



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land and Materials Administration

Oil Control Program

1800 Washington Boulevard, Suite 620

Baltimore. MD 21230-1708

FACT SHEET

General Permit for the Discharge of Treated Groundwater from Oil Contaminated Groundwater Sources to Surface Water or Groundwater of the State

General Discharge Permit Number: 24OGR-XXXX

NPDES Number: MDG91XXXX

Prepared by Brad Barzin

July 10, 2024

Table of Contents

SUMMARY OF SIGNIFICANT CHANGES FROM THE 18OGR..... 2

BACKGROUND..... 2

PART I: APPLICABILITY AND COVERAGE..... 3

PART II: DEFINITIONS 4

PART III: CONDITIONS OF REGISTRATION 4

PART IV: SPECIAL CONDITIONS OF DISCHARGES 5

PART V: MONITORING AND REPORTING 5

PART VI: VIOLATION OF GENERAL PERMIT CONDITIONS 5

PART VII: GENERAL CONDITIONS 5

PART VIII: AUTHORITY TO ISSUE GENERAL NPDES PERMITS 5

ATTACHMENT 1: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS 6

Numerical Limitations / Monitoring 6

Narrative Limitations 7

ADDITIONAL INFORMATION 7

SUMMARY OF SIGNIFICANT CHANGES FROM THE 18OGR

1. Removal of “No Exposure Certification” form, as stormwater is not applicable to this discharge type.
2. Removal of erroneous permit language (I.F.3.b; not applicable to this permit) and unnecessary repetition of permit conditions (III.G; repeat of I.H).
3. The definitions of “Oil”, “Impervious area” and “Total Petroleum Hydrocarbons or TPH” were clarified.
4. The NOI requirements were modified to include the latitude and longitude coordinates of the discharge point (i.e., exact outfall location) in either decimal degrees or minutes/seconds degrees (III.A.1.c.).
5. Provided explicit instructions as to where notifications should be submitted to MDE in a new section (IV.A.2).
6. The Violation of General Permit Conditions was updated to include Administrative Penalties (VI.D) and Criminal Penalties were modified to expand on the extent of the penalties (VI.F.1-3).
7. Various General Conditions were added to include; Permit Actions, Duty to Reapply, Need to Halt or Reduce Activity Not a Defense, and Duty to Mitigate. Conditions Necessary for Demonstration of an Upset were also updated (VII.I).
8. An important environmental initiative and consideration for upcoming permits involves incorporating Environmental Justice (EJ) protections. The concept behind EJ is that all people— regardless of their race, color, national origin or income —are able to enjoy equally high levels of environmental protection. Additional background may be found on MDE’s website <https://mdewwp.page.link/EJ>. The permittee must include the EJ Score for the facility with the NOI. If the EJ Score for the facility is ≥ 0.76 , then the permittee shall post signage on-site so that the community knows that the facility discharges under this permit and offers the community to share the permit and NetDMR data upon the community’s request.
9. Requirement for all effluent parameters to be monitored (but not necessarily limited), regardless of the type of source of contamination.

BACKGROUND

The Clean Water Act (CWA) was originally enacted as the Water Pollution Control Act of 1948 (P.L. 80-845) and amended in 1972 by the Federal Water Pollution Control Act (P.L. 92-500), which established the National Pollutant Discharge Elimination System (NPDES) in Section 402 of the Act.

The 1972 amendments enumerated a set of national goals “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,” which among others included attainment of “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water” (33 U.S.C. § 1251).

The law became known as the “Clean Water Act” (P.L. 95-217) under amendments to the Act in 1977. The 1977 amendments made it unlawful to discharge any pollutant from a point source into navigable waters without a permit and gave the U.S. EPA authority to regulate such discharges by setting limits on the amount of pollutants that can be discharged into a body of water from a permitted source.

Under § 402(b) of the CWA, 40 CFR Part 123, EPA may grant authority (in whole or in part) to individual states to administer the federal NPDES program in that state. On September 30, 1990, the EPA authorized Maryland to operate such a program. The Code of Maryland Regulations (COMAR) Title 26, Subtitle 08, Chapter 04 requires all discharges of waste or wastewater to surface water to be authorized under a state discharge permit or NPDES permit. Authorized states are prohibited from adopting standards that are less stringent than those established under the Federal NPDES permit program but may adopt standards that are more stringent if allowed under state law. The Federal NPDES program under the CWA does not apply to groundwater discharges, therefore discharges to groundwater are regulated under the state discharge permit pursuant to COMAR 26.08.04.01B(1).

This permit replaces General Permit Number 18OGR, which became effective on December 12, 2017, and expired on December 11, 2022. Currently, the 18OGR general permit is administratively extended for facilities covered under that permit at the time it expired. As of 2022, over 86 Maryland facilities are registered by the Maryland Department of the Environment’s (MDE) Oil Control Program (OCP) under the 18OGR permit.

