

# National Pollutant Discharge Elimination System GENERAL PERMIT FACT SHEET for

Petroleum Products Terminals NPDES Permit No. ING340000 November 4, 2015

## **Indiana Department of Environmental Management**

Office of Water Quality
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Existing Permit Information:	Permit Number: Existing facilities under 327 IAC 15-9 have general permit tracking numbers using the following format ING340xxx (to be retained).  Expiration Date: Under 327 IAC 15-9, 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.
Source Location:	State -wide
Receiving Stream:	All waters of the state of Indiana, except for Outstanding State Resource Waters and Outstanding Natural Resource Waters
Proposed Action:	New administrative NPDES general permit to replace existing NPDES general permit-by-rule (327 IAC 15-9)
Source Category	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 is ensuring that the discharge consists of only wastewater from a petroleum products terminal. Dischargers who meet the eligibility requirements may apply for coverage by this NPDES general permit, instead of seeking coverage under an individual NPDES permit. This general permit is proposed to be in effect for a five-year term.

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 petroleum products terminals wastewater so that the public health, existing uses, and aquatic biota are protected. "Petroleum Products Terminals" is defined as:

- a) "Petroleum Products Terminals" means an area where petroleum products are supplied by pipeline or barge; where petroleum products are stored in aboveground tanks; where petroleum products are transferred to trucks for transport to other locations.
- b) "Wastewater discharge associated with Petroleum Products Terminals water means the discharge from any conveyance, used for collecting and conveying wastewater which is directly related to the storage area of the petroleum products terminal. This includes storm water run-off, tank bottom water, and water used for hydrostatically testing the storage tanks or on-site pipelines.

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 15-9) for discharges of Petroleum Products Terminals wastewater 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 "ING34" but coverage under the general permit will be limited to the permit term established in the master general permit once it is issued.

As such, the discharges generally require the same effluent limitations and monitoring requirements. As of December, 2014, there are approximately 40 facilities which are currently regulated under 327 IAC 15-9. Since the permit requirements for all these discharges are similar and because of the number of such dischargers, it is the opinion of IDEM that this category of sources is controlled more appropriately under a NPDES general permit rather than under individual permits. These discharges are similar in several ways, they:

- 1) are comprised solely of petroleum products terminals wastewater discharges;
- 2) the used storage tanks, as addressed in this general permit, have contained petroleum or petroleum-derived liquids.
- 3) may utilize chlorinated source water for the petroleum products terminals activities at the site.

### B. Geographic area covered:

This general permit is intended to potentially cover any discharge of petroleum products terminals wastewater within the boundaries of the state of Indiana, except as denoted herein.

## C. Receiving waters:

This general permit will authorize discharges to all waters of the State of Indiana, except for Outstanding State Resource Waters and Outstanding National Resource Waters. Dischargers to these receiving waters are required to obtain an individual NPDES permit to regulate their discharges.

## D. Discharges Not Authorized by This General Permit

Discharges covered under this general permit will be from primarily industrial facilities with discharges solely comprised of petroleum products terminals wastewater. This general permit contains certain specific exclusions from coverage under the general permit which are denoted in Section 1.3 of the permit. In such instances the person will be required to apply for an individual NPDES permit. The following discharges are not authorized by this permit:

- a) direct discharges consisting of more than storm water only into waters that are designated as an Outstanding National Resource Water (ONRW) defined at IC 13-11-2-149.5 or an Outstanding State Resource Water (OSRW) defined at IC 13-11-2-149.6 and listed at 327 IAC 2-1.3-3(d). A direct discharge to an ONRW or OSRW that consists only of storm water associated with construction activity, storm water associated with industrial activity, or storm water from a municipal separate storm sewer system may still be permitted under a general permit when the Commissioner determines the discharge will not significantly lower the water quality as defined under 327 IAC 2-1.3-2(50) of such a water downstream of that discharge;
- 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;
- c) 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 facility for which the Notice of Intent (NOI) is submitted; and
- d) storm water discharges associated with construction activity.

# E. Application for Coverage

This general permit proposes to provide coverage for any facility with discharges composed entirely of petroleum products terminals wastewater which meet the criteria listed in Section A above and agree to be regulated under the terms of the general permit.

