

**Ohio Environmental Protection Agency (Ohio EPA)
National Pollutant Discharge Elimination System (NPDES) Fact Sheet for
General Permit for Discharges Associated with Coal Surface Affectment Activities with No
Reasonable Potential for TDS**

I. Purpose of Fact Sheet

This fact sheet includes the following information about Ohio EPA's new coal mining-related surface activities general permit (OHM000004):

- Background information;
- Description of discharges authorized under this general permit;
- Application procedures and overview of the general permit requirements;
- Comparison of OHM000004 to Ohio EPA's previous general permit (OHM000003); and
- Procedures for Participation in the Formulation of Final Determinations.

II. Background

The Federal Water Pollution Control Act [also referred to as the Clean Water Act (CWA)] and Ohio Revised Code (ORC) Chapter 6111 provide that the discharge of pollutants to waters of the state from any point source is unlawful, unless the discharge is in compliance with an effective NPDES permit.

The purpose of issuing NPDES permits for coal mining-related activities on the surface of lands is to ensure that any wastewater discharges from these activities are in compliance with all applicable state and federal water pollution control laws.

Most of the discharges generated from coal mining-related activities on the surface of lands are stormwater-related. Other wastewaters generated include controlled surface mine drainage (such as pumping water from a coal pit) and non-controlled surface mine drainage (such as steep slope removal areas).

III. Description of Authorized Discharges

The permit covers discharges from most activities conducted on the surface of lands in connection with a coal mine, including removal of coal from coal refuse piles, development of coal refuse disposal sites prior to the placement of any coal refuse, surface mining impacts from surface mines and surface mining impacts associated with preparation of an underground coal mine.

Discharges not previously authorized by OHM000001 through OHM000003, discharges to Outstanding National Resources Waters, Superior High Quality Waters, and Outstanding State Waters, and discharges upstream of Outstanding National Resources Waters, Superior High Quality Waters, and Outstanding State Waters (unless it can be demonstrated there will not be an adverse impact on water quality) are also not authorized under this general permit.

This permit does not provide coverage for impacting streams and wetlands with fill activities. The permit specifies buffer zones for streams, springs, and wetlands pending approval of an Ohio EPA water quality certification or permit, or permit authorization from the United States Army Corps of Engineers. This permit does not cover mining operations with discharges that may have the reasonable potential to discharge high TDS water greater than the Ohio water quality standard for chronic TDS.

Dischargers not eligible for coverage under this permit may still obtain an individual NPDES permit by submitting a complete individual permit application (Form 1, Form 2D or 2E, and an Antidegradation Addendum).

IV. Application Procedures and General Permit Requirements

New Facilities Seeking Coverage

Notice of Intent - Facilities must submit a Notice of Intent (NOI) application to apply for coverage under the general permit. State and federal regulations exclude facilities covered by general permits from requirements to submit an application for an individual permit [OAC 3745-38-02 and 40 CFR 122.21 (a), respectively].

NOI requirements are intended to establish a mechanism that can be used to establish a clear accounting of the number of facilities covered by the general permit, their identities, locations, mailing addresses, and the nature and amount of discharge.

To apply for general permit coverage, all applicants will be required to complete and submit an NOI application form that is available from Ohio EPA, a map of the coal mining site that details the discharge locations and discharge site coordinates, at least 6 sample results for TDS or specific conductance from a similar discharge for the proposed outfall and an application fee of \$200. The NOI application form and appropriate fees shall be submitted to the following address:

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

A copy of the NOI should also be sent to the Central Office of the Ohio EPA.

Facilities who intend to obtain coverage under the general permit shall submit an NOI form within 45 days of the proposed date of discharge. Dischargers who fail to obtain coverage under the general permit and are not otherwise covered by an NPDES permit are in violation of Ohio Revised Code (ORC) 6111.

Facilities with Coverage under OHM000003

Ohio EPA will notify existing facilities in writing with instructions on how to renew coverage. Existing facilities must submit a new NOI application form within 90 days of the date on the Ohio EPA's written instructions to renew coverage.

Basic Requirements of OHM000004

OHM000004 mostly mirrors the previous Ohio EPA permit OHM000003.

- Part I – “Coverage under this permit.” This section details geographical coverage and eligibility requirements.
- Part II – “Notice of Intent Requirements.” This section explains the procedures for application, modification of an existing permit, and terminating a permit.
- Part III.A – “Final Effluent Limitations and Monitoring Requirements.” This section contains several tables detailing effluent limits and monitoring requirements.
- Part III.B – “Special Effluent Limitations and Monitoring Conditions.” This section provides details on sampling requirements and when the alternative tables in Part III.A may be used.
- Part IV – “Stormwater Pollution Prevention Plans.” This section provides information regarding stormwater pollution prevention.
- Part V – “Standard Permit Conditions.” This section lists other permit conditions that are standard for an NPDES permit.
- Part VI – “Definitions.” This section provides definitions of the terms used in the permit.

