



## National Pollutant Discharge Elimination System

GENERAL PERMIT FACT SHEET for

Hydrostatic Testing of Commercial Pipelines

NPDES Permit No. ING670000

November 4, 2015

## Indiana Department of Environmental Management

Office of Water Quality

100 North Senate Avenue

Indianapolis, Indiana 46204

[www.idem.IN.gov](http://www.idem.IN.gov)

<b>Existing Permit Information:</b>	<p><u>Permit Number:</u> ING670000 (Master General Permit). Existing facilities permitted under 327 IAC 15-11 will retain their existing general permit tracking numbers, and new permitted facilities will have tracking numbers using same numbering protocol (ING670xxx).</p> <p><u>Expiration Date:</u> Under 327 IAC 15-11, each permitted facility has a unique expiration date based upon five (5) years from when coverage commences. Under this general permit all permitted facilities will have the same expiration date.</p>
<b>Source Location:</b>	State-wide
<b>Receiving Stream:</b>	All waters of the state of Indiana, except for Outstanding State Resource Waters and Outstanding National Resource Waters
<b>Proposed Action:</b>	New administrative NPDES general permit to replace existing NPDES general permit-by-rule (327 IAC 15-11)
<b>Source Category</b>	NPDES Minor – Industrial
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The Federal Water Pollution Control Act (also referred to as The Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), which was enacted in 1972, provides that the discharge of pollutants to the 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 primary condition determining eligibility for this general permit is ensuring that the discharge consists of only wastewater from hydrostatic testing of commercial pipeline(s). Dischargers who meet the eligibility requirements may apply for coverage by this NPDES general permit.

Development of a Fact Sheet for NPDES permits is required by Title 40 of the Code of Federal Regulations, Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Indiana Department of Environmental Management (IDEM) as outlined in 40 CFR 122.28 and 327 IAC 5-3-8.

## **A. Description of General Permit Category:**

The purpose of this general permit is to regulate the discharge of wastewater associated with hydrostatic testing of commercial pipelines so that the public health, existing uses, and aquatic biota are protected. "Wastewater discharge associated with hydrostatic testing of commercial pipelines" means the discharge from a conveyance used for collecting and conveying wastewater which is directly related to commercial pipelines. This includes discharge of water used for hydrostatic testing of new or used pipelines. A "commercial pipeline" is a pipeline, generally underground, that transports petroleum or natural gas.

NPDES general permits are developed and issued to cover multiple facilities engaged in the same process category instead of an individual facility within the State of Indiana. IDEM first developed a general NPDES permit-by-rule (327 IAC 15-11) for discharges of hydrostatic test water in 1994. As a result of statutory changes to Indiana law in 2011, IDEM is now changing its method of administering NPDES general permits by changing from a permit-by-rule format to an administrative format which utilizes a "master general permit" (EPA terminology) which will be renewed and reevaluated on a five-year interval. Persons who seek coverage under the master general permit will continue to be assigned permit tracking numbers beginning with "ING67" but coverage under the general permit will be limited to the permit term established in the master general permit once it is issued.

Discharges of wastewater associated with hydrostatic testing of commercial pipelines are similar and require generally the same effluent limitations and monitoring requirements. As of November 2015, there are approximately 7 facilities which are currently regulated under 327 IAC 15-11. The facilities covered by this general NPDES permit have typical daily flow volumes ranging from 0.0001 to 10.0 million gallons per day (MGD). The discharges are typically infrequent and may only occur on a single day or over a period of a few days during a month. Since the permit requirements for all these discharges are similar it is the opinion of IDEM that this category of sources is controlled more appropriately under a NPDES general permit. These discharges are similar in the following ways:

- 1) They are comprised solely of hydrostatic test water discharges.
- 2) They originate from metallic or PVC pipelines.
- 3) The pipelines being tested are intended for future transport or have previously transported or contained petroleum or petroleum-derived gases or liquids.

