designated trout waters, Prohibited Outstanding Resource Value Waters (ORVW's) or DNR-posted fish-spawning areas?

☐ **Yes** We discharge the above wastewater(s) and/or dewater to designated trout waters, Prohibited ORVW's or DNR-posted fish-spawning areas. *This type of discharge is not authorized under the Permit MNG49 and should be reported on the compliance table at the end of this form.*

☐ **No** We do not discharge the above wastewater(s) to surface waters or dewater to designated trout waters, Prohibited ORVW's or DNR-posted fish-spawning areas.

Note: You can find the location of designated trout streams at the "Special Impaired Waters Search" tool found at the MPCA website at <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>. For ORVWs, the list can be found in Minn. R. 7050.0470 (ORVWs are identified with an asterisk) at <http://www.revisor.leg.state.mn.us/arule/7050/0470.html>.

Water Quality Impaired Waters

Discharges from your facility cannot cause or contribute to water quality impairments in downstream surface waters. You should regularly check the U.S. Environmental Protection Agency (EPA) Approved List of Impaired Waters (using the "Special and Impaired Waters Search" tool referenced above) to identify water quality impairments in downstream receiving waters and take actions to ensure your discharges are not contributing to the impairment. If a Total Maximum Daily Load (TMDL) has been completed for the impaired water, ensure that your Pollution Prevention Plan is revised within 18 months of the TMDL approval date to comply with the Waste Load Allocation in the TMDL.

5. Are downstream surface waters listed as impaired and if so have you taken action to ensure that your discharges are not contributing to the impairment and/or if a TMDL is in effect, your facility's discharge complies with the Waste Load Allocation in the TMDL?

☐ **Yes** Downstream surface waters are impaired and we have taken action to ensure our discharges are not contributing to the impairment; and/or if a TMDL is in effect, we comply with the Waste Load Allocation.

☐ **No** Downstream surface waters are impaired and we have not taken action to ensure our discharges are not contributing to the impairment; and/or if a TMDL is in effect, we have not complied with the Waste Load Allocation. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

☐ **Not applicable** Downstream surface waters are not listed for water quality impairments or we do not discharge a specific pollutant that would contribute to the impairment.

Stormwater Management

Permit MNG49 requires proper management of stormwater, including sediment control on all down-gradient perimeters before any up-gradient land is disturbed as soon as possible or no later than the next runoff event.

6. Are appropriate sediment and erosion control practices in place on all down-gradient perimeters before any up-gradient land disturbing activities begin?

☐ **Yes** We have provided temporary protection or permanent cover to all exposed soil areas that pose a risk of sediment discharge to surface waters within the timeframe required by the Permit MNG49.

☐ **No** We have not provided temporary protection or permanent cover to all exposed soil areas that pose a risk of sediment discharge to surface waters within the timeframe required by the Permit MNG49. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

7. **Is silt fence or other effective sediment control installed around temporary erodable stockpiles or strippings/overburden stored outside the pit or quarry?**
- ☐ **Yes** We have placed silt fence or other sediment control around erodable stockpiles stored outside the pit or quarry.
- ☐ **No** We do not have silt fence or other sediment control around erodable stockpiles stored outside the pit or quarry. *This is a violation of the Permit MNG49 and must be reported on the compliance table at the end of this form.*
- ☐ **Not Applicable** We do not have erodable stockpiles or strippings/overburden stored outside the pit or quarry. *Continue with question (9).*
8. **Are temporary erodable stockpiles or strippings/overburden placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches?**
- ☐ **Yes** We have placed stockpiles in surface waters, including stormwater conveyances. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
- ☐ **No** We do not have stockpiles in surface waters, including stormwater conveyances.
9. **Are Best Management Practices (BMPs) adequately maintained to control sediment, such as repairing, replacing or supplementing silt fences when sediment reaches one-third the height of the fence, removing sediment from sedimentation basins when the depth collected in the basin reaches one-half of the storage volume, or adequately addressing spills and leaks?**
- ☐ **Yes** We have adequately maintained BMPs to control sediment.
- ☐ **No** We have not adequately maintained BMPs to control sediment. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
10. **If you have a Hot Mix Asphalt production area, are you using drip pans and splash guards where spills frequently occur?**
- ☐ **Yes** We are using drip pans and splash guards where spills frequently occur.
- ☐ **No** We are not using drip pans and splash guards where spills frequently occur. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
11. **If you have a Concrete Production operation, do you have adequate BMPs, such as sweeping, to prevent or minimize the discharge of spilled cement, kiln dust, fly ash, or settled dust from paved portions of the facility exposed to stormwater?**
- ☐ **Yes** We have adequate BMPs to control stormwater discharges.
- ☐ **No** We do not have adequate BMPs to control stormwater discharges. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
12. **If stormwater is leaving your site, have you or will you take at least two samples each calendar year for total suspended solids (TSS) and iron (iron only applicable to subsector E2: Concrete block and brick, concrete products other than block and brick, and ready-mix concrete, including portable concrete plants), of the discharged water?**
- ☐ **Yes** We have or will take two samples of stormwater runoff for TSS (and iron, if applicable).
- ☐ **No** We have not sampled stormwater for TSS (and iron, if applicable) as required. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
- ☐ **Not Applicable** Stormwater does not leave our site and/or we have obtained a waiver as described in Section 4.3 of the MNG490000 permit.

