National Pollutant Discharge Elimination System
NPDES FACT SHEET for
Renewal of General NPDES Permit ING340000
Petroleum Products Terminals
September 11, 2020
Final: October 22, 2020

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Existing Permit Information:	Permit Number: Existing facilities under ING340000 have tracking numbers using the following format ING340xxx (to be retained). Expiration Date: The current general NPDES permit has an expiration date of 10/31/2020.
Source Location:	State-wide
Receiving Water:	All waters of the state of Indiana, except for Outstanding State Resource Waters and Outstanding Natural Resource Waters
Proposed Action:	Renewal of the first administrative General NPDES permit which was issued in 2015. This proposal is to renew this permit for a new five-year term.
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 General NPDES 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 wastewater from petroleum products terminals so that the public health, existing uses, and aquatic biota are protected.

"Petroleum products terminal" (PPT) is defined as an area where petroleum products are supplied by pipeline or barge; where petroleum products are stored in aboveground tanks; and/or where petroleum products are transferred to trucks for transport to other locations. These typically have a primary SIC code of 5171, but other SIC codes may also be included.

"Petroleum products terminal wastewater" is defined as 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 runoff, tank bottom water, and water used for hydrostatically testing the storage tanks or onsite pipelines.

General NPDES permits are developed and issued to cover multiple facilities engaged in the same process category instead of requiring an individual NPDES permit for each 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, which was repealed in 2015 and replaced with administrative general NPDES permit ING340000. IDEM is now administering general NPDES permits via a "master" general permit 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.

As such, the discharges from PPTs generally require the same effluent limitations and monitoring requirements. As of July, 2020, there are approximately 37 facilities covered by the general permit. 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 general NPDES permit rather than under individual permits. These discharges are similar in the following ways:

1) They are comprised solely of petroleum products terminals wastewater discharges;

2) They contain used storage tanks, as addressed in this general permit, that contain or have contained petroleum or petroleum-derived liquids.

3) They may utilize chlorinated source water for the fire suppression activities and hydrostatic testing activities at the site.

B. Geographic Area Covered:

This general permit is intended to regulate 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 authorizes discharges to all waters of the State of Indiana, except for Outstanding State Resource Waters (OSRWs) and Outstanding National Resource Waters (ONRWs). PPTs discharging to these receiving waters are required to obtain an individual NPDES permit instead of general permit coverage.

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 wastewater from petroleum products terminals. 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:

1) discharges directly to or into a tributary of 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);

2) discharges to a receiving water when the discharge results in an increase in the ambient concentration of a pollutant which contributes to the impairment of the receiving water for that pollutant as identified on the current 303(d) list of impaired waters;

3) 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;

4) discharges resulting from the cleaning of tanks and/or pipelines.

5) storm water discharges associated with construction activity;

6) discharges to combined or sanitary sewer systems;

7) discharges that are commingled with hazardous wastes or hazardous materials;

8) discharges of domestic or sanitary wastewater; and

9) discharges for which the Commissioner requests an individual permit application.

E. Application for Coverage

This general permit proposes to provide coverage for any facility with discharges composed entirely of wastewater from petroleum products terminals 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 fully completed Notice of Intent form (State Form 55919). 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.

Due to the nature of the discharges regulated by this general permit, several new parameters are being included in the Effluent Characterization section of the 2020 proposed NOI letter. These include: Total BTEX, Naphthalene, Chemical Oxygen Demand (COD), Total Organic Carbon, PAHs, and Total VOCs.

F. 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 General NPDES permit (ING340000) requires an NOI to be filed at least thirty (30) 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 2015 general permit, the existing coverage shall automatically be extended provided that the permittee has filed a renewal NOI prior to the expiration date of that permit. The permittee must then also submit a new NOI in accordance with Section 4.0 of this general permit within ninety (90) days following the date the Commissioner makes the new NOI form available to the permittee to affirm that he or she, as a Responsible Official of his/her company, intends to comply with the requirements of this new general permit. Alternatively the permittee may submit 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.

G. Antidegradation Evaluation

Nature of the Discharge

Petroleum products terminals may store crude petroleum, refined petroleum products, or liquid petroleum products. The general permit regulates three potential wastewater sources from the petroleum products terminal: storm water runoff from the diked containment areas at the terminal, hydrostatic testing water for the storage tanks or on-site pipelines, and tank bottom water. All of these are intermittent types of discharges and occur on a very infrequent basis.

