



### NPDES PERMIT PROGRAM OVERVIEW

Prepared by:

**Charles Breitenfeldt,** 

Compliance and Technical Assistance Northwest Regional Office



Heath Dill,

Compliance and Technical Assistance Southwest Regional Office





# Establishment of the National Pollutant Discharge Elimination System (NPDES) Program



#### Background

 In 1972, an amendment to the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), was enacted by Congress to address serious pollution problems affecting the nation's rivers, lakes, and coastal waters.



### Two of the most commonly referenced goals are:

- A national goal of attaining water quality sufficient to enable the nation's waters to be "swimmable" and "fishable"
- A national goal of eliminating the discharge of pollutants into navigable waters by 1985.







 One of the cornerstones of the CWA was the establishment of the National Pollutant Discharge Elimