

Ohio Environmental Protection Agency

Fact Sheet for

National Pollutant Discharge Elimination System (NPDES)

General Permit for Storm Water Discharges Associated with Industrial Activity

“Multi-Sector General Permit”

**I. Background**

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act (CWA)) was enacted. It provides that the discharge of pollutants to waters of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p) which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES program. On November 16, 1990 and on December 8, 1999, EPA published final regulations that establish requirements as to which storm water dischargers are required to obtain NPDES permits. Ohio, being a delegated NPDES State, is required to administer the storm water regulations.

Ohio EPA initially issued a general permit for storm water discharges associated with industrial activity (referred to as the industrial general permit) on October 26, 1992. That general permit expired on April 26, 1994. This fact sheet addresses the fourth renewal of the industrial general permit (Permit No. OHR000005).

Ohio EPA's current and previous generation industrial general permits have been based mostly upon USEPA's 1992 baseline industrial general permit. As a result, these general permits contained very broad, non-industry specific permit requirements. With this general permit renewal, Ohio EPA decided to mirror USEPA's current Multi-Sector General Permit (MSGP) for the following reasons:

- Consistency. Most States currently use the federal MSGP for their industrial storm water general permit. The federal MSGP has been in existence for 15 years so Ohio is behind in this effort;
- More Effective Requirements. The federal MSGP provides more prescriptive requirements based on each industrial sector. This provides facilities with an easier means of identifying Storm Water Pollution Prevention Plan (SWP3) requirements, reducing permittee confusion, and resulting in more effective best management practices (BMPs); and
- Existing Federal Guidance. USEPA has developed, and included on their website, useful guidance and factsheets for each industrial sector.

## II. Description of General Permit Coverage and Type of Discharges

This general permit covers new and existing point source discharges of storm water associated with industrial activity to surface waters of the state. Unlike OHR000004, this permit will allow renewal coverage for mining and quarrying of non metallic minerals (SIC code 14xx). This permit does not cover the following:

- Storm water discharges currently addressed by an individual NPDES permit
- Storm water discharges associated with construction activity
- Storm water discharges that the Director of Ohio EPA has determined to be contributing to a violation of a water quality standard
- Storm water discharges from petroleum bulk stations and terminals (SIC code 5171)
- Storm water discharges from marinas (SIC code 4493)
- Active landfills

Discharges to the surface water categories Superior High Quality Waters, Outstanding State Waters, and Outstanding National Resource Waters, excluding Lake Erie, must have had continuous general permit coverage for storm water associated with industrial activity since February 10, 1996 in order to be eligible for coverage under OHR000005. These restrictions are the result of Ohio Administrative Code 3745-1-05, Antidegradation Rule.

Facilities with industrial storm water discharges not eligible for coverage under this renewal permit will have to apply for an individual NPDES permit or seek coverage under an alternative storm water general permit that does apply.

## III. Application and Termination Procedures

Notice of Intent: To obtain industrial general permit coverage, each discharger submits a Notice of Intent (NOI) application form. A discharge covered by a general permit does not need to be authorized by an individual NPDES permit. The NOI requirements of the draft general permit are intended to establish a mechanism that provides a clear accounting of the number of entities covered by the permit, the nature of operations at the facility generating the discharge, and their identities and locations.

Dischargers in Ohio that are required by federal regulations to obtain a permit for storm water associated with industrial activity, unless exempted from eligibility, can be regulated by the industrial general permit. To obtain or continue coverage, a discharger needs to complete and submit the Notice of Intent (NOI) application form that will be available from Ohio EPA along with the appropriate fee to the following address:

Ohio Environmental Protection Agency  
Office of Fiscal Administration  
P.O. Box 1049  
Columbus, Ohio 43216-1049

Coverage will commence when written approval of coverage is received from the Director authorizing the discharge in accordance with the requirements of OHR000005.

Entities that had coverage under general permit number OHR000004 and intend to continue coverage for a storm water discharge associated with industrial activity under the renewed general permit, shall submit a new NOI application form within 90 days of the date of Ohio EPA's written instructions to re-notify. New facilities that plan to initiate a storm water discharge are required to submit an NOI application form 180 days prior to commencing discharge.