The pollutants of concern from a petroleum products terminal include oil & grease, TSS, total VOC, total cyanide, TOC, ammonia (as N), benzene, BTEX, naphthalene, PAHs, and lead. Total residual chlorine (TRC) may also be present in the discharge if it is present in the source water. The purpose of issuing the NPDES permit to facilities discharging petroleum products terminals wastewater is to ensure that the discharge to the receiving water 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/or monitored for facilities regulated by this general permit to ensure the proper operation of these systems and that best management practices are 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 Limitation Guidelines.

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: benzene, naphthalene, total residual chlorine (TRC), Oil & Grease, total suspended solids (TSS), and Total BTEX.

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 or 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 or 327 IAC 2-1.5 and utilizes the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6. Applicable water quality criteria are available for the following regulated pollutants included in this general permit: total residual chlorine (TRC), benzene, and naphthalene.

The effluent limitations for benzene and naphthalene which are proposed in this general permit renewal are intended to address pollutants which are already likely to be present at these sites. The 2015 permit authorizes the discharge from this activity (the discharge of tank bottom water or the discharge from hydrostatic testing of existing storage tanks). The proposed effluent limitations are based on best professional judgment of the best available treatment in accordance with 327 IAC 5-5-2 and are more stringent than the water quality-based effluent limits (WQBELs) for these same parameters. Some form of advanced wastewater treatment, such as granular activated carbon treatment will be necessary in order to meet these effluent limitations.

The following table shows a comparison of the most stringent applicable water quality criterion for benzene and naphthalene, the daily maximum WQBELs based on the most stringent applicable criterion, calculated without the benefit of a mixing zone to demonstrate the most protective limit, and the technology-based effluent limits (TBELs) using best professional judgment (BPJ) and best available technology (BAT):

	Water Quality Criterion (µg/l)	Daily Maximum Effluent Limitations (µg/l)	
	WQC	WQBEL	TBEL
Benzene	98	160	5
Naphthalene	26	43	10

The most stringent of the limits for each pollutant, based on either the water quality criteria or the treatment technology, is selected to ensure that both proper treatment of the wastewater is occurring and that the discharge is not harmful to aquatic life or human health. In these cases, the TBELs are more stringent than the limits based on water quality criteria.

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. For discharges covered under the existing general permit, the inclusion of new limits for the regulated pollutants benzene and naphthalene is not the result of a deliberate activity taken by a facility, but rather additional restrictions being placed by IDEM on pollutants already believed to be present in these discharges. Therefore, for existing dischargers, this general permit

does not propose to establish a new or increased loading of the regulated pollutants benzene and naphthalene, so the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6 do not apply to these regulated pollutants.

For a new facility being covered under this general permit, Tier 2 antidegradation was considered for the regulated pollutants TRC, benzene and naphthalene. TRC is limited in this general permit due its potential presence in the source water. The general permit does not otherwise authorize the applicant to introduce chlorine for treatment of the source water or any wastewater discharges. The TRC limit included in this general permit is the daily maximum WQBEL for TRC which is equal to the limit of detection (LOD) but less than the LOQ. Compliance will be demonstrated if the observed effluent concentrations are less than the LOQ. IDEM considers such compliance requirements to satisfy antidegradation for TRC.

For benzene, the TBEL of 5 µg/l as a daily maximum is less than 10% of the most stringent applicable water quality criterion. Therefore, the permit establishes a new loading of benzene that is less than a de minimis lowering of water quality under 327 IAC 2-1.3-4(c)(1)(A) and antidegradation is satisfied. For naphthalene, the TBEL of 10 µg/l as a daily maximum is equal to the LOQ. IDEM considers compliance with the LOQ to satisfy antidegradation for naphthalene.

The following antidegradation determination is based on 327 IAC 2-1.3. The effluent limitations for Total BTEX contained in the general permit for discharges of petroleum products terminals wastewater are based on best professional judgment of the best available treatment in accordance with 327 IAC 5-5-2 and the Indiana Tier 1 antidegradation standard. The effluent limits for TRC are based on protection of water quality and the effluent limits for benzene and naphthalene are based on best professional judgment of the best available treatment in accordance with 327 IAC 5-5-2. Such activities are typically of an intermittent nature, normally with durations lasting no more than several days each calendar year. IDEM concludes that the Tier 2 antidegradation standard has been met for total residual chlorine, benzene and naphthalene.