V. Comparison of OHM000004 to OHM000003

Part I:

1. *Inclusion of New Authorized Discharges*

Coal mining activities are jointly regulated by Ohio EPA and the Ohio Department of Natural Resources – Division of Mineral Resources Management (ODNR-DMRM). In order to streamline and clarify the regulatory process, Ohio EPA collaborated with ODNR-DMRM to ensure the renewed permit (OHM000004) utilized accurate terminology to describe coal mining activities. The previous permit (OHM000003) authorized discharges associated with “coal surface mining activities.” This description is not accurate, and there are many coal mining activities that take place on the surface of lands that discharge wastewaters and stormwater. The new authorized discharges include all coal mining-related activities that disturb the natural land surface (with the exception of surface mines using anhydrous ammonia or mines that would discharge within 500 yards upstream of a water supply plant intake). The terminology utilized in OHM000004 is consistent with ODNR-DMRM terminology and ensures discharges from coal mining-related activities on the land surface will be regulated in accordance with the CWA.

2. *Stream and Wetland Impact Prohibition*

No language was included in OHM000003 regarding impacting stream and wetlands with fill activities on coal surface mining sites. Stream and wetland impacts from fill activities are addressed in the federal CWA Sections 401 and 404. NPDES permits are addressed in CWA Section 402. The requirements for obtaining an NPDES permit do not authorize coverage for a 401/404 permit. Since this was not made clear in the language of OHM000003, there has been some confusion in the permitting process both for the NPDES permit and 401/404 permits. This prohibition has been added to OHM000004 to eliminate this confusion and clarify the permitting process. Conveyance from permanent treatment practices are allowed so long as such conveyances minimize the width of disturbance within the buffer zone.

3. *Construction Stormwater Activities Authorization*

Ohio EPA has a general permit that covers stormwater discharges caused by construction activities (OHC000004) which covers runoff from constructing haul roads and parking lots. These are activities that may take place prior to active coal surface mining activities. OHM000003 was intended to cover stormwater discharges resulting from construction activities on coal surface mining sites, but this was not made clear in the permit. Consequently, there has been confusion about whether or not OHM000003 provided sufficient coverage or if coverage under OHC000004 was also necessary. A statement has been added to OHM000004 to explicitly state that the permit does cover stormwater discharges resulting from construction activities and coverage under OHC000004 is not necessary.

4. *Reasonable Potential Determinations*

Ohio EPA has included a specific process for determining whether a discharge has the reasonable potential to cause or contribute to excursions above water quality standards for any parameter. If a discharge's Projected Effluent Quality (PEQ) is greater than the WQS based on six or more data points, or if any effluent measurement is greater than the WQS based on fewer than six data points, the discharge has the reasonable potential to cause or contribute to exceedances.

Part II:

1. *Data Submittal Requirements – New Outfalls*

All new outfalls must submit at least six results for TDS or specific conductance from a similar discharge so that a reasonable potential assessment can be made.

2. *Termination Requirements*

In order to terminate a permit under OHM000003, a Notice of Termination (NOT) form was required as well as a copy of an ODNR-DMRM Phase II bond release for the site. The purpose of this was to verify the discharge points on a coal surface mining site had either been eliminated or mitigated in such a way they would not discharge pollutants to the environment. Changes were made to ODNR- DMRM's coal mine permitting and bond release process that increased the time necessary to obtain a Phase II bond release. After discussions with ODNR-DMRM, it was determined a form called, "Request to Remove Siltation Structure(s) and Termination of the Two-Year Period," was sufficient to show that a discharge point had been eliminated or mitigated. Permit OHM000004, Part III B-9 now includes the "Two-Year" form as well as a Phase II bond release as acceptable documentation to be included with NOT.

Part III.A:

1. *Additional Monitoring Requirements to Final Table for Outfall 001*

A coal surface mining site may have more than one discharge point (outfall), but all outfalls are expected to meet the same requirements. Monitoring for pH was included in OHM000003, but as a footnote. Monitoring for pH has been added to the monitoring table directly in OHM000004 in order to make reporting pH easier.

U.S. EPA has raised concerns that coal surface mines could discharge concentrations of total filterable residue, chlorides, and sulfates that would have an adverse impact on aquatic wildlife. In the case of chlorides and sulfates the state of Ohio does not have aquatic life water quality criteria for either parameter. Monitoring for specific conductivity was included in

OHM000003 with the intention of using that data to determine if monitoring or effluent limits would be required for total filterable residue in OHM000004.

A reasonable potential analysis (RPA) for total filterable residue was performed in accordance with the rules in the Ohio Administrative Code (OAC) 3745-33-07. Previous communication with the U.S. EPA established that specific conductivity could be correlated to total filterable residue at a ratio of 2,400 $\mu\text{mho/cm}$ to 1,500 mg/L. Average and maximum projected effluent quality (PEQ) values for specific conductivity were calculated using all reported Discharge Monitoring Report (DMR) data from September 1, 2015, through September 1, 2018 for all sites currently permitted under OHM000003. The PEQs for specific conductivity were converted to values for total filterable residue using the ratio above. These PEQ values were compared to the water quality standard of 1,500 mg/L. The analysis assumed worst- case discharge conditions of a zero-flow stream and no available dilution. The average PEQ was between 50 and 100% of the water quality standard. Parameters that meet these conditions require monitoring but not limits [OAC 3745-33-07(A)(2)]. Monitoring for total filterable residue has been added to OHM000004. Although Ohio does not have water quality criteria for sulfates and chlorides, monitoring for these parameters have also been added to OHM000004 in order to gather data for later analysis. Ohio EPA has also added total alkalinity and total hardness.