The stormwater intervention limits for runoff leaving your site are the following:

- Total Suspended Solids (TSS), 100 mg/L, calendar year average.
- Iron, 1.0 mg/L, calendar year average (applicable to Subsector E2).

13. **If you have taken a sample(s) of stormwater runoff, do the results meet the intervention limits?**

- ☐ **Yes** We have monitored our stormwater and results of TSS (and iron, if applicable) meet intervention limits.
- ☐ **No** We have monitored our stormwater and results of TSS (and iron, if applicable) do not meet intervention limits. *This is not a violation of the Permit MNG49; however, you are required to perform any necessary corrective action(s) to address stormwater control measures, including the maintenance of implementation of BMPs, when an exceedance of an applicable intervention limits occurs. Failure to respond to an intervention limit exceedance is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
- ☐ **Not Applicable** We have not yet monitored our stormwater.

If your facility is not located within 2,000 feet of an ORVW, trout water or trout stream, continue with question 15.

Stormwater discharging within 2,000 feet of an ORVW must meet the following requirements:

- An undisturbed buffer zone of not less than 100 linear feet from the receiving water (not including tributaries) shall be maintained at all times, with exceptions for water crossings or limited water access that are adequately documented.
- All exposed soil areas with a slope of 3:1 or steeper, that have a continuous positive slope to a ORVW or trout water must have temporary erosion protection or permanent cover within three days after the area is no longer being actively worked. All other continuous positive slopes to ORVWs or trout water must have erosion protection within seven days after the area is no longer actively worked.
- Temporary sediment basins must be used for common drainage locations that serve an area with five or more acres disturbed at one time.
- For any new impervious surfaces created, a water management system must treat one inch of runoff.

Stormwater discharging within 2,000 feet of an ORVW and/or trout water as listed in Minn. R. 6264.0050, subp. 2 and 4 must meet the following requirements:

- The stormwater management system must be designed such that the pre- and post-project runoff rate and volume from the 1 and 2-year, 24-hour storm events remains the same.

Stormwater discharges within 2,000 feet of trout streams must minimize temperature impacts using one or more of the following controls:

- Minimize impervious surfaces.
- Minimize discharges from impervious surfaces by discharging to vegetated areas, grass swales or other non-structural controls.
- Infiltrate or evapotranspire stormwater in excess of pre-project conditions (up to the 2-year, 24-hour storm event).
- Stormwater ponds must incorporate temperature mitigation methods such as shading, filtered bottom withdrawal, or constructed wetland treatment cells and draw down within 24 hours or less.

14. Does stormwater from your site which discharges within 2,000 feet of ORVWs, trout waters and/or trout streams meet the above additional requirements?

- ☐ **Yes** We implement measures to address the additional requirements for discharges to ORVWs, trout waters and/or trout streams.
- ☐ **No** We do not implement measures to address the additional requirements for discharges to ORVWs, trout waters and/or trout streams. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

Wastewater Management

If your facility does not have a hot mix asphalt plant with a wet scrubber for air emission control, continue with question 17.