Industrial storm water dischargers required to obtain permit authorization to discharge who fail to obtain coverage under this general permit, or are not otherwise covered by an NPDES permit for storm water discharges associated with industrial activity, will be in violation of ORC Chapter 6111.

Permit Expiration: The general permit renewal will expire five years after the effective date.

Notice of Termination: Each individual site covered under the general permit must submit a Notice of Termination (NOT) form to terminate coverage under this permit. Once discharges associated with regulated industrial activity covered by this permit are eliminated, the permittee must submit an NOT. Failure to submit an NOT form constitutes a violation of the permit.

#### **IV. Description of Permit Conditions**

As indicated above, this draft general permit will mostly mirror USEPA's current MSGP. The draft general permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWP3). The purpose of implementing an SWP3 is to minimize or eliminate the potential for contamination of storm water by industrial activities. The MSGP's framework consists of general requirements and SWP3 conditions applicable to all regulated facilities (Parts 1-5 of draft permit) and, in addition, sector specific requirements depending on the type of industry (Part 8 of draft permit). Part 6 of the permit includes monitoring procedures for facilities subject to quarterly benchmark and/or annual effluent limitation guideline monitoring requirements. Part 7 is applicable to all facilities and includes the Reporting and Recordkeeping requirements.

Facilities should look at Appendix D of the draft general permit to determine which sector(s) requirements (Part 8) apply to their operations. Appendix D

identifies the sectors of industrial activity, by Standard Industrial Classification (SIC) Codes and Industrial Activity Codes, to determine a facility's sector. A complete list of SIC Codes (and conversions from the newer North American Industry Classification System (NAICS)) can be obtained from the Internet at [www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html) or in paper form from various locations in the document titled Handbook of Standard Industrial Classifications, Office of Management and Budget, 1987.

USEPA's MSGP guidance is relevant to this general permit renewal. Interested parties should review the following USEPA federal MSGP documents:

- Federal 2008 MSGP (this may not be as useful as the rest)
- Federal MSGP Fact Sheet
- Industrial Sector Fact Sheets
- Industrial SWP3 Guidance
- Sample SWP3 Template
- Sample Recordkeeping Templates
- Industrial Storm Water Monitoring and Sampling Guide
- Annual Reporting Form

The above documents can be viewed on the Internet at <http://cfpub.epa.gov/npdes/stormwater/msgp.cfm>.

Ohio EPA's intent is to be consistent with the federal MSGP and only alter conditions/language if warranted for Ohio. As such, the following identifies noteworthy changes in comparison to the federal MSGP:

- Excluding Certain Industries from Coverage. OHR000005 would exclude marinas (SIC code 4493), petroleum bulk terminals (SIC code 5171) and coal surface mining (SIC code 1221) from coverage. Ohio EPA currently has specific general permits for these facilities.
- Metal Mining (SIC Code 10xx) & Sand and Gravel Facilities (SIC code 14xx). Our current effective industrial storm water general permit excludes coverage for metal mining and sand and gravel mining operations. As such, Ohio EPA currently issues individual NPDES permits for these facilities. The federal MSGP allows coverage for these facilities. This general permit would potentially allow coverage for these facilities when renewing coverage; but not for initial coverage. Initial authorization to discharge would continue through the use of individual NPDES permits.
- Landfills. NPDES industrial storm water regulations are applicable to any active or closed landfill, land application site and open dump that receive, or have received, manufacturing wastes from industrial facilities subject to NPDES industrial storm water regulations. The federal MSGP allows coverage for these facilities. This general permit is applicable to the same

facilities but will only allow coverage to closed facilities. Active landfills, land application sites and open dumps that are subject to industrial storm water regulations will be addressed through individual NPDES permits. This is consistent with Ohio's current industrial storm water general permitting.