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.

The effluent parameters regulated under the 2015 permit include flow, oil & grease, pH, TSS, Total Residual Chlorine (TRC), Total VOCs, Total Organic Carbon (TOC), ammonia (as N), 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 in the 2015 general permit, several of the parameters were only applicable to the discharge

of tank bottom water and hydrostatic testing of storage tanks. This resulted in a very limited set of parameters being monitored in the storm water runoff from these sites. IDEM is proposing some changes to the effluent limitations and monitoring requirements in the 2020 renewal of the general permit.

The main table of pollutant parameters in the 2015 permit (Table 1) is confusing and only provides a very limited set of parameters regardless of the discharge scenario. Based on staff review of the federal and state storm water rules, as well as EPCRA Section 313 Reporting Requirements, IDEM is proposing to add several new parameters to both the draft general permit and the NOI wastewater characterization requirements.

The effluent tables in Section 2.1 of the permit have also been updated and restructured to provide better clarity of the effluent limitations and monitoring requirements which are applicable to the various discharge scenarios.

Storm Water Discharges Associated With Industrial Activity

In Section 2.1 of the permit, Tables 1 and 2 reflect the effluent limitations and monitoring requirements for the discharges of storm water runoff associated with industrial activity. Several new pollutants of concern are being added to the monitoring requirements for this type of discharge, including: Benzene, Total BTEX, Naphthalene, Chemical Oxygen Demand (COD), Ammonia as (N), and Lead. IDEM reserves the right to include additional pollutants of concern in the Notice of Coverage letter based upon review of the NOI and other facility-specific information.

a) **Flow** is a standard parameter to be monitored in all NPDES permits. This parameter is required of all NPDES permits and is included in this permit in accordance with 327 IAC 5-2-13(a)(2). Flow monitoring is required daily.

b) **Total Flow** is to be monitored and reported each month in millions of gallons (mgal). This requirement is included to assist IDEM in properly assessing the annual permit operating fees set forth under IC 13-18-20.

c) **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. The monitoring frequency for this parameter for storm water runoff is once monthly.

d) **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 effluent limitations and monitoring requirements for Oil and Grease is the same as that which exists in the current general permit, ING340000, except that the monitoring frequency for this parameter is proposed to be reduced from twice monthly to once monthly.

e) **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) for 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 requirements for TSS is the same as that which exists in the current general permit, ING340000, except that the monitoring frequency for this parameter is proposed to be reduced from twice monthly to once monthly.

f) **Total Residual Chlorine (TRC)** concentrations are 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.

g) **Benzene, Total BTEX, Naphthalene, Chemical Oxygen Demand (COD), Ammonia as (N), and Lead** are new pollutants of concern being added to this general permit specifically for the storm water monitoring requirements. The addition of COD is based upon the 2015 USEPA Multi-sector general permit requirements for Petroleum Bulk Terminals. The remaining parameters are added based upon the EPCRA Section 313 reporting requirements and BPJ. Monitoring is required once monthly by grab sample.

Discharges from Hydrostatic Testing of New Storage Tanks or Pipelines and/or Those which have been Certified Clean

In Section 2.2 of the permit, Tables 3 and 4 reflect the effluent limitations and monitoring requirements for the discharges of hydrostatic testing of new storage tanks or new onsite pipelines. If a permittee can certify as clean an existing tank needing to be hydrostatically tested, then the tank or pipeline may also qualify for these tables of limits. The previous (2015) general permit only provided one set of effluent limits and monitoring requirements for hydrostatic testing activities, which assumed that all vessels had previously contained product. Based upon a request for a reduced set of requirements for the testing of new tanks and pipelines, IDEM has created these new tables to reflect the appropriate effluent limits and monitoring requirements.

h) **Flow** is a standard parameter to be monitored in all NPDES permits. This parameter is required of all NPDES permits and is included in this permit in accordance with 327 IAC 5-2-13(a)(2). Flow monitoring is required daily.

i) **Total Flow** is to be monitored and reported each month in millions of gallons (mgal). This requirement is included to assist IDEM in properly assessing the annual permit operating fees set forth under IC 13-18-20.

j) **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. The monitoring frequency for this parameter for hydrostatic testing discharges is once daily by grab sample.

k) **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 daily by composited grab sample.

l) **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) for 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 daily by grab sample. The effluent limitations and monitoring requirements for TSS is the same as that which exists in the current general permit, ING340000.

m) **Total Residual Chlorine (TRC)** concentrations are 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. Monitoring for TRC is required daily by grab sample.