Precipitation-based alternative monitoring tables take dilution into account. As such, limits for total suspended solids are removed and limits for settleable solids are added. It is assumed that dilution will apply to total filterable residue as well; therefore, no alternative tables for facilities that have reasonable potential to exceed WQS for total filterable residue are proposed. All facilities will utilize the same precipitation-based alternative monitoring tables.

2. Definition of a Precipitation Event for Alternative Table 2

Alternative monitoring tables for precipitation events are authorized by Part 40 of the *Code of Federal Regulations* (CFR), section 434.63. The federal effluent guideline limitations list technology-based effluent limits for several parameters based on the intensity of the precipitation event as defined in the section. The limits in Alternative Table 2 are based on 40 CFR 434.63(c)(1). This table applies to any discharge up to a maximum defined in the regulation.

Ohio EPA is proposing to use 0.75 inches as the minimum precipitation event to trigger the use of Alternative Table 2. This value matches the “rain event” utilized in other general permits such as OHC000004. Ohio EPA calculated this value by reviewing studies to determine the “maximized capture volume,” where the capture of larger storm events does not significantly result in greater pollutant removal. Long-term analysis of rainfall data indicates that 85% of storm events in Ohio result in a rainfall of approximately 0.50 inches. Multiplying this amount by 1.5 (which represents a mid-range regression coefficient for maximizing storm event and volume capture) results in 0.75 being used as the rainfall depth. Ohio EPA believes this a sufficient precipitation depth to control pollutants in runoff. Permittees shall use instructions included in Part III B-6 for reporting purposes of alternative limits.

2. Addition of Final Table 003

Ohio EPA believes there is the potential for cobalt, selenium and aluminum to leach out of coal and be in discharges associated with coal mining operations. The Ohio EPA determined this by reviewing the ELG data base of the US EPA and by stream sampling. All permittees will be required to monitor for cobalt, selenium and aluminum from at least one representative

outfall for the life of the permit. A representative outfall is an outfall that is substantially identical to other outfalls at the permittee's facility.

3. *Addition of Final Table 100*

Final table 100 was added as an alternative to table 001 once reclamation has begun at a surface coal facility. When Phase 1 reclamation is completed for a given outfall, reporting for outfall 001 shall begin as outfalls 101, 102, etc.

4. *Alternative pH Demonstration*

The permittee may comply with an alternative pH minimum of 6.0 S.U. in lieu of 6.5 S.U. at its outfall if it can demonstrate no instream pH impact from its discharge. In such cases, the permittee would be required to provide pH data for its outfall and a representative monitoring point upstream and downstream of its outfall. If upstream or downstream monitoring locations are not feasible, the permittee may propose to Ohio EPA an alternative mechanism to demonstrate instream pH is unimpacted by its discharges.

Part IV:

Stormwater Pollution Prevention Plans

The stormwater pollution prevention plan in OHM000003 was broadly based on the industrial stormwater general permit. This permit, OHR000005, was updated in January 2012. The stormwater pollution prevention plan for coal mining-related surface activities has been updated in OHM000004 to reflect the updated language in OHR000006. OHR000006 was updated in May 2017. The updated language also incorporates language from OHC000005, the Construction Stormwater General Permit. These changes eliminate the potential need for coverage under OHC000005. For most facilities, the stormwater controls implemented to comply with the Surface Mining Control and Reclamation Act (SMCRA) permit will satisfy the conditions of this general permit OHM000004.

Part V:

Obtaining an Individual Permit or Alternative General Permit

The Director may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Director to take action. The Director may review the site history, water quality data in the receiving stream, monthly discharge reports, notices of violation, inspection reports, or any other relevant information to determine the need for an individual NPDES permit or an alternative NPDES general permit.

VI. Procedures for Participation in the Formulation of Final Determinations

The draft general permit was public noticed on February 19, 2016. A public hearing was held on May 4, 2016. The public comment period ended on May 11, 2016. All comments received were considered, and a response to comment document is available.

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are invited. Evidence may be presented by the applicant, the state, or other parties, and following presentation of such evidence, other interested persons may present testimony of facts or statements of opinion.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed to:

**DSW Permits Processing Unit
Ohio Environmental Protection Agency
P.O. Box 1049 Columbus, Ohio 43216-1049**

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

**Ohio Environmental Protection Agency
Attention: Division of Surface Water Permits and Compliance Section
P.O. Box 1049 Columbus, Ohio 43216-1049**

The Ohio EPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. The first 250 pages copied are free. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

For additional information about this fact sheet or the draft permit, contact:
Ashley Ward at (614) 644-4852 (Ashley.Ward@epa.ohio.gov); or,
Scott Foster at (740) 380-5277 (Scott.Foster@epa.ohio.gov).