- Monitoring Requirements. Consistent with the federal MSGP, OHR000005 will contain Numeric Effluent Limitations Based on Effluent Limitations Guidelines for Sectors A, C, D, E, J and O. In comparison to the federal MSGP, OHR000005 does not include the State or Tribal Provisions monitoring requirements nor the Discharges to Impaired Waters monitoring requirements.

The federal MSGP requires benchmark monitoring, specific for each industrial sector, for pollutant parameters which USEPA has determined to be of concern by industrial sector. Likewise, this general permit would require that nineteen (19) of the twenty-nine (29) industrial sectors perform benchmark analytical monitoring. The benchmark monitoring requirements are not effluent limitations. Benchmark values represent a level to determine whether a facility's SWP3 is successful.

The benchmark monitoring is based on a collection of 4 quarterly samples. If the average of the 4 monitoring values for any parameter does not exceed the benchmark value, the permittee has fulfilled their monitoring requirements for that parameter for the permit term. If this average exceeds the benchmark for a parameter, then the permittee will need to review their SWP3 and control measures and modify accordingly. Additional monitoring would be required.

The federal MSGP's primary source of benchmark concentrations is derived from EPA's National Water Quality Criteria. For a majority of the benchmarks, USEPA used the acute aquatic life, fresh water ambient water quality criteria. USEPA believes these acute freshwater values best represent the highest concentrations at which typical fresh water species can survive exposures of pollutants for short durations (e.g., a storm discharge event). As such, the process USEPA followed in selecting benchmark values is as follows:

- First, if there is a USEPA promulgated acute criterion then USEPA selected that value for the benchmark;
- If there is no USEPA acute criterion, then USEPA selected the chronic criterion as the benchmark value;
- Finally, in the remaining instances where there are neither USEPA acute or chronic criteria available for a specific pollutant, then USEPA selected the benchmark value based on data from runoff studies or technology based standards.

Ohio EPA evaluated each benchmark monitoring parameter and followed USEPA's rationale noted above but used Ohio Water Quality Criteria when available. As such, some federal benchmark values have been changed to be consistent with Ohio Water Quality Criteria. Tables 1 and 2 identify all parameters associated with benchmark monitoring for all industrial sectors. These tables compare the federal MSGP's benchmark values to Ohio's draft general permit benchmark values. The benchmark values of some metals are dependent on water hardness. For these parameters, permittees will need to determine the hardness of the receiving water (see Appendix J of the draft general permit). Parameter benchmarks that are dependent upon water hardness are included in Table 2.

**TABLE 1**

Parameter	Federal MSGP		Ohio MSGP	
	Benchmark	Criteria	Benchmark	Criteria
Aluminum (T)	0.75 mg/L	Acute Aquatic Life	0.75 mg/L	Federal Acute Aquatic Life
Ammonia <sup>1</sup>	2.14 mg/L	Acute Aquatic Life	3.1 mg/L	Ohio Acute Aquatic Life
Antimony (T)	0.64 mg/L	Chronic Human Health	0.90 mg/L	Ohio Acute Aquatic Life
Arsenic (T)	0.15 mg/L	Chronic Aquatic Life	0.34 mg/L	Ohio Acute Aquatic Life
Beryllium (T)	0.13 mg/L	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life
Biochemical Oxygen Demand (5 day)	30 mg/L	Secondary Treatment Regulations (40 CFR 133)	30 mg/L	Federal Benchmark Value
Cadmium (T)	See Table 2	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life
Chemical Oxygen Demand	120 mg/L	Factor of 4 times BOD5 concentration - North Carolina Benchmark	120 mg/L	Federal Benchmark Value
Copper (T)	See Table 2	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life
Cyanide	0.022 mg/L	Acute Aquatic Life	0.022 mg/L	Ohio Acute Aquatic Life
Iron (T)	1.0 mg/L	Chronic Aquatic Life	N/A	Ohio does not include the USEPA 1.0 mg/L Iron criterion in our Water Quality Standards because only a portion of total Iron in Ohio waters is biologically available and therefore toxic. Ohio's biological program has shown that healthy aquatic communities occur in Ohio waters with total Iron concentrations above 1.0 mg/L. Therefore, the Ohio MSGP does not include Iron as a benchmark parameter.
Lead (T)	See Table 2	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life
Magnesium (T)	0.064 mg/L	Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18	0.064 mg/L	Federal Benchmark Value
Mercury (T)	0.0014 mg/L	Acute Aquatic Life	0.0017 mg/L	Ohio Acute Aquatic Life

