



Water Resources
ENVIRONMENTAL QUALITY

Technical Bulletin

For General Permit NCG510000

Petroleum-Remediated Groundwater

Revised

September 15, 2016

Coverage Under This Permit

This general permit covers point source discharges of remediated petroleum contamination (i.e., gasoline, diesel fuel, aviation fuel, kerosene, or fuel oil) to surface waters that discharge less than (<) 0.25 MGD. Such wastewater discharges include:

- **Groundwater remediation**
- **Well construction and similar wastewaters**
- **Other construction activities (e.g., dewatering)**

Wastewater contaminated with pollutants other than petroleum compounds (e.g., solvents, pesticides) are excluded from this general permit, and will require an individual NPDES permit to discharge to surface waters. Also, proposed discharges to receiving waters classified as ORW or HQW are excluded from general permit coverage. NOTE: Discharge of groundwater generated by well construction or other construction activities that are not contaminated are deemed to be automatically permitted per 15A NCAC 2H.0106 (f) (7).

Changes in Reissued General Permit

The previous General Permit expired September 30, 2016. Several important changes from the previous version of this permit are:

- **Total Lead.** Final limits for Total Lead are 3 µg/L for freshwater and 8.1 µg/L SB/SC Class. An interim Total Lead limit of 25 µg/L will be used for compliance purposes until October 1, 2020. By this date, if compliance with the new limits cannot be maintained, the permittee shall apply for an individual permit.
- **Total Hardness (as CaCO₃).** For freshwater discharges, if any effluent Total Lead sample exceeds the final limit of 3.0 µg/L, quarterly sampling for hardness shall be immediately initiated and performed in conjunction with Total Lead sampling.
- **Toluene.** The saltwater limit for aquatic life protection is changed from 215 ug/l to 370 ug/l based on updated EPA ECOTOX & RAIS 8/07 data.
- **Total Xylenes.** The saltwater limit for aquatic life of 370 µg/L is removed because IRIS, ECOTOX & RAIS 6/12 indicate limited data. A limit of 450 µg/L is added for trout class waters based on IRIS, ECOTOX & RAIS 6/12.
- **Total Recoverable Phenolics.** Please note the parameter description and parameter code is changed from Total Phenol [346694] to Total Recoverable Phenolics [32730].

- **Oil and Grease.** The previously used test method for Oil & Grease targets animal and vegetable fats, oils and greases typical of 100% domestic discharges. Method 1664 –STG-HEM [*silica gel transfer-hexane extraction method*] targets non-polar oil and grease more typical of industrial waste discharges.
- **MTBE.** The human health limit of 1500 µg/L is added.
- **Flow.** For flows greater than or equal to (≥) 0.05 MGD and less than 0.25 MGD, monitoring is now weekly. Flows greater than or equal to (≥) 0.25 MGD are excluded from coverage under this General Permit.
- **Monitoring Frequency for parameters.** For flows greater than or equal to (≥) 0.05 MGD and less than (<) 0.25 MGD, monitoring is now Monthly.

Key Permit Requirements

- Effluent monitoring of parameters specified in Part I, Section A. Quarterly monitoring is required for flows less than (<) 0.05 MGD. For flows greater than or equal to (≥) 0.05 MGD, monitoring is monthly. Flows greater than or equal to (≥) 0.25 MGD are excluded from coverage under this General Permit. Six separate monitoring pages are included in Part I, Section A:

Flows <0.05 MGD

A. (1). gasoline

A. (2). diesel fuel, aviation fuel, kerosene & fuel oil

A. (3). combined releases

Flows >0.05 MGD and <0.25 MGD

A. (4). gasoline

A. (5). diesel fuel, aviation fuel, kerosene & fuel oil

A. (6). combined releases

- All samples should be collected before the effluent joins or is diluted by any other wastestream, water or substance. [Part II, Section D. (1)]
- Proper operation and maintenance of the system to achieve compliance with the conditions of the permit. [Part II, Section C. (2.)]
- Solids, sludges, filter backwash or other pollutants removed in the course of treatment shall be disposed properly to prevent materials from entering waters of the State. [Part II, Section C. (6.)]
- The permittee shall give notice to the Division of any planned physical alterations or additions to the system that could significantly increase the quantity of

pollutants discharged or introduce new pollutants to the discharge. [Part II, Section E. (2.)]

- Any exceedances of the permit limits must be reported to the Division within 24 hours from the time the permittee becomes aware of the circumstances. [Part II, Section E. (6.)]
- Minimum Treatment System Requirements include: air stripper and/or activated carbon; and oil water separator (if free product available). Permittee should consider the need for surge tanks and filters. It is permittee's responsibility to design a treatment system that will comply with permit limits.

Frequently Asked Questions

1) Do I need to employ a certified wastewater treatment plant operator to manage and run the system?

Not at this time. The Division's Technical Assistance and Certification Unit does not currently plan to classify these types of remediation facilities for the purposes of requiring a certified operator. The requirement remains in the permit at this time with clarification, in the event that classification is assigned at a future time.

2) Where do I find my stream classification?

The stream classification, i.e. WS-IV, C, Tr, etc. can usually be found in the Certificate of Coverage. If you are unsure of your stream classification, you can contact the DWR Water Quality Permitting Section.

3) Does a certified lab need to be used to analyze samples?

Yes, a North Carolina certified lab must be used to perform analytical monitoring. A list of certified labs is available from the Division.

4) What If I Sell My Business Or The Name of My Business Changes?

The Division views changes of name or ownership as a minor permit modification and requires the Director's approval. Name and ownership changes require you to complete a Name/Ownership Change Form. The forms are available by contacting the DWR Water Quality Permitting Section or via the website (see Contact Information below).

5) How do I apply for coverage or rescind coverage under this General Permit?

This General Permit expires on September 30, 2021. New applicants must submit a completed NOI and applicable permit fees. The application forms are available by contacting the DWR Water Quality Permitting Section or via the website (see Contact Information below). If an existing permittee plans to eliminate the remediation activity and no longer requires coverage under this General Permit, the permittee will need to request rescission of permit coverage from the NPDES Unit by letter request.

6) Do I need to submit the monitoring results to the Division?

At this time, the submission of monitoring reports for this permit is not required. There are no standardized Discharge Monitoring Reports (DMRs) associated with this permit. Submittal of monthly Discharge Monitoring Reports (DMRs) shall not be required except upon demand by the Division. Part I, Section A supersedes the requirement for submitting monthly Discharge Monitoring Reports (DMRs) specified in Part II, Section D (2) of this permit. Even though the **submittal** of the monthly monitoring reports to the Division is suspended, all monitoring requirements remain. The data will be maintained on site for a period of three years. However, as per Part II, E.6, violations of any permit limitation must be reported within 24 hours from the time the permittee becomes aware of the circumstances.

Contact Information

For additional information on NPDES wastewater permitting and compliance, please contact us at:

N.C. Division of Water Resources
Water Quality Permitting Section
1617 Mail Service Center
Raleigh, N.C. 27699-1617
Phone: (919) 807-6300
Fax: (919) 807-6495

You may also contact the local DWR Regional Office at:

- Asheville: (828) 296-4500
- Fayetteville: (910) 433-3300
- Mooresville: (704) 663-1699
- Raleigh: (919) 791-4200
- Washington: (252) 946-6481
- Wilmington: (910) 796-7215
- Winston-Salem: (336) 776-9800

The DWR Water Quality Permitting Section can be accessed on the internet at:

<http://deq.nc.gov/about/divisions/water-resources/water-resources-permits>. Copies of the General Wastewater Permits, technical bulletins, application fees, guidance documents, and miscellaneous forms may be downloaded from this web site.

Another source of information on regulatory requirements for all media is the Department of Environmental Quality (DEQ) Customer Service Center, which can be reached at 1-877-6748.