

National Pollutant Discharge Elimination System
DRAFT GENERAL PERMIT FACT SHEET for
Onsite Residential Sewage Discharging Disposal Systems
In Allen County
NPDES Permit No. ING410000
July 24, 2018

Indiana Department of Environmental Management

Office of Water Quality
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| Existing Permit Information: | <u>Permit Number:</u> Existing facilities under 327 IAC 15-14 have general permit tracking numbers using the following format ING4100xx (to be retained). <u>Expiration Date:</u> Under 327 IAC 15-14, there has been no defined general permit term. Under this general permit all permitted facilities will have the same expiration date. |
| Source Location: | Allen County |
| Receiving Stream: | All surface waters of the state of Indiana located in Allen County, except for Outstanding National Resource Waters |
| Proposed Action: | New administrative NPDES general permit to replace NPDES general permit-by-rule 327 IAC 15-14 |
| Source Category | NPDES Minor – Privately-owned |
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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 treated sanitary wastewater from an onsite residential sewage discharging disposal system within the Allen County Onsite Wastewater Management District (hereinafter referred to as the “District”) which has complied with all statutorily-based ordinance requirements. Dischargers who meet the eligibility requirements may obtain coverage under 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 wastewater so that the public health, existing uses, and aquatic biota are protected. "Onsite Residential Sewage Discharging Disposal System" is defined at IC 13-11-2-114.7 as a sewage disposal system that:

- (1) is located on a site with and serves a one (1) or two (2) family residence; and
- (2) discharges effluent offsite.

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 15-14) for discharges of wastewater from onsite residential sewage discharging disposal systems in 2003 as directed by state law. As a result of subsequent 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 are covered under the master general permit will be assigned permit tracking numbers beginning with "ING41" 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 January, 2018, there are approximately 35 residential properties in Allen County with onsite discharging systems which are currently regulated under 327 IAC 15-14. 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. Also IDEM was required by state statute to create a general permit to cover such discharges. These discharges are similar in several ways:

- 1) They are comprised solely of treated sanitary wastewater from Allen County individual residences with failing septic systems;
- 2) The volume of wastewater from each affected residence is 1,000 gallons per day, or less; and
- 3) The homeowners have complied with all District requirements and have evaluated and ruled out all other disposal methods in accordance with IC 13-18-12-9.

Except as provided in IC 13-18-12-9 (c), the point source discharge of sewage, treated or untreated, from a dwelling or its associated residential sewage disposal system to waters is prohibited. IC 13-18-12-9 (c) says the point source discharge of treated sewage from an onsite residential sewage discharging disposal system to waters is permitted if:

- 1) the local health department for the jurisdiction in which the system is located issues an operating permit for the system under IC 13-18-12-9 (d); and

2) the discharge is authorized under a general permit issued under 40 CFR 122.28.

IC 13-18-12-9 (d) specifies the following: In a county onsite waste management district established under [IC 36-11](#) that performs all the functions related to onsite waste management listed in [IC 36-11-2-1](#), the local health department for the jurisdiction in which the system is located may issue an operating permit for an onsite residential sewage discharging disposal system if the system is installed to repair a sewage disposal system that fails to meet public health and environmental standards and if:

- 1) the local health department adopts procedural rules for monitoring onsite residential sewage discharging disposal systems in the jurisdiction, including fines or penalties, or both, for noncompliance, to ensure that:
 - A) required maintenance is performed on the systems; and
 - B) the systems do not discharge effluent that violates water quality standards;
- 2) the local health department certifies, with respect to the system for which the permit is issued, that:
 - A) the system is capable of operating properly;
 - B) the system does not discharge effluent that violates water quality standards;
 - C) an acceptable septic tank soil absorption system cannot be located on the property served by the system because of:
 - i) soil characteristics of the property
 - ii) size of the property; or
 - iii) topographical conditions of the property;
 - D) the system:
 - i) was properly installed by a qualified installer; and
 - ii) provides the best available technology for residential discharging onsite sewage disposal systems; and
 - E) the local health department has:
 - i) investigated all technologies available for repair of the sewage disposal system that fails to meet public health and environmental standards other than the use of an onsite residential sewage discharging disposal system; and
 - ii) determined that an onsite residential sewage discharging disposal system is the only possible technology that can be used to effect a repair of the sewage disposal system that fails to meet public health and environmental standards without causing unreasonable economic hardship to the system owner; and

- 3) the system for which the permit is issued cannot be connected to a sanitary sewer because:
 - A) there is not a sanitary sewer connection available;
 - B) the sanitary sewer operator refuses connection; or
 - C) unreasonable economic hardship would result to the system owner because of:
 - i) the connection requirements of the sanitary sewer operator; or
 - ii) the distance to the sanitary sewer.