Each facility seeking coverage under this general permit must submit a Notice of Intent (NOI). 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

327 IAC 2-1.3 outlines the state's Antidegradation Standards and Implementation Procedures. The Tier 1 antidegradation standard found in 327 IAC 2-1.3-3(a) applies to all surface waters of the state regardless of their existing water quality. Based on this standard, for all surface waters of the state, existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. IDEM implements the Tier 1 antidegradation standard by requiring NPDES permits to contain effluent limits and best management practices for regulated pollutants that ensure the narrative and numeric water quality criteria applicable to the designated use are achieved in the water and any designated use of the downstream water is maintained and protected. Effluent limits for the following regulated pollutants are being included in this NPDES permit to satisfy the Tier 1 antidegradation standard: Oil & Grease and total suspended solids (TSS).

The Tier 2 antidegradation standard found in 327 IAC 2-1.3-3(b) applies to surface waters of the state where the existing quality for a parameter is better than the water quality criterion for that parameter established in 327 IAC 2-1-6 and 327 IAC 2-1.5. These surface waters are considered high quality for the parameter and this high quality shall be maintained and protected unless the commissioner finds that allowing a significant lowering of water quality is necessary and accommodates important social or economic development in the area in which the waters are located. IDEM implements the Tier 2 antidegradation standard for regulated pollutants with numeric water quality criteria quality adopted in or developed pursuant to 327 IAC 2-1 and 327 IAC 2-1.5 and utilizes the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6. Total residual chlorine is a Tier II pollutant.

According to 327 IAC 2-1.3-1(b), the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6 apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity subject to the Clean Water Act, including a change in process or operation that will result in a significant lowering of water quality.

The following antidegradation determination is based on 327 IAC 2-1.3. The general permit for discharges of petroleum products terminals wastewater is based on the best professional judgment of the best available treatment in accordance with 327 IAC 5-5-2 and Indiana water quality standards. IDEM has determined that the proposed new or increased loading for total residual chlorine is exempt from the antidegradation demonstration requirements of 327 IAC 2-1.3-5 as provided for under 327 IAC 2-1.3-4(a) because the new discharge will result only in a short-term, temporary (not to exceed twelve (12) months) lowering of water quality.

## Wastewater Characterization

The pollutants expected to be discharged to the receiving stream from a petroleum products terminal include Oil & Grease, TSS, Total VOC, Total Cyanide, TOC, Ammonia as (N), Benzene and Lead . The purpose of issuing the NPDES permit to facilities discharging petroleum products terminals wastewater 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. These parameters shall be limited and monitored for facilities regulated by this general permit to ensure the proper operation of these systems and the best management practices being employed to control the wastewater being discharged.

The general permit imposes effluent limits based on treatment technology and water quality standards. The effluent limits are not based upon federal effluent guidelines.

## **Eligibility**

"Wastewater discharge associated with petroleum products terminals" means the discharge from any conveyance, but not limited to, storage tanks and on-site pipelines which have been used for the storage and or transfer of crude oil or liquid petroleum hydrocarbons.

Pursuant to 327 IAC 15-2-9(b)(1)(A), applicable requirements contained in this article must be adequate to ensure compliance with the water quality standards contained in 327 IAC 2-1 and 327 IAC 2-1.5. Existing petroleum products terminals may contain crude petroleum, petroleum refined products, or liquid petroleum products. Pollutants which have numeric water quality criteria are not expected to be present due to the source and nature of this discharge. If a substance is found to be present in the discharge which shows a reasonable potential to exceed water quality standards, then that facility will be required to obtain an individual NPDES permit.

The general permit regulates up to three potential wastewater sources from the petroleum products terminal: storm water runoff, hydrostatic testing water for the storage tanks or on-site pipelines, and tank bottom water. All of these are intermittent types of discharges and some occur on a very infrequent basis.

## G. When to Apply

State NPDES rules require individual permit applications to be filed at least 180 days prior to the commencement of the activity. The current NPDES general permit-by-rule (327 IAC 15-9) 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, the following time frames are proposed:

a) New Facility: For a new facility, an NOI shall be submitted at least thirty (30) days before any discharges of petroleum products terminals wastewater.

- b) For a facility that has existing, effective coverage under the former general permit (327 IAC 15-9), on the effective date of this general permit, the existing coverage shall automatically be extended provided that the permittee takes one of the following actions within ninety (90) days following the date that the Commissioner makes the NOI form available to the permittee.
  - 1) The permittee submits a new NOI in accordance with Section 4.0 of this general permit to affirm it intends to comply with the requirements of this new general permit;
  - 2) The permittee notifies IDEM in writing of its intent to terminate general permit coverage in accordance with Section 5.0 of this general permit; or
  - 3) The permittee submits an individual NPDES application or modification to IDEM for the existing discharge permitted by the former general permit. In such cases, the general permit coverage will remain in effect until the effective date of coverage under an individual NPDES permit.
- c) For subsequent renewals of general permit coverage under this general permit, an NOI shall be submitted not less than ninety (90) days before the permit expires. If, upon review of the conditions and requirements of the reissued permit, the applicant determines that coverage under said permit is not appropriate for the site, he/she may, within 90 days, withdraw the NOI and submit either an application for an individual NPDES permit, or a Notice of Termination (see section 5.0 of this permit).
- d) In the case of a transfer of ownership an NOI must be submitted not less than thirty (30) days before the transfer. Additional requirements for the transfer of general permit coverage are found in Section 6.2 of this general permit.