Discharges of Tank Bottom Water and/or from Hydrostatic Testing of Existing Storage Tanks or Pipelines

In Section 2.3 of the permit, Tables 5 and 6 reflect the effluent limitations and monitoring requirements for any discharges of tank bottom water or hydrostatic testing of existing storage tanks or onsite pipelines (i.e. those which have previously contained petroleum products). These requirements are the same as those in the previous (2015) general permit except that five new parameters have been added to the list of pollutants to be monitored. These additional pollutants of concern are likely to be applicable regardless of the type(s) of petroleum products which may be stored at these facilities. Effluent limitations have been added to the permit based upon BAT/BPJ. The monitoring frequency for any discharges of this type is daily by grab sample. IDEM reserves the right to

include additional pollutants of concern in the Notice of Coverage letter based upon review of the NOI and other facility-specific information.

The same effluent limitations and monitoring requirements for flow, Total Flow, pH, oil and grease, TSS and TRC are the same as those described in items (h)-(m) above.

n) **Total VOC, TOC, ammonia as (N), total cyanide, and lead -**These pollutants are included as monitor-only requirements for discharges of tank bottom water and/or for any discharges of hydrostatic test water involving a storage tank or onsite pipeline which previously contained product. These monitor-only requirements are carried forward from the 2015 general permit and are continued to be required on a daily basis when these types of discharges are occurring.

o) **Benzene :** Benzene is being added as an indicator of the volatile organic compounds present in most petroleum products. The benzene limitation of 5 micrograms per liter (5 µg/l) has been established based upon Best Available Technology (BAT) in accordance with 327 IAC 5-5-2. This parameter shall be monitored daily by grab sample.

p) **Chemical Oxygen Demand –** Monitoring and reporting requirements for COD are proposed to be added to this general permit applicable to this discharge. Monitoring shall occur on a daily basis by grab sample.

q) **Naphthalene**: Effluent limitations and monitoring requirements for naphthalene are included to the general permit in the event that diesel fuel or kerosene is present. The Naphthalene limitation of ten micrograms per liter (10 µg/l) is established based upon Best Professional Judgment of the Best Available Technology (BPJ/BAT) in accordance with 327 IAC 5-5-2. The monitoring requirements for this pollutant may be waived or reduced (via an official IDEM approval letter) if the wastewater characterization data supports the waiver or reduction.

r) **Polynuclear Aromatic Hydrocarbons (PAHs)**: Monitoring for this parameter has been added to this general permit based on BPJ. The monitoring shall occur on a daily basis by grab sample.

s) **Total BTEX:** The Total BTEX limitation of 100 micrograms per liter (100 µg/l) is established based upon Best Professional Judgment of the Best Available Technology (BPJ/BAT) in accordance with 327 IAC 5-5-2.
BTEX is the sum of the four alkyl benzenes: benzene, toluene, ethylbenzene, and total xylenes (i.e., the sum of the ortho, para, and meta isomers of xylene). Under aerobic conditions, when mixtures of BTEX are present, toluene usually degrades first, followed by xylene, and lastly benzene and ethylbenzene, if they are degraded at all. BTEX compounds are present at relatively high concentrations in light distillates (e.g., approximately 2% ethylbenzene, 5% benzene, and 11-12% toluene and xylenes). However, the composition of petroleum products that contain BTEX is highly variable, and

for some petroleum products, any one of the four BTEX compounds could be the dominant chemical of concern.

2. Narrative Water Quality Based Limits

The narrative water quality standards contained in 327 IAC 2-1-6(a) and 327 IAC 2-1.5-8(b) have been included in this general permit to ensure that the narrative water quality criteria are met. The 2015 general permit inadvertently omitted the requirement that the discharge shall not cause the receiving water(s) outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants. This provision has been included in the 2020 general permit renewal.