**TABLE 1**

Parameter	Federal MSGP		Ohio MSGP	
	Benchmark	Criteria	Benchmark	Criteria
Nickel (T)	See Table 2	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life
Nitrate + Nitrite Nitrogen	0.68 mg/L	NURP median concentration	0.68 mg/L	Federal Benchmark Value
pH	6.0 - 9.0 s.u.	Secondary Treatment Regulations (40 CFR 133)	6.5 - 9.0	Ohio Chronic Aquatic Life
Selenium (T)	0.005 mg/L	Chronic Aquatic Life	0.005 mg/L	Ohio Chronic Aquatic Life
Silver (T)	See Table 2	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life
Total Phosphorus	2.0 mg/L	North Carolina stormwater Benchmark derived from NC WQ Standards. This concentration value was designed to prevent eutrophication.	1.0 mg/L	Ohio Chronic Aesthetic. Ohio's concentration value to prevent eutrophication.
Total Suspended Solids	100 mg/L	NURP median concentration	100 mg/L	Federal Benchmark Value
Turbidity	50 NTU	Research/DMR Data	50 NTU	Federal Benchmark Value
Zinc (T)	See Table 2	Acute Aquatic Life	See Table 2	Ohio Acute Aquatic Life

<sup>1</sup> Aquatic life criteria for ammonia are based on a temperature of ≤ 20°C and pH of ≤ 8.5.

**TABLE 2<sup>1</sup>**

Water Hardness Range	Benchmark Parameters Dependent on Water Hardness - Ohio MSGP Compared to Federal MSGP													
	Beryllium (T) <sup>2</sup> (mg/L)		Cadmium (T) (mg/L)		Copper (T) (mg/L)		Lead (T) (mg/L)		Nickel (T) (mg/L)		Silver (T) (mg/L)		Zinc (T) (mg/L)	
	Federal	Ohio	Federal	Ohio	Federal	Ohio	Federal	Ohio	Federal	Ohio	Federal	Ohio	Federal	Ohio
0-25 mg/L	0.13	0.01	0.0005	0.0009	0.0038	0.0038	0.014	0.021	0.15	0.15	0.0007	0.0001	0.04	0.04
25-50 mg/L	0.13	0.02	0.0008	0.0015	0.0056	0.0056	0.023	0.035	0.20	0.20	0.0007	0.0003	0.05	0.05
50-75 mg/L	0.13	0.04	0.0013	0.0027	0.0090	0.0090	0.045	0.067	0.32	0.32	0.0017	0.0007	0.08	0.08
75-100 mg/L	0.13	0.08	0.0018	0.0039	0.0123	0.0123	0.069	0.103	0.42	0.42	0.0030	0.0013	0.11	0.11
100-125 mg/L	0.13	0.11	0.0023	0.0052	0.0156	0.0156	0.095	0.142	0.52	0.52	0.0046	0.0020	0.13	0.13
125-150 mg/L	0.13	0.16	0.0029	0.0065	0.0189	0.0189	0.122	0.184	0.61	0.61	0.0065	0.0028	0.16	0.16
150-175 mg/L	0.13	0.20	0.0034	0.0078	0.0221	0.0221	0.151	0.227	0.71	0.71	0.0087	0.0037	0.18	0.18
175-200 mg/L	0.13	0.26	0.0039	0.0092	0.0253	0.0253	0.182	0.272	0.80	0.80	0.0112	0.0047	0.20	0.20
200-225 mg/L	0.13	0.31	0.0045	0.0106	0.0285	0.0285	0.213	0.320	0.89	0.89	0.0138	0.0058	0.23	0.23
225-250 mg/L	0.13	0.38	0.0050	0.0120	0.0316	0.0316	0.246	0.368	0.98	0.98	0.0168	0.0071	0.25	0.25
250+ mg/L	0.13	0.41	0.0053	0.0127	0.0332	0.0332	0.262	0.393	1.02	1.02	0.0183	0.0077	0.26	0.26