## **B. Geographic area covered:**

This general permit is intended to cover any discharge of hydrostatic test water from a commercial pipeline within the boundaries of the state of Indiana, except as denoted herein.

**C. Receiving waters:**

This general permit will authorize discharges to all surface waters of the State of Indiana, except for direct discharges to Outstanding State Resource Waters (OSRWs) and Outstanding National Resource Waters (ONRWs). Direct dischargers to OSRWs or ONRWs are required to obtain an individual NPDES permit to regulate their discharges.

**D. Eligibility**

Discharges covered under this general permit will be from industrial facilities with discharges solely comprised of wastewater from hydrostatic testing of commercial pipelines. This general permit contains certain specific exclusions from coverage which are denoted in Section 1.3 of the permit. Dischargers proposing discharges not authorized by this permit will be required to apply for an individual NPDES permit.

The following discharges of hydrostatic test water from commercial pipelines are not authorized by this permit:

- direct discharges into waters that are designated as an ONRW defined at IC 13-11-2-149.5 or an OSRW defined at IC 13-11-2-149.6 and listed at 327 IAC 2-1.3-3(d);
- discharges to a receiving stream when the discharge results in an increase in the ambient concentration of a pollutant which contributes to the impairment of the receiving stream for that pollutant as identified on the current 303(d) list of impaired waters;
- discharges containing water treatment additives (WTAs) which have not received prior written approval from IDEM for the specific additive, use, and dosage at the particular site for which the Notice of Intent (NOI) is submitted; and
- discharges resulting from the cleaning of tanks and/or pipelines.

**E. Application for Coverage:**

This general permit proposes to provide coverage for any discharges composed entirely of hydrostatic test water which meet the general permit criteria, are not precluded from general permit coverage, and where the discharger agrees to be regulated under the terms of the general permit.

Each discharger seeking coverage under this general permit must submit a Notice of Intent (NOI) form. Federal regulations found in 40 CFR 122.21(a) exclude persons covered by general permits from requirements to submit an application for an individual permit. 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, the identities, locations, mailing addresses, and nature of discharge.

## **F. Antidegradation Evaluation**

### Nature of Discharge

Hydrostatic testing of pipelines is generally done on a periodic basis resulting in discharges that only last for a short term, temporary period. In accordance with Indiana's Antidegradation Standards and Implementation Procedures at 327 IAC 2-1.3-4, a new or increased discharge of non-bioaccumulative chemicals of concern which only occurs for a short term, temporary period lasting less than 12 months does not constitute a significant lowering of water and is not subject to further antidegradation review.

### Wastewater Characterization

The pollutants expected to be discharged to the receiving stream from a new pipeline include oil and grease and total suspended solids. The purpose of issuing the NPDES permit to dischargers discharging hydrostatic test water from commercial pipelines is to ensure that the discharge to the receiving stream does not result in deleterious effects to aquatic life and is in compliance with 327 IAC 2-1-6 and 327 IAC 2-1.5-8, the minimum surface water quality standards.

The general permit imposes effluent limits based on treatment technology and water quality standards. The effluent limits are set at levels to ensure there is not a significant lowering of water quality of the stream receiving the discharge. Monitoring and limiting these parameters will ensure the proper operation of these systems and the best management practices being employed to control the wastewater being discharged.

Total residual chlorine limits and monitoring requirements are also included for facilities which use a potable water supply as the source water for the hydrostatic testing. Although the existing general permit-by rule at 327 IAC 15-11 did not include effluent limitations for total residual chlorine, it did not prohibit the use the potable water supplies as source waters for hydrostatic testing. Dischargers are not authorized to introduce chlorine for treatment of the source water or wastewater. The purpose of adding total residual chlorine (TRC) limits is to acknowledge the potential use of potable water and to ensure only de minimis discharges of TRC when potable water is used for hydrostatic testing.