3. Monitoring and reporting requirements will be as follows:

The proposed monitoring frequencies are discussed previously in this Fact Sheet. Grab samples for oil & grease and TSS shall be taken of the hydrostatic test water as it leaves the pipeline or tank being tested or after receiving any 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.

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.

Permittees must 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. For more information about NetDMR, see www.IN.gov/IDEM/cleanwater/2422.htm.

I. Spill Response and Reporting Requirement

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 five (5) days of the permittee becoming aware of the incident and may be submitted by U.S. Mail or by email in which case the reports must be sent to: 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. 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. These fees are also applicable to NOIs 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). For more information, please see https://www.IN.gov/IDEM/cleanwater2367.htm. Both the application fees and annual fees may be remitted by check via U.S. mail or may be remitted via IDEM's online payment portal at https://www.in.gov/idem/6973.htm, which can accept e-checks and some credit cards.

L. Reopening Clauses

This general permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing

1. to comply with 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, if 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.

2. to incorporate any of the reopening clause provisions cited at 327 IAC 5-2-16.

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 General NPDES 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.

O. Proposed Changes to the General Permit

IDEM has updated the overall general permit template to ensure that the language reflects current federal rules and the current state rules and statutes. The following is a summary of the changes which IDEM is proposing in this general permit compared to the 2015 final general permit:

1) The eligibility requirements in Section 1.3 were expanded to further restrict the types of discharge activities which can be authorized under this general permit.

2) The 2015 permit allowed for some discharges of storm water to be authorized when the discharge is directly to an Outstanding State Resource Water, because such a provision existed in 327 IAC 15-6. This provision has been removed because it conflicts with the statutory requirements in IC 13-18-3-2(p) which only allows for such discharges if they are short-term temporary discharges.

3) Section 2.1 of the 2015 permit included a single table of effluent limits and monitoring requirements (Table 1) which attempted to set forth the varying requirements for different discharge scenarios: discharges of storm water runoff, and discharges of hydrostatic test water and/or tank bottom water. In this draft permit we have set forth 3 sets of tables in Sections 2.1, 2.2, and 2.3 to more clearly show which parameters are required to be monitored for each type of wastewater discharge. In both Sections 2.1 and 2.3 IDEM has included a listing of pollutants of concern, but has also included a provision to potentially add other parameters to the Notice of Coverage letter, as may be necessary, based upon review of the NOI and other facility-specific information.

4) The Narrative Water Quality Standards were moved from Section 2.2 to 2.4 of the permit. A new paragraph (f) was added to Section 2.4 of the permit to specify that the discharge shall not cause toxicity outside of the mixing zone.

5) Section 3.0 of the permit has been updated to reflect the requirement for all NPDES permittees to enroll in NetDMR for electronic submittal of the monthly monitoring reports.

6) A new Section 6.11 has been added to the permit to include future electronic reporting requirements due to federal e-reporting requirements.

7) New Sections 6.12 thru 6.15 have been added which represent standard permit conditions for NPDES permits which was inadvertently omitted from the 2015 permit.

8) A new Section 6.15 has been added which includes definitions for various terms used in the general permit.

9) Section 4.0 of the permit and the NOI form have been updated to require a flow schematic diagram of the permitted site.

10) The NOI has been updated to request email addresses if available for the listed Potentially Affected Persons who require notifications under IC 4-21.5.

11) The certification statement on the NOI form has been updated to include language from Title 13-30 of the Indiana Code.

P. POST PUBLIC NOTICE ADDENDUM and IDEM RESPONSES to COMMENTS (October 23, 2020)

The draft NPDES general permit renewal for ING340000 was made available for public comment from September 14, 2020 through October 14, 2020 as part of Public Notice No. 20200914-ING340000-RD. A legal ad notice was published in the Indianapolis Star on September 14, 2020 and a notice was also posted on IDEM's website at https://www.IN.gov/idem/5474.htm, under the Statewide heading at https://www.IN.gov/idem/6777.htm for the duration of the comment period. The version posted on our website contained the entire draft permit renewal document along with the NPDES fact sheet and the draft revised Notice of Intent form. Copies of the draft permit and related documents were also sent out to the existing general permittees via e-mail.