B. Geographic area covered:

This general permit is intended to potentially cover any discharge of treated sanitary wastewater from onsite residential sewage discharging disposal systems within the boundaries of Allen County Indiana.

C. Receiving waters:

This general permit will authorize discharges to all surface waters of the State of Indiana within Allen County, Indiana, except for those described in Part D of this fact sheet.

D. Discharges Not Authorized by This General Permit

Discharges covered under this general permit will be from private residences with onsite residential sewage discharges that are solely comprised of treated sanitary 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 into waters that are designated as an Outstanding National Resource Water (ONRW) defined at IC 13-11-2-149.5; and
- b) 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.

E. Application for Coverage

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

The District must submit a Notice of Intent (NOI) to IDEM to seek coverage under this general permit. Each homeowner within the District who has an onsite residential sewage discharging disposal system and who has complied with all requirements of the District (which includes submitting an NOI to the District) will then automatically be covered by this general permit.

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: CBOD5 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. Ammonia-nitrogen and Total Residual Chlorine are Tier II pollutants.

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 effluent limitations in the general permit for discharges of wastewater from an Onsite Residential Sewage Discharging Disposal System are based on the Small Sanitary

Discharger Rule, 327 IAC 5-10-5. The only exception is the effluent limitation for Dissolved Oxygen (D.O.). Concerns were raised about the ability of these small treatment systems to consistently achieve the D.O. limits set forth in that rule. Consequently alternative limits were derived based upon the best professional judgment of the best available treatment in accordance with 327 IAC 5-5-2 and Indiana water quality standards.

There are approximately 35 existing residences which are currently covered by this general permit. It is possible that additional residential sites could become future permittees as determined by the District. If this occurs, the homeowner must follow a rigorous process to first evaluate and eliminate all other treatment and disposal alternatives. Therefore any proposed new or increased loading for ammonia-nitrogen and/or total residual chlorine would be necessary in order to implement a corrective action to abate a polluted condition as set forth in IC 13-18-7. As a result IDEM has determined that these residents of the District shall be exempt from the antidegradation demonstration requirements of 327 IAC 2-1.3-5 because any new or increased loading of the regulated pollutants would meet the provisions of subsection (b)(2)(C)(4).

Wastewater Characterization

The pollutants expected to be discharged to the receiving stream from an Onsite Residential Sewage Discharging Disposal System include CBOD₅, Total Suspended Solids, Ammonia-nitrogen, Total Residual Chlorine, *E. coli*, pH and Dissolved Oxygen. The purpose of issuing the NPDES permit to these entities 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

The point source discharge of treated sewage from a residential sewage disposal system is prohibited unless the District has:

- a. determined that an acceptable septic tank soil absorption system cannot be located on the property because of soil characteristics; lot size; or topographical conditions,
- b. investigated all available technologies for repair of the existing soil absorption system,
- c. verified that the system cannot be connected to a sanitary sewer, and

- d. certified that the onsite residential sewage discharging disposal system for which this permit is issued is capable of operating properly and does not discharge effluent which violates water quality standards.

G. When to Apply

State NPDES rules typically 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 15-14) 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) For all sites that have existing, effective coverage under the general permit-by-rule (327 IAC 15-14), on the effective date of this NPDES general permit, the existing coverage shall automatically be extended provided that the District takes one of the following actions within ninety (90) days following the date that the Commissioner makes the NOI form available to the District.
 - 1) The District shall submit 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 District 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 District 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.
- b) For subsequent renewals of general permit coverage under this general permit, an NOI shall be submitted by the District not less than ninety (90) days before the general permit expires.
- c) New Facility: If a new (previously unpermitted) site is approved by the District after the effective date of this general permit, the District shall submit an amended NOI to IDEM at least fifteen (15) days before any discharges of wastewater, unless a later date is allowed by the Commissioner.
- d) In the case of a transfer of ownership the homeowner is required to fully notify the new owner of the property of the existence of the onsite residential sewage discharging disposal system and the requirements of this general permit. The homeowner shall also promptly notify the District of the change in ownership for the property in order for the discharge authorization to continue. The District is required to provide to IDEM semiannual updates of the current members of the District including locations of the residences with active systems, identification of the homeowners, and their associated contact information pursuant to 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).