### Eligibility

Pursuant to 327 IAC 15-2-9(b)(1)(A), applicable requirements contained in this general permit must be adequate to ensure compliance with the water quality standards contained in 327 IAC 2-1, or 327 IAC 2-1.5. Although existing commercial pipelines may contain crude petroleum, petroleum refined products and natural gas,

pollutants which have numeric water quality criteria are not expected to be present due to the source and nature of this discharge. However, when a substance is found to be present in the discharge which shows a reasonable potential to exceed a numeric water quality criterion, that facility will be required to obtain an individual NPDES permit prior to discharging.

## **G. When to Apply**

All dischargers desiring coverage under this general permit must timely submit a Notice of Intent (NOI). The current NPDES general permit-by-rule (327 IAC 15-11) allows an NOI to be filed at least fifteen (15) days prior to the commencement of the proposed activity. Under the terms and conditions of this general permit, appropriate submission time frames, depending on the situation of the discharger are proposed (see Section 4.0 of general permit).

## **H. Permit Conditions:**

### **1) Narrative Water Quality Based Limits**

The narrative water quality standards contained in 327 IAC 2-1-6(a)(1) (A)-(E) and 327 IAC 2-1.5-8 have been included in this general permit to ensure that the narrative water quality criteria are met.

### **2) Current Numeric Permit Limits & Monitoring Requirements**

Under State and Federal law and regulations 40 CFR 122.44 and 327 IAC 5, a discharge permit must establish effluent limitations equivalent to best available technology economically achievable (BAT). For some industry categories, such effluent limitations have already been established by the EPA. This is not the case with discharges of hydrostatic test water; thus, IDEM used best professional judgment (BPJ) to choose effluent limitations that meet technology based levels equivalent to BAT.

**a) Flow** is a standard parameter to be monitored in all NPDES permits. The requirement to report both the monthly average and daily maximum flows for each month has been retained from the general permit-by-rule. This parameter is required of all NPDES permits and is included in this permit in accordance with 327 IAC 5-2-13(a)(2).

**b) Oil and Grease** is a common industrial pollutant and has the potential to be present in hydrostatic test water. The daily maximum effluent limitation for oil and grease of 15 mg/l is considered sufficient to ensure compliance with the narrative water quality criteria in 327 IAC 2-1-6(a) and 327 IAC 2-1.5-8 which prohibit a visible oil sheen on receiving waters. The effluent limitations and monitoring requirement for oil and grease is the same as that which exists in the current general permit-by-rule, 327 IAC 15-11.

- c) pH** is included in the general permit to ensure that the discharge will not violate Indiana water quality standards. The proposed limit of 6.0 to 9.0 standard units (s.u.) is in accordance with the Indiana Water Quality Standards (327 IAC 2-1-6 and 327 IAC 2-1.5-8). The effluent limitations and monitoring requirement for pH is the same as that which exists in the current general permit-by-rule, 327 IAC 15-11.
- d) Total Suspended Solids (TSS)** is limited to a daily maximum of 45 mg/l. This limitation is based on the best professional judgment (BPJ) of the technology and corresponding effluent limitations equivalent to the best conventional treatment (BCT) in accordance with 327 IAC 5-2-10(6). The effluent limitations and monitoring requirements for TSS are the same as that which exists in the current general permit-by-rule, 327 IAC 15-11.
- e) Total Flow.** An additional reporting requirement is being added to require permittees to monitor and report the total flow value for the month in units of million gallons (mgal). This requirement has been a parameter listed on the Discharge Monitoring Report forms for all NPDES permittees for the past several years, and it is included to assist IDEM in properly assessing the annual permit operating fees set forth under IC 13-18-20.
- f) Total Residual Chlorine (TRC)** is limited to a daily maximum of 0.02 mg/l. The effluent limitation for TRC is 0.02 mg/l as a daily maximum. This limit is derived from 327 IAC 2-1-6. (Table 1 - Water Quality Criteria for Specific Substances) and 327 IAC 2-1.5-8 (Table 8-1; Surface Water Quality Criteria for Protection of Aquatic Life) and assumes that the discharge is likely to occur when there is little or no dilution available in the receiving waters. Since this effluent limitation (0.02 mg/l) is less than the LOQ value (0.06 mg/l), the permittee may report "< 0.06" for the daily maximum if the testing result(s) are less than the LOQ value. For any month in which the permittee does not utilize chlorinated intake water, the permittee may report "n/a" for this parameter. This parameter is included in the event that a potable water supply is utilized as the source water for the hydrostatic test water.