During this official public comment period, IDEM received comments from Mr. Jarrett Keck representing the Explorer Pipeline Hammond Facility on October 8, 2020 and from Mr. Norman Phillibert of MPLX Terminals LLC on October 13, 2020. IDEM also received a nonobjection letter from Mr. Stephen Jann of the U.S. EPA Region 5 with three recommended changes on September 30, 2020. These comments and recommendations and this Office's corresponding responses are summarized below. Any changes to the permit and/or Fact Sheet are also discussed below.

Comment #1 (U.S. EPA):

NPDES regulations at 40 CFR 122.44(i) and (iii) state that NPDES permits must include monitoring requirements to assure compliance with permit limitations, including monitoring for noncontinuous discharges as determined to be necessary. Section 2 of the draft permit requires the permittee to control discharges to meet narrative water quality standards. The permit incorporates those standards by reference to 327 IAC 2-1-6 and 2-1.5-8 and expressly in Section 2.2 a) through f). However, the draft permit does not include a requirement to monitor for these conditions. EPA recommends including a requirement in Section 2 to report outfall monthly observations of the outfall as "yes" or "no" where "yes" means the observation was made and "no" if observation requirement was not completed.

Response #1:

IDEM does not currently require such reporting for any of our NPDES permits, either individual or general permits. However, we will take this recommendation under advisement and may implement visual monitoring and reporting requirements in future NPDES permits.

Comment 2 (U.S. EPA):

In conjunction with the yes/no reporting recommended above, the permit should include a requirement to report whether the observation detected any unusual characteristic of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, turbidity, or deposits) within five days of the observation (or some other appropriate timeframe determined by IDEM), and steps taken to remedy the unusual characteristic.

Response #2:

See Response #1.

Comment #3 (U.S. EPA):

Throughout the permit IDEM inconsistently uses the terms "receiving streams" and "waters". EPA recommends IDEM revise the permit to reference "water(s)" in order to capture all regulated waters that may receive discharge from this general permit and to make the permit consistent with the prohibition in Section 2.2 that protects narrative water quality standards.

Response #3:

IDEM concurs. Since IDEM staff was advised of this wording inconsistency prior to the public notice of the draft general permit, this edit had already occurred. Therefore, no changes to the general permit are necessary.

Comment #4 (Mr. Keck):

We are unclear why COD, Ammonia, Lead, Benzene, total BTEX, Naphthalene should be applied to storm water discharges. The facility does not co-mingle tank bottom water with stormwater nor applies tank bottom water to surface soil. Further there is no water treatment currently occurring at the facility. These parameters are most likely to be present under conditions referenced in Paragraph 2.3 "Numeric Discharge Limitations for Discharges of Tank Bottom Water or Hydrostatic Test Water from Existing Tanks and Existing on-site Pipelines, Table 5. We ask for these parameters to be removed from Table 1 as they are more appropriately referenced in Table 5.

In reference to this comment, it should be noted that the Explorer Pipeline Hammond Facility is a Petroleum Product Breakout Station not a Petroleum Product Terminal. No loading or unloading facilities are located at this property. Breakout stations are used to receive and store refined product transported by pipeline for re-injection and continued transportation by pipeline.

Response #4:

When preparing the draft renewal of the general permit, IDEM staff researched various sources of information to determine an appropriate set of effluent limitations and monitoring requirements. Petroleum Product Terminals are not subject to Federal Effluent Limitation Guidelines and we sought to ensure that we had a good spectrum of pollutants based upon the potential contaminants one might find in the discharge(s) from these facilities. This research included a review of the general permits for similar discharges from other states. We also looked at some of the requirements we typically include in individual NPDES permits for these types of discharges. However, we also decided to include a provision to allow for reductions for some of the monitoring requirements based upon site-specific information. Normally we would not incorporate such variability in a general permit, but we believe it is a reasonable thing to offer the general permittees in this category.