Parameters regulated under the existing permit include flow, CBOD₅, TSS, Total Residual Chlorine, Ammonia-nitrogen, Temperature, Dissolved Oxygen, pH, and *E. coli*. Except for temperature, these are baseline effluent limitations and monitoring requirements which are typically required of all discharges of treated sanitary wastewater. The temperature monitoring is required to determine compliance with the Dissolved Oxygen limits.

- 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 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). Flow monitoring is required once monthly and may be estimated.
- 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. This parameter shall be monitored twice annually.
- c) **Carbonaceous BOD₅ (CBOD₅)** is limited to 15 mg/l as a daily maximum. The effluent limit is based upon 327 IAC 5-10-4. Monitoring for this parameter is required twice annually by grab sample. The effluent limitations and monitoring requirements for CBOD₅ is the same as that which exists in the current general permit-by-rule, 327 IAC 15-14.
- d) **Total Suspended Solids (TSS)** is limited to 18 mg/l as a daily maximum. The effluent limit is based upon 327 IAC 5-10-4. Monitoring for this parameter is required twice annually by grab sample. The effluent limitations and monitoring requirements for TSS is the same as that which exists in the current general permit-by-rule, 327 IAC 15-14.
- e) **Total Residual Chlorine (TRC)**. If chlorine is used as a disinfectant, the residual prior to dechlorination shall be maintained at a minimum of 0.5 mg/l at all times. Dechlorination is required such that the concentration of residual chlorine does not exceed the limit of quantification of 0.06 mg/l. The water quality-based effluent limit is set at 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 chlorine is used as the disinfectant. Monitoring for this parameter is required once quarterly by grab sample. The effluent limitations and monitoring requirements for TRC is the same as that which exists in the current general permit-by-rule, 327 IAC 15-14.

- f) **Ammonia-Nitrogen** is limited to 2 mg/l as a daily maximum. The effluent limit is based upon Best Available Treatment technology. Monitoring for this parameter is required twice annually by grab sample. The effluent limitations and monitoring requirements for ammonia-nitrogen are the same as that which exists in the current general permit-by-rule, 327 IAC 15-14.
- g) **Dissolved Oxygen (D.O.)** is limited as a daily minimum value. In the winter the daily minimum which must be attained is 5.0 mg/l. In the summer the dissolved oxygen concentration shall not be less than 4.0 mg/l nor less than fifty percent (50%) of saturation as determined by Table 2 in the permit and for which a corresponding instream temperature reading in Celsius must be taken and recorded.
- h) ***E. coli*** is limited as a daily maximum value of 235 colonies/100 ml. This limit is based on 327 IAC 5-10-6. Monitoring for this parameter is required once quarterly by grab sample. The effluent limitations and monitoring requirements for *E. coli* is the same as that which exists in the current general permit-by-rule, 327 IAC 15-14.

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. Corrective Actions for Effluent Violations:

If the results of any compliance monitoring show an exceedance of an effluent limitation under this section, a confirmation test must be conducted for each exceeded limitation no later than thirty (30) days from the date that the original sample was taken. Results of the confirmation sampling must be submitted to the District as soon as received but in no case later than seven (7) days after receipt of the sampling results. A confirmation test must be conducted every thirty (30) days until the effluent limitation is met.

If two (2) consecutive sampling results, including the confirmation samples, exceed an effluent limitation, the District must submit a corrective action plan to the department within thirty (30) days of receipt of results of the second sample. The plan shall include information on corrective action taken to ensure compliance with each exceeded limitation and a plan to ensure future compliance with the limitation.

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. Fees

The District must remit a \$50 application fee with the initial NOI submittal. IDEM will not require the submittal of annual fees for the entities covered by this general permit.

K. 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.

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 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.