Wet scrubber wastewater management

Scrubber wastewater is to be contained within pipes, aboveground tanks or impoundments. Impoundments are to be designed by a registered engineer and are to be operated to ensure that the leakage rate does not exceed 500 gallons/acre/day. A water balance and inspection shall be conducted on each impoundment at least once each operating year. Pipes and aboveground tanks are to be operated and maintained to prevent leaks.

15. Do you manage your scrubber wastewater containment to meet the above Permit MNG49 requirements to ensure adequate containment of wastewater?

- ☐ **Yes** We utilize containment structures, and operate and inspect them to meet the above Permit MNG49 requirements.
- ☐ **No** We do not utilize adequate containment structures or operate and/or inspect them to meet the above Permit MNG49 requirements. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

Wet scrubber wastewater disposal

Scrubber wastewater may be used for roadbed preparation or dust control on unpaved roads if the asphalt plant is in the process of relocating, has ceased operation for the year, or if alterations to the impoundment are needed. Wastewater shall be applied in such a manner as to prevent runoff or prolonged ponding and shall not discharge to surface waters.

16. Do you dispose of your scrubber wastewater in such a manner that it meets the above permit requirements?

- ☐ **Yes** We dispose of scrubber wastewater in such a manner as to meet the above Permit MNG49 requirements.
- ☐ **No** We do not dispose of scrubber wastewater in such a manner as to meet the above Permit MNG49 requirements. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
- ☐ **Not Applicable** We have not disposed of scrubber wastewater at this site.

If your facility does not have a Concrete Production operation, continue with question 18.

At Concrete Production facilities, washing trucks, mixers, transport buckets, forms or other equipment is allowed if discharges are adequately contained on-site and do not contaminate groundwater. Process wastewater from these activities may not discharge to surface water. Containment basins must be designed and constructed to allow for infiltration, with maximum separation from groundwater, and a capacity to contain wastewater and stormwater resulting from a 10-year, 24-hour storm event.

17. Have you taken measures to insure process wastewater is not discharged to surface water and is adequately contained on-site? Are the containment basins designed for proper containment and control of wastewater and stormwater (if applicable)?

- ☐ **Yes** We have adequately addressed and are correctly collecting and discharging process wastewater.
- ☐ **No** We have not adequately addressed process wastewater and/or are not correctly collecting and discharging process wastewater. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

If your facility does not have dewater from sand and gravel, industrial sand, and/or dimension stone sites, continue with question 20.

18. If you operate a sand and gravel pit/dimension stone/crushed and broken stone quarry in which pit water is pumped out and discharges to surface waters, have you or will you conduct daily flow monitoring and take at least one sample quarterly for pH and total suspended solids (TSS) of the discharged water?

- ☐ **Yes** We have or will conduct flow monitoring and take a sample of pump-out water for pH and TSS.
- ☐ **No** We have not conducted flow monitoring or sampling of pump-out water for pH and TSS as required. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form. (Continue with question 20).*
- ☐ **Not Applicable** We do not pump water from our site or we do not operate a sand and gravel pit/dimension stone/crushed and broken stone quarry. *(Continue with question 20).*

The effluent limits for water that is pumped from a sand and gravel pit/dimension stone/crushed and broken stone quarry pit are the following:

- pH must be within a range of 6.5 to 8.5 standard units.
- TSS:
 - 1) Dewatering from Construction Sand and Gravel (SIC code 1442)
 - a) Total Suspended Solids (TSS), 30 mg/L, Daily Maximum, one time per quarter
 - 2) Dewatering from Industrial Sand Mining (SIC code 1446)
 - a) TSS, 45 mg/L, Daily Maximum, one time per quarter
 - b) TSS, 25 mg/L, Calendar Quarter Average, one time per quarter
 - 3) Dewatering from Subsector J2 facilities (SIC code 1411, 1422, 1423, 1429)
 - a) TSS, 30 mg/L, Daily Maximum, one time per quarter

19. If you have taken a sample of pit pump-out water, do the results meet effluent limits?

- ☐ **Yes** We have monitored our pump-out water and results of TSS and pH monitoring meet effluent limits.
- ☐ **No** We have monitored our pump-out water and results of TSS and/or pH monitoring do not meet effluent limits. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*
- ☐ **Not Applicable** We have not yet monitored our pit pump-out water.