<sup>1</sup> Ohio EPA tiered the hardness dependent criteria consistent with USEPA's MSGP. When calculating the hardness dependent values for each parameter, Ohio's statewide acute water quality criteria for the protection of aquatic life for hardness dependent parameters were used. The outside mixing zone maximum (OMZM) for the total recoverable form was used for each parameter.

<sup>2</sup> USEPA does not have hardness dependent criteria for Beryllium, but Ohio EPA does; therefore, Beryllium is included as a water hardness dependent parameter.

All monitoring data collected for Effluent Limitations monitoring and for Benchmark monitoring shall be submitted to Ohio EPA using Ohio EPA's online electronic discharge monitoring report (eDMR) system on the Internet at <https://ebiz.epa.ohio.gov/login.jsp>. This data will need to be submitted no later than 30 days after you have received your complete laboratory results. For benchmark parameters that are satisfied, you will need to continue reporting that the benchmark parameter has been satisfied within 30 days after each monitoring period. If you cannot access eDMR, paper reporting forms shall be submitted by the same deadline to the appropriate address identified in Part 7.6.1 of the draft general permit. Effluent Limitations Exceedance Reports shall be submitted in hard copy form to the address identified in Part 7.6.1. For additional eDMR information, visit the following Ohio EPA website: <http://epa.ohio.gov/dsw/edmr/eDMR.aspx>.

- Non-Metallic Mineral Mining and Dressing (Sector J). In addition to the federal MSGP requirements, this draft permit contains a condition (Part 8.J.5.2.4) that requires, before termination of permit coverage, reclamation of floodplain areas that are diked off during construction and operation of sand and gravel mining operations.

Before placement of these levees or dikes, these areas provide significant sediment and associated pollutant removal during high flows. We

estimate that as much as 50% of the sediments are carried during higher than bankfull events causing floodplains to serve as sinks for fine sediments and accumulating many tons of sediment from a watershed. Leaving an area with the entire embankment has the same problems associated with entrenched streams; that is, passing pollutants and higher stage of floodwater downstream as well as increased potential of channel instability. Adding this condition to reinstate the pre-existing ecological services is justified since these areas are sediment sinks for pollution. But as mining operations cease, this has been largely left unaddressed until recently. To date, Ohio EPA, in coordination with the Ohio Department of Natural Resources, has worked with three sites around central Ohio that have applied measures for this purpose.

- Sections Titled “Reserved”. Throughout the permit you will notice sections of the permit that are listed as “Reserved.” In order to maintain the federal MSGP’s numbering system, Ohio EPA simply labeled sections of the permit that are not applicable to Ohio as “Reserved.” The purpose of retaining the federal numbering is to make comparing the two permits easier for everyone reviewing Ohio EPA’s.

The draft general permit and associated documents can be viewed on the Internet at: <http://epa.ohio.gov/dsw/storm/index.aspx>.

**V. Procedures for the Formulation of Final Determinations**

This general permit shall be issued as a final action unless the director revises the draft after consideration of the record of a public hearing or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Interested persons are invited to submit written comments upon the general permit. Comments should be submitted in person or by mail no later than 45 days after the date of the Public Notice. Deliver or mail all comments to the following address:

Ohio Environmental Protection Agency  
Division of Surface Water - Permits Processing Unit  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

The NPDES permit number (OHR000005) should appear next to the above address on the envelope and on each page of any submitted comments. All comments received no later than 45 days after the date of the Public Notice will be considered.

**VI. Additional Information**

For additional information regarding this draft general permit, please contact one of the following:

**Michael Joseph**  
(614) 752-0782  
michael.joseph@epa.state.oh.us

**Jason Fyffe**  
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