### 3) Monitoring and Reporting Requirements

Monitoring requirements for all pollutant parameters are set at 1 x Daily. Grab samples of each pollutant parameter shall be taken of the hydrostatic test water being discharged as it leaves the pipeline being tested or after receiving treatment at the beginning and at the end of the discharge and two (2) times during the discharge at evenly spaced time intervals. All of the grab samples shall be combined into one (1) composite sample at the end of the test period for analysis. If the permittee does not utilize a potable water supply as the source water for the hydrostatic testing, then the permittee can report "n/a" for TRC on the federal Discharge Monitoring Reports (DMRs) and state Monthly Monitoring Reports (MMRs).

Total flow volume for the month must be calculated once monthly. The permittee is required to complete and submit federal DMRs and state MMRs to IDEM containing the results obtained during the previous monitoring period by the 28th day of the month following the monitoring period.

The permittee may choose to or may be required to enroll in the NetDMR program for the electronic submittal of the federal DMR and the state MMR forms in lieu of submitting them via U.S. Mail. Once approved by IDEM, the permittee may use this process for submitting reports in lieu of submitting hard copies of the reports to IDEM.

## **I. Reporting Spills and Noncompliance**

All persons covered by this general permit must monitor for, identify, and report adverse incidents. If a person covered by this general permit observes or is otherwise made aware of an adverse incident that may have resulted from a discharge, the person must notify IDEM by telephone at **(888) 233-7745**:

- immediately for incidents which pose a significant danger to human health or the environment,
- as soon as possible but within two (2) hours of discovery for any adverse incidents resulting in death or acute injury or illness to animals or humans (see 327 IAC 2-6.1), and
- within 24 hours of the person becoming aware of the adverse incident for any other adverse incidents not listed above.

The permittee shall also submit a written report to IDEM within 5 days of the permittee becoming aware of the incident and may be submitted by U.S. Mail, by fax, or by email (such reports must be sent to: [wwreports@idem.IN.gov](mailto:wwreports@idem.IN.gov)).

Spills from the permitted facility meeting the definition of a spill under 327 IAC 2-6.1-4(15), the applicability requirements of 327 IAC 2-6.1-1, and the Reportable Spills requirements of 327 IAC 2-6.1-5 (other than those meeting an exclusion under 327 IAC 2-6.1-3 or the criteria outlined below) are subject to the Reporting Responsibilities of 327 IAC 2-6.1-7.

It should be noted that the reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedances that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedance to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

**J. Fees**

In accordance with IC 13-18-20-12, any application for a new permit, renewal of a permit, modification of a permit, or variance from a permit requirement must be accompanied by an application fee, which is currently \$50.00. This fee is also applicable to Notice of Intent letters for general permits. Once approved for coverage under a general permit, the permittee is also subject to annual operating fees. These annual fees are set by statute (IC 13-18-20).

**K. Reopening Clause**

This general permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing to include any applicable effluent limitation or standard issued or approved under 301(b)(2)(C),(D) and (E), 304 (b)(2), and 307(a)(2) of the Clean Water Act, when the effluent limitation or standard so issued or approved:

- a) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) controls any pollutant not limited in the permit.

**L. Permit Term**

This general permit is proposed to be in effect for a five-year term.

**M. Forms, References, and Guidance Documents**

The IDEM website will contain information about each of the NPDES general permits, including the issued permit(s), Notice of Intent (NOI) forms, Notice of Termination (NOT) forms, and helpful reference documents to assist the regulated community and the general public. This web page is still in development as of the date of this fact sheet.