Pollution Prevention Plan

A Pollution Prevention Plan (Plan) must be prepared for each site. The Plan must describe appropriate BMPs to reduce or eliminate water pollution at the site. The Plan shall include a site map that identifies the facility's location, nearby surface waters, pit-dewatering points, directions of stormwater runoff from the site and the name of surface water that receives any discharge from the facility. The Plan shall also include a list of potential pollution sources at the site, such as fuel storage tanks, materials storage, vehicle/equipment maintenance areas. Finally, the Plan must specify BMPs that are used to minimize or eliminate pollution at the site.

20. Have you prepared and implemented a Plan for your facility?

- ☐ **Yes** We have prepared and implemented a Plan for our facility.
- ☐ **No** We have not prepared and implemented a Plan for our facility. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

21. Do you inspect the facility at least monthly during active operations to ensure the Plan is followed?

- ☐ **Yes** We do inspect the facility at least once a month to ensure the Plan is followed.
- ☐ **No** We do not inspect the facility at least once a month to ensure the Plan is followed. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

22. Do you submit a Discharge Monitoring Report (DMR) by January 21 of each year for stormwater and/or 21 days after the end of each calendar quarter for dewatering following permit issuance?

- ☐ **Yes** We do submit a DMR by January 21 of each year for stormwater and/or 21 days after the end of each calendar quarter for dewatering.
- ☐ **No** We did not/have not submitted a DMR by January 21 of each year year for stormwater and/or 21 days after the end of each calendar quarter for dewatering. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

If you are not currently working at a site, or you are closing your facility and no longer want coverage for your facility under the Permit MNG49, continue with question 23, otherwise this is the conclusion of the audit.

Temporarily Inactive Sites

A temporary Inactive site is one where nonmetallic mining and/or associated activities have occurred in the past but currently are not actively being undertaken. You want to maintain coverage for the possibility of activities being conducted in the foreseeable future. All stormwater BMPs must be permanent and in place if the site is to temporarily inactive. You are not required to sample stormwater if the site is temporarily inactive, but you must submit a DMR with this information. Sampling must be conducted when the site becomes active.

23. Have you ensured that permanent BMPs are in place for the site to be considered Temporarily Inactive?

- ☐ **Yes** We have met the BMP requirements for the site to be considered Temporarily Inactive.
- ☐ **No** We have not met the BMP requirements for the site to be considered Temporarily Inactive. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

Final Stabilization and Closure

In order to be released from the inspection, recording and reporting requirements of the Permit MNG49 for a site where you no longer conduct operations the Permittee is to certify that:

- There is no stormwater runoff and/or pit/quarry dewatering or other process wastewater discharging from the site.
- A new owner or operator has assumed responsibility for the site.
- The site achieves final stabilization—drainage ways that leave the site are stabilized to prevent erosion, disturbed soil areas are stabilized with uniform perennial vegetative cover with a density of at least 70 percent over all pervious areas; temporary BMPs are removed, all sediment from basins are removed in order to sufficiently return the basin to design capacity, sediment must be stabilized to prevent it from washing back into the basin, and other BMPs must be implemented to prevent erosion for excavated areas and stockpiles.

24. Have you ensured that there is either no runoff, or another owner or operator has assumed responsibility, or the site is stabilized, for all sites that you no longer wish to have covered by the Permit MNG49?

- ☐ **Yes** We have met the termination requirements for those sites we no longer want covered by the Permit MNG49.
- ☐ **No** We have not met the termination requirements for those sites we no longer want covered by the Permit MNG49. *This is a violation of the Permit MNG49 and should be reported on the compliance table at the end of this form.*

Compliance Table

For each item that you indicated was a violation, summarize the violation below and how it will be corrected.

Question #	Description of the violation	Corrective actions to be taken to address the violation