Comment #5 (Mr. Phillibert):

<u>Comments on Table 1</u>

Section 2.1 Numeric Discharge Limitations for Storm Water Discharges Table 1. The draft permit, Table 1, is proposing sampling and analysis to take place once per month. The analytical from the listed parameters measure the effectiveness of the facility's best management practice for pollution prevention. MPLX Terminals does not believe the high monitoring frequency of once per month is necessary in order to measure the effectiveness of the facility's best management practice. In fact, the US EPA Multi-Sector General Permit for Stormwater Discharges

Associated with Industrial Activity requires a quarterly monitoring frequency. We request that IDEM consider using the quarterly monitoring frequency in the final General NPDES Permit.

Response #5 (Mr. Phillibert):

IDEM recognizes that US EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity may have a less stringent monitoring frequency than what we have proposed in this general permit. However, we view that as a recommended minimum frequency for this category of industries. We are willing to consider a less frequent monitoring frequency on a facility-specific basis if sufficient evidence exists to justify it. Each Notice of Coverage letter will set forth the required monitoring which will be determined based upon the information in the NOI and staff's review of compliance and enforcement records. The NOC is subject to appeal by the permittee or a third-party. No changes have been made to the general permit.

Comment #6 (Mr. Phillibert):

Petroleum products terminals are releasing storm water from the storage tank secondary containment areas. The terminals have procedures, inspections, and practices as required by the facility's Spill Prevention Control and Countermeasures Plan to ensure good integrity of the storage tanks and ancillary equipment. In addition, the facility inspects the storm water prior to discharge. As a result of these practices, the water discharge to the outfalls is product free. Table 1 list the required parameters for the monitoring of the storm water. The Oil and Grease, Chemical Oxygen Demand, Benzene, Total BTEX, and Naphthalene parameters are indicators of whether the water is contaminated with petroleum product. The monitoring of oil and grease is sufficient to indicate whether the storm water is contaminated. The Chemical Oxygen Demand, Benzene, Total BTEX, and Naphthalene parameters are thus redundant to the Oil and Grease parameter. MPLX Terminals recommend that Chemical Oxygen Demand, Benzene, Total BTEX and Naphthalene parameters are removed from Table 1.

Response #6:

IDEM disagrees. Oil & Grease monitoring are an inadequate substitute for COD, Benzene, Total BTEX, and Naphthalene. If the storm water is contaminated with petroleum product, we need to know the levels to which the contamination has occurred. However as previously noted in Response #5, the monitoring frequency for these parameters may be adjusted on a facility-specific basis. The applicant may include any requests for special consideration regarding these parameters in the cover letter submitted with the NOI (either as part of the renewal or via a subsequent modification request). Ideally the documentation should

include monitoring data which supports the request. No changes have been made to the general permit.

Comment #7 (Mr. Phillibert):

Table 1 lists lead as a parameter for monitoring. The petroleum products are lead free thus the products being stored at petroleum terminals are lead free. The petroleum terminals can certify that the product stored on site are lead free. MPLX Terminals recommends that the lead parameter be removed from Table 1.

Response #7:

While most petroleum products today are in fact lead-free, we do not have sufficient data in-house at this time to justify the removal of this pollutant from the list of monitoring parameters. If the applicant certifies that all of the product stored on site is lead-free, we will evaluate this information in conjunction with the NOI and compliance review discussed in Response #5. The applicant may include any requests for special consideration regarding these parameters in the cover letter submitted with the NOI (either as part of the renewal or via a subsequent modification request). Ideally the documentation should include monitoring data which supports the request. No changes have been made to the general permit.

Comment #8 (Mr. Phillibert):

Table 1 lists Ammonia (as N) as a parameter for monitoring. Ammonia (as N) is expected for storm water runoff from farms and it is not present in petroleum products secondary containment areas. MPLX Terminals recommend that Ammonia (as N) be removed from Table 1.

Response #8:

We do not have sufficient data in-house at this time to justify the removal of this pollutant from the list of monitoring parameters contained in this general permit. This parameter has been a general permit requirement for this category of dischargers since 1994. However, IDEM will evaluate any information supplied in conjunction with the NOI and the facility-specific compliance review discussed in Response #5. The applicant may include any requests for special consideration regarding these parameters in the cover letter submitted with the NOI (either as part of the renewal or via a subsequent modification request). Ideally the documentation should include monitoring data which supports the request. No changes have been made to the general permit.

