Ohio Environmental Protection Agency

Fact Sheet For
National Pollutant Discharge Elimination System (NPDES)
General Permit for Discharges of
Hydrostatic Test Water

Public Notice No.: 17-10-009
Public Notice Date: September 28, 2017

I. **Background**

The Federal Water Pollution Control Act [also referred to as the Clean Water Act (CWA)] and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111.04), provide that the discharge of pollutants to waters of the State from any point source is unlawful, unless the discharge is in compliance with a NPDES permit. Sometimes facilities in Ohio have the need to discharge hydrostatic test water for limited duration.

Hydrostatic test water means water placed in pipelines, tanks, etc. (new/unused or used) and raised to greater than atmospheric pressure in order to check for leaks and/or the structural integrity of these facilities. Hydrostatic test water also includes tank and pipelines filled with water to test for leaks without raising pressure to above atmospheric pressure. Discharges of hydrostatic test water generally take place from new facilities, unused facilities, and from used facilities that have been used for the transportation or storage of natural gas, crude oil, or liquid or gaseous petroleum hydrocarbons. These facilities include, but are not limited to, pipelines and storage tanks.

Ohio EPA has elected to issue a statewide general permit to cover these facilities discharging hydrostatic test water to waters of the State.

The conditions under the heading "eligibility" are very important because they provide an explanation of what type of discharges are and are not covered by this general permit. The general permit imposes effluent limitations and monitoring requirements based on new/unused or used facilities for hydrostatic test water. The permit requirements for used facilities are different from new/unused facilities and the source water used.

This permit would be a renewal of the current general permit; it is subject to the requirements of Ohio’s antidegradation rule (Ohio Administrative Code 3745-1-05) because all discharges covered by this permit are by definition new. The general permit is proposed for a duration of five years.
This permit is a renewal of the current permit for Hydrostatic Test Water, OHH000002. The current permit will be terminated when OHH000003 becomes effective.

II. **Description of General Permit Coverage and Type of Discharge**

The permit will go through antidegradation procedure. The discharges are characterized as hydrostatic test water. The following wastewater discharges associated with hydrostatic test water are not authorized by this permit:

- wastewater discharges that are mixed with any other discharges that are not associated with hydrostatic test water. Storm water that is not related to but is mixed with the discharge from the hydrostatic test water, during wet weather conditions, is not covered by this general permit. Storm water discharges are authorized separately by a storm water general permit;
- wastewater discharges that the Director has determined to be contributing to a potential violation of Ohio's surface Water Quality Standards;
- wastewater discharges that are discharged to combined or sanitary sewer systems;
- wastewater discharges that take place within five-hundred yards upstream of a public water supply surface water intake and cannot meet Ohio's public water supply standards.
- wastewater discharges that are commingled with hazardous wastes or hazardous substances;
- wastewater discharges associated with petroleum-related corrective actions;
- wastewater discharges containing pollutants classified as bioaccumulative chemicals of concern such as mercury;
- discharges to any receiving water designated Outstanding National Resource Water (ONRW), Outstanding State Water (OSW), Superior High Quality Water (SHQW) or Category 3 wetland, or to receiving waters that discharge into a water with one of these designations within two stream miles of the discharge point; and
- wastewater discharges containing pollutants classified as biocides (except chlorine) and any other added chemicals.

III. **Typical Pollutants, Treatment, Monitoring Requirements, and Permit Limits**

Hydrostatic test water:

Typical pollutants usually present in hydrostatic test water discharge are total suspended solids, total recoverable iron, total residual chlorine, benzene, toluene, ethylbenzene, xylene and floating oil & grease. Parameters like pH and dissolved oxygen that influence effluent chemistry are also regulated.
Monitoring requirement and permit limits have been developed based upon the potential effluent characteristics of new and unused facilities.

In some cases, treatment may not be necessary for some of these discharges. For example, discharges from the hydrostatic testing of new tanks and pipes may contain small amounts of oil that are often used by the manufacturer to prevent corrosion prior to product use. Treatment for such low concentration of oil and grease is usually not required.

In case of hydrostatic testing of used tanks and pipelines that previously transported liquid petroleum products will likely contain high levels of oil and grease that require treatment.

Oxygen depleting compounds such as sodium sulfite are often used in the test water to protect against corrosion inside the tanks and pipelines. This may result in depletion of dissolved oxygen in the discharge resulting in need for oxygenation to avoid potential impacts in the receiving waters. This is true for both new and used facilities.

Since public water supply (which contain significant residual chlorine) or surface water (with chlorine added for disinfection) is used for testing of these facilities, dechlorination either by treatment or dissipation may be needed to meet water quality standards in the discharge. Discoloration in the discharge may result from corrosion. It can be regulated by iron monitoring.

Monitoring requirements and permit limits are to be selected from the three effluent tables (under A B, or C) in Part III of the general permit based on new or used facilities and the water source. It is therefore essential for the applicant to explain clearly in the Notice of Intent (NOI) whether the discharge is from new/unused pipes/tanks or from used pipes/tanks.

IV. **Description of Permit Conditions**

**Notice of Intent** - Operators of facilities with the industrial activities described in Section II of the general NPDES permit must obtain a permit to discharge. Each individual facility must submit a Notice of Intent (NOI) to obtain coverage under the general permit. Ohio EPA’s regulations (OAC Rule 3745-38-06) exclude persons covered by general permits from requirements to submit an individual application. NOI requirements are intended to establish a mechanism that can be used to establish a clear accounting of the number of permittees covered by the general permit, their identities, locations, mailing addresses, and nature of discharge.
The NOI application form, source water pollutant concentrations when applicable, the description of Best Management Practices (BMPs) to be employed, and a sketch showing how the discharge would take place and be treated shall be submitted through the Ohio EPA eBusiness Center Division of Surface Water NPDES Permit Application STREAMS service in the link below.

https://ebiz.epa.ohio.gov/login.html

Permit coverage does not become effective until the permittee receives written notification from the Director that coverage is granted.

V. **Effluent Limitations and Monitoring Requirements**

Effluent limitations and monitoring requirements are based on Ohio’s WQS (Water Quality Standards), BPJ (Best Professional Judgment), and BADCT (Best Available Demonstrated Control Technology).

The following three tables list the required monitoring parameters and applicable effluent limitations for new/unused pipes and tanks, used pipes and tanks, and all other hydrostatic test waters, respectively.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration</th>
<th>Sampling Type</th>
<th>Frequency</th>
<th>Limit Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum</td>
<td>Minimum</td>
<td>Monthly</td>
<td>24 Hr. Total Estimate</td>
</tr>
<tr>
<td>Flow Rate (GPD)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Dissolved Oxygen (mg/L)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>pH (S.U.)</td>
<td>9.0</td>
<td>6.5</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Total Suspended Solids (mg/L)</td>
<td>45</td>
<td>-</td>
<td>30</td>
<td>Composite</td>
</tr>
<tr>
<td>Oil and Grease, Total (mg/L)</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Iron, Total Recoverable (ug/L)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Composite</td>
</tr>
<tr>
<td>Chlorine, Total Residual (mg/L)</td>
<td>0.019</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
</tbody>
</table>
Hydrostatic test water discharge from used pipes and tanks using potable water, surface water, or uncontaminated ground water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration</th>
<th>Sampling Type</th>
<th>Frequency</th>
<th>Limit Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>Minimum</td>
<td>Monthly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow Rate (GPD)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24 Hr. Total Estimate</td>
</tr>
<tr>
<td>Dissolved Oxygen (mg/L)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>pH (S.U.)</td>
<td>9.0</td>
<td>6.5</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Total Suspended Solids (mg/L)</td>
<td>45</td>
<td>-</td>
<td>30</td>
<td>Composite</td>
</tr>
<tr>
<td>Oil and Grease, Total (mg/L)</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Iron, Total Recoverable (ug/L)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Composite</td>
</tr>
<tr>
<td>Toluene (ug/L)</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Benzene (ug/L)</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Ethylbenzene (ug/L)</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Chlorine, Total Residual (mg/L)</td>
<td>0.019</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
<tr>
<td>Xylene, Total (ug/L)</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>Grab</td>
</tr>
</tbody>
</table>

All other hydrostatic test water discharges including those using treated effluent for test water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration</th>
<th>Sampling Type</th>
<th>Frequency</th>
<th>Limit Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>Minimum</td>
<td>Monthly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varies*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

* This table is intended for test waters using water sourced from non-potable, ground water, or surface water. The parameters monitored will mirror the first two tables depending on whether the pipes are used or unused. Additional parameters and limits will be monitored based on analysis of the source water.
VI. **Changes from Current Permit**

A new effluent table was added for waters being used which may contain pollutants. This table includes all parameters of interest and the permittee will be required to monitor those parameters which may result in the exceedance of water quality standards or applicable treatment standards based on the levels of pollutants in the source water.

A net intake credit for total suspended has been added for water sourced from surface waters and discharged to the same body of water. This is similar to Michigan’s general permit for hydrostatic test water.

The permit was changed throughout to replace paper submittals of NOIs and notices-of-termination (NOTs) with the eBusiness submittal requirements.

In the NOI requirement section (Part II), sampling requirements are proposed for discharges using source waters which may contain pollutants. Also, footnotes from the effluent tables (Part III) related to BMPs included with the NOIs were relocated to Part II.

For total suspended solids and iron, the sampling method was changed from a 24-hour flow-proportional sample to a series of grab samples.

For pH and dissolved oxygen, the sampling method is proposed to change from a monthly grab to a monthly multiple grab sample. Three separate grab samples shall be taken and analyzed and the extreme value will be reported or, if the grabs are taken on different days, each result shall be reported.

A clause was added to the NOI requirement which allows for an NOI to cover multiple discharge locations but if the discharges span multiple Ohio EPA districts, a separate NOI would need to be submitted for each district in which a discharge will occur.

A clause was added to the NOI requirements which allows for multiple discharges along a single pipeline project. Applicants will be able to add discharge locations along the same project after initial coverage is granted. Any discharges related to a change of scope for the project was initially granted coverage would require a separate NOI.

A clause was added to the NOI requirements which requires any treatment additives proposed to be used to be attached with the NOI.

An “uncontaminated ground water” definition was added. A qualitative approach of using source location is proposed due to the short duration of discharges.
“Uncontaminated ground water” means ground water sourced from locations with no known industrial or commercial contamination of the ground water table.

A new condition is proposed to limit transfers between water bodies to minimize invasive species and waterborne bacteria.

A clause was added to provide notification to the appropriate Ohio EPA district office 14 days prior to the commencement of hydrostatic testing.

A clause was added to limit withdrawal rates from surface waters to be able to support aquatic life.

Special Conditions (Part IV) had additional measures added to both minimize pollutant and to be more consistent with the hydrostatic test water provisions of the general permit for petroleum bulk storage terminals (OHB000003). These measures include:

- The use of non-chlorinated source water where possible. If chlorinated water is used, the permittee shall hold the water for at least 24 hours prior to discharge and sample prior to discharge to confirm the total residual chlorine limits will be achieved.
- For pipelines, BMPs for Part III was moved to Part IV which require the permittee to minimize erosion using straw bales, splash pads, silt fences, and vegetated buffers.
- For tanks, a BMP was added prescribing decanting from an adequate height on the tank to preclude drawing off of settled solids from the bottom of the tank.
- Any treatment additives would require approval from Ohio EPA prior to the discharge.
- The permittee will be required to maintain records of any petroleum-related liquids and sludges collected and how they were disposed of.
- Prohibits the discharge of any pipeline liquids and sludges pushed out ahead of a pig [pipe cleaning tool].

Other non-substantive changes were made including the correction of typographical errors and incorrect rule references.

VII. **Notice of Termination**

Each individual facility covered by the general permit must submit a Notice of Termination (NOT) form to terminate coverage under this permit. Permittees are to
request permit coverage termination once the wastewater discharges are eliminated. Failure to submit an NOT form constitutes a violation of the permit and is a violation of ORC 6111.

VIII. **Request for Information**

The proposed draft permit includes the prohibition of petroleum-related liquids and sludges as well as and liquid or sludges pushed out ahead of a pig. Ohio EPA believes the hydrostatic test process involves the pig being pushed via compressed air and that any sludges or liquids may be collected.

IX. **Procedures for Participation in the Formulation of Final Determinations**

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of 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 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 OEPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 7 days after the public hearing date will be considered.

For additional information about this fact sheet or the draft permit, contact Cole Miller, (614) 728-3846, cole.miller@epa.ohio.gov.