General Permit 24OGR regulates its discharges pursuant to COMAR 26.08.04.09P(2), which covers the following discharges to surface water or groundwater of the State:

1. All new and existing discharges of treated groundwater from oil-contaminated groundwater sources.

As a General Permit, the application process for coverage under this permit includes the submittal of a Notice of Intent (NOI) along with treatment system information, site map, analytical data, and the application fee, following the process as described below. Other than some minor format changes and the significant changes identified in the summary above, the 24OGR permit remains unchanged from the prior 18OGR permit.

PART I: APPLICABILITY AND COVERAGE

Part I of the permit identifies eligible and ineligible discharges under the permit, as do all MDE general NPDES permits.

The eligible discharges specify “treated groundwater” to prevent discharge of untreated effluent. For example, although initial analytical samples collected from a UST system excavation may show “non-detect” for petroleum hydrocarbons, the discharge must be treated to verify that the effluent is at permissible concentrations even if oil contamination is not encountered during the course of the project.

Part I.C lists the ineligible types of discharges that would require coverage under a different permit through MDE’s Water and Science Administration (WSA) due to the other pollutants that are not captured by the conditions of this permit. Remediation by injection of chemicals into

groundwater and reinjection of treated effluent require prior authorization from MDE because there may still be high effluent concentrations of parameters that are not limited. Such authorization would be provided under the direction of the OCP Remediation Division as part of the case(s) associated with the site. Discharges to groundwater may also require additional permitting from WSA's Groundwater Discharge Permits Division.

The "No General Permit Required" section was removed from this permit as the "No Exposure Certification" form was not applicable to this type of discharge. If a facility is not seeking to discharge treated groundwater from oil-contaminated sources, then they would simply not request coverage under this permit. In addition, that form is explicitly for the discharge of stormwater, which this permit does not address. If a rain event were to occur at a contaminated site and stormwater was mixed with contaminated groundwater, then all impacted water would be required to be treated before discharge as per the permit conditions.

The rest of this part, which describes the other possible permits that may be required, authorization granted to permittees, and processes to terminate or transfer the permit, remains largely unchanged from the 18OGR permit except for the updating of hyperlinks to the Notice of Termination and Notice of Transfer forms.

PART II: DEFINITIONS

This part defines common terms found in all NPDES permits as well as those specific to this one. The list of terms remains largely unchanged from those in 18OGR, with the three exceptions below:

The definition of "Oil" was extended to specify mixtures of product/waste types, whether the substance is used for motor fueling, and the CERCLA regulatory citation was made specific to 42 U.S.C. §§9601.

"Total Petroleum Hydrocarbons or TPH" was clarified to read, "TPH can include gasoline range organics, diesel range organics, and oil range organics." There have been instances of permittees counting TPH-DRO and TPH-GRO separately, instead of summing those components to determine the maximum concentration of TPH as intended.

"Impervious area" was clarified to read "including any area that is paved or used for vehicular storage or traffic, building rooftops, sidewalks, driveways, etc.".

PART III: CONDITIONS OF REGISTRATION

This part clarifies what is required to apply for coverage by submitting an NOI and the application fee. The terms of Part III remain largely unchanged from the information that was required to apply for the 18OGR, and the requirements for reporting a change in the discharge or a discharge into a municipal sewer remain the same. Any alterations should be considered very minor and are addressed in updated instructions for the NOI. The NOI requirements were clarified to include the latitude and longitude coordinates of the discharge point (i.e., exact outfall location) in either decimal degrees or minutes/seconds degrees (III.A.1.c.), as the 18OGR permit NOI forms appeared to be asking for a general location of the facility, and not of the outfall(s) as intended.

Part III.C delineates the responsible parties for signing and submitting all documents required by this permit, such as the NOI and Discharge Monitoring Reports. Written authorization by that responsible party is required for somebody else to become a duly authorized representative to sign and submit reports. Limited Liability Companies (LLC) were added to the “Signatories” section (III.C.2.b).

PART IV: SPECIAL CONDITIONS OF DISCHARGES

OCP must be notified if any discharge is known or suspected to have contained any toxic pollutant not specifically limited by this permit at levels specified in 40 CFR § 122.42. This part contains the discharge effluent limitations for the treatment systems. The effluent limitations are included with the permit here as Attachment 1. All discharges must, at minimum, be monitored for flow rate, total BTEX along with those individual constituents, naphthalene, MTBE, and total petroleum hydrocarbons (TPH-DRO and GRO) unless otherwise specified in the permit, and cannot contain visible oil sheen, floating solids, or persistent foam.

PART V: MONITORING AND REPORTING

This part specifies requirements for how to monitor discharges, data recording and retention, submission of testing results, and instructions to follow if a permit noncompliance occurs. This entire section is relatively standard across all MDE general NPDES permits and has been carried over verbatim from the 18OGR permit. On October 22, 2015, EPA published the NPDES Electronic Reporting Rule to modernize Clean Water Act reporting. As a result, this permit requires the submission of all reports electronically via EPA’s (and MDE’s) reporting website, NetDMR. MDE has included its standard permit language regarding this requirement, which is shared among all of its NPDES permits. More information regarding this rule can be found at www.epa.gov/compliance/npdes-ereporting.