#### **H. Permit Conditions:**

# 1) Effluent 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.

Parameters regulated under the existing permit include flow, oil & grease, pH, TSS, Total Residual Chlorine, Total VOC, TOC, Ammonia as (N), Benzene, Total Cyanide and Lead. These are the baseline effluent limitations and monitoring requirements which are required of all discharges of petroleum products terminals wastewater. However certain parameters are only applicable to the discharge of tank bottom water.

a) Flow\_is a standard parameter to be monitored in all NPDES permits. As in the general permit-by-rule, the requirement to report both the monthly average and daily maximum flows for each month has been retained. 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) pH** is included in the general permit to ensure that the discharge will not violate Indiana water quality standards. The pH limits are 6.0 to 9.0 standard units.
- c) Oil and Grease The daily maximum effluent limitation of 15 mg/l and monthly average of 10 mg/l are 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(a) that prohibits a visible oil sheen on receiving waters. The monitoring frequency for this parameter is twice monthly. The effluent limitations and monitoring requirement for Oil & Grease is the same as that which exists in the current general permit-by-rule, 327 IAC 15-9.
- d) Total Suspended Solids (TSS) TSS is limited to 30 mg/l as a monthly average and 45 mg/l as a daily maximum. 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) and 327 IAC 2-1-6(a). The monitoring frequency for this parameter is twice monthly. The effluent limitations and monitoring and monitoring requirements for TSS is the same as that which exists in the current general permit-by-rule, 327 IAC 15-9.
- e) Total Residual Chlorine (TRC) is limited to a daily maximum of 0.02 mg/l. This limitation is based on Indiana water quality standards. This parameter is included in the event that a potable water supply is utilized as the source water for the hydrostatic test water. The purpose of adding total residual chlorine limits is to acknowledge the potential use of potable water and to ensure that water quality standards are met at the discharge whenever it is used as the source water. This general permit does not authorize the applicant to introduce chlorine for treatment of the source water or any wastewater discharges.
- f) Total VOC, TOC, Ammonia as (N), Benzene, Total Cyanide, and Lead. These monitoring parameters are retained from the general permit by-rule because they are believed to be present in the discharges of tank bottom water. This permit proposes to continue to require the permittee to monitor only for these parameters on days when tank bottom water discharges, which is typically a rare occurrence.
- g) Total Flow. An additional reporting requirement is being added to require the permittees to monitor and report the total flow value for the month in units of million gallons (mgal). This requirement has actually 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.

## 2. 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.

## 3. Monitoring and reporting requirements will be as follows:

Monitoring requirements for Flow, Oil & Grease, and TSS are set at 2 x Monthly. Grab samples of the Oil & grease and TSS shall be taken of the hydrostatic test water being discharged as it leaves the pipeline or tank 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. The pH shall be sampled once by grab sample.

Total flow volume for the month must be calculated once monthly. The permittee is required to complete and submit federal Discharge Monitoring Reports (DMRs) and state Monthly Monitoring Reports 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 enroll in the NetDMR program for the electronic submittal of the federal Discharge Monitoring Reports and the state Monthly Monitoring Report forms in lieu of submitting them via U.S. Mail. When approved by IDEM, the permittee may use this process for submitting reports in lieu of submitting paper copies of the reports to IDEM.

## I. Spill Response and Reporting Requirement

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. Storm Water Pollution Prevention Plan (SWP3) and Best Management Practices (BMPs)

Since this general permit authorizes storm water discharges associated with industrial activity that are subject to regulation under 40 CFR 122.26, IDEM has

incorporated certain specific provisions from EPA's Multi-sector General Permit into this general permit with regard to these discharges. Sections 7.0 and 8.0 of this general permit include Best Management Practices and Storm Water Pollution Prevention Plan requirements that are appropriate for these types of facilities.

#### K. 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 for this type of general permit. Once a person is approved for coverage under a general permit, they are also subject to annual operating fees. These annual fees are set by statute (IC 13-18-20).

## L. Re-opening 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.

#### M. Permit Term

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

### N. 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 forms, Notice of Termination 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.