Comment #9 (Mr. Phillibert):

Comments on Tables 3 and 4

Section 2.2 Numerical Discharge Limitations for Discharges of Hydrostatic Test Water from New Tanks or New On-site Pipeline Installation Table 3 and Table 4

Tables 3 and 4 require that the listed parameters (flow, oil & grease, total suspended solids, total residual chlorine and pH) be monitored on a daily basis for a hydrostatic test water release from new tanks and new on-site pipeline installations.

Since hydrostatic test is a batch process, we propose that the monitoring frequency be revised to the following:

One sample event is to be taken prior to the water discharge. For discharges that extend beyond 4 hours in duration, a second sample event shall be taken in the last 50% of the effluent. Samples must be collected at a point immediately following the discharge from the vessel and prior to commingling with storm water or the receiving stream.

The title of Table 3 may be revised to include existing tanks and equipment that are certified as clean existing tanks and equipment. See additional comment below."

Response #9:

The procedures that are set forth in the general permit for obtaining flow-weighted and time-weighted samples are the same as what we currently require in our individual NPDES permits. Since these sampling protocols are unchanged from the 2015 general permit, we have determined that these requirements should remain the same for now. We may be willing to consider alternate procedures for procuring these sample results in the future, but this will warrant additional time to study the best practices. No changes have been made to the general permit regarding this comment.

Comment #10 (Mr. Phillibert):

Comments on Tables 5 and 6

Section 2.3 Numeric Discharge Limitations for Discharges of Tank Bottom Water of Hydrostatic Test Water from Existing Tanks and Existing On-Site Pipeline(s) Tables 5 and 6

MPLX Terminals recommend that the monitoring frequency be revised to the following:

One sample event is to be taken prior to the water discharge. For discharges that extend beyond 4 hours in duration, a second sample event shall be taken in the last 50% of the effluent.

Samples must be collected at a point immediately following the discharge from the vessel and prior to commingling with storm water or the receiving stream.

A batch hydrostatic test water of clean existing tanks and pipelines are not in contact with product thus we propose that another table is added for discharges of hydrostatic test water from Existing tanks and Existing On-site Pipelines that are certified clean.

Monitored parameters are Flow, Total Flow, Oil &Grease, Total suspended Solids, and Total Residual Chlorine as listed in Table 3 of the draft permit with a monitoring frequency as follows: One sample event is to be taken prior to discharge. For discharges that extend beyond 4 hours in duration, a second sample event shall be taken in the last 50% of the effluent. Samples must be collected at a point immediately following the discharge from the vessel and prior to commingling with the receiving stream.

The certification of clean existing storage tank and pipeline is that the equipment is product free. The certification may be based on visual and olfactory observation and measurement such as the lower explosion limit measurement that confirms that the tank and/or equipment is product free.

Response #10:

We concur that a tank which has been certified as “clean” should qualify for the more lenient requirements of Section 2.2, Tables 3 & 4 of the general permit, rather than those which we have proposed in Section 2.3, Tables 5 & 6 of the general permit. We have amended the general permit to accommodate this additional source. However as noted in the Response #9 above, we are not making any changes at this time to the sampling protocols for the flow-weighted and time-weighted sampling requirements contained in this general permit.

Additional Changes to the Proposed NPDES General Permit

1. IDEM has also amended the wording in Section 2.2, subsections (b), (d) and (e) of the general permit to include wording which is more accurately reflective of the rule language for the narrative water quality standards. There were several instances where we merely referenced “substances”, but the rule language says “substances, materials, floating debris, oil, scum, or other pollutants”.

2. OWQ Compliance staff has recommended a slight adjustment to the sampling type for Total Flow in Section 2.1 of the general permit. The U.S. EPA ICIS database does not have a matching sampling parameter entitled “Cumulative Recorded Total”. This was the terminology which we had used in the 2015 general permit, however it was determined that the best and closest descriptive parameter available in the ICIS database to

represent this parameter is “Recorder Total”. Therefore, we have changed the sample type accordingly, although the directions in the associated footnote will remain the same. This term has also been updated in Section 6.16 of the general permit which contains terminology definitions.

3. We have also amended Section 4.2, subsection (b) of the general permit to denote the fact that the second NOI is due 90 days from the date that the Commissioner makes the new NOI form available to the permittee(s).