PART VI: VIOLATION OF GENERAL PERMIT CONDITIONS

This part delineates the permittee’s legal responsibilities as well as penalties for permit violations or falsification and tampering with any aspect of the permit (such as the data or certifications supplied in the application, reports, documents, or other information), and the monitoring devices or test methods required under this permit. Administrative Penalties were added under VI.D and the details of the Criminal Penalties for Violations (VI.F.1-3) were expanded upon.

PART VII: GENERAL CONDITIONS

The standard permit conditions are consistent with the other general NPDES permits recently issued by MDE. Multiple items were updated (A, I, & O) and added (C, E, F & G) to clarify the general conditions.

PART VIII: AUTHORITY TO ISSUE GENERAL NPDES PERMITS

This part identifies the statutes which provide authority for MDE to issue this and all other general NPDES permits. This language is unchanged from the 18OGR permit.

ATTACHMENT 1: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

This attachment is meant to be a simple reference sheet for permittees outlining the parameters of interest and the concentration limits that must be met in the effluent for in this permit.

Explanations of the numeric limitations and the monitoring requirements are listed below along with the rationale for their inclusion in the permit. All parameters and their effluent limitations, if any, have been brought forward from the 18OGR permit without any changes. However, all discharges are now required to be monitored for all parameters, regardless of the source of the groundwater contamination.

Numerical Limitations / Monitoring

Flow: All MDE NPDES permits require monitoring for flow. There are no numerical limitations for flow in this permit. In lieu of measured flow, the permittee may also provide monitoring via flow estimation, pursuant to the terms of Part V.A.2. of the permit.

Additionally, any single discharge of 100,000 gallons or more into a municipal storm sewer system triggers a requirement for additional notification prior to discharge to that system operator.

Total BTEX: BTEX is an abbreviation for benzene, toluene, ethylbenzene, and xylenes and is represented by the sum of those four parameters and has been limited to 100 µg/L (parts per billion, ppb) based on best professional judgment. These parameters are most prevalent (though not exclusive to) gasoline and have been applied in past iterations of the OGR permit if the source of the groundwater contamination had included gasoline. This historic effluent parameter daily concentration limit has been brought forward from the prior version of the permit, but for all sources of contamination.

Benzene: Of the four individual parameters which comprise Total BTEX, only benzene has an aquatic life water quality standard, which is lower than the tech-based standard for Total BTEX of 100 µg/L, so a daily maximum limitation of 5µg/L has been included for benzene as in the prior permit. Water quality standards are found at COMAR 26.08.02.03-2G.

Naphthalene: Naphthalene is the simplest polycyclic aromatic hydrocarbon, appearing to be two joined benzene “carbon rings” and can be found in many petroleum products. Although no daily maximum concentration is set in the permit, monitoring is required.

MTBE: Methyl tertiary-butyl ether, usually called MtBE or MTBE, was an additive used to increase oxygen content in gasoline in an effort to improve engine emissions. MTBE has not been used in the fuel available in Maryland since 2006. However, due to a number of chemical characteristics, it is routinely found at oil contaminated sites and associated groundwater remediation projects. MTBE is known to impart an unpleasant taste to drinking water at concentrations at or above 20 ppb, which is Maryland’s State Action Level. Due largely to its susceptibility to aerobic degradation, MTBE is required to be monitored without specified limits when discharged to surface water under this permit.

Total Petroleum Hydrocarbons (TPH): This is the primary parameter of interest, as it can be assumed that any source contaminated by oil would have this component. As petroleum hydrocarbons can be found in many different compositions and molecular weights depending on

the product type, TPH is tested for both diesel-range and gasoline-range organics (DRO and GRO). The sum of these components is used to calculate TPH.

The daily maximum limitation of 15 mg/L (parts per million, ppm) is a historically used technology-based limitation that was established using best professional judgment to represent an achievable standard for treatment using gravity separation or adsorption. If a visible sheen is present in the discharge, then it can be assumed that the concentration is greater than this value. However, the absence of a sheen does not indicate compliance with the standard, only a laboratory analysis of an effluent sample can demonstrate compliance with the standard.

Monitoring Frequency: Effluent sampling frequencies depend on the total treatment and discharge volumes. Discharges of at most 25,000 gallons per month must be sampled at least once per month, with more frequent sampling needed (at least once every 2 weeks) for monthly discharges of between 25,001 and 500,000 gallons. For discharges greater than 500,001 gallons per month, at least weekly sampling (4/month) is required.

Narrative Limitations

None.

ADDITIONAL INFORMATION

A copy of the entire draft general permit is available to any interested person and may be obtained from:

Maryland Department of the Environment
Land and Materials Administration
Oil Control Program
1800 Washington Boulevard, Suite 620
Baltimore, Maryland 21230
(410) 537-3442

This permit is being renewed in accordance with the Administrative Procedures Act, which includes the publication of a notice in a Maryland newspaper and allowing the public at least 30 days afterwards to provide comments. Upon written request, MDE will schedule a Public Hearing for the purpose of accepting public comment and for MDE to answer any questions regarding this permit renewal. MDE will provide an interpreter for deaf and hearing impaired persons provided that a request is made for such service at least five days prior to the hearing.

For additional information, please contact Mr. Brad Barzin of the Oil Control Program's AST and Permits Section at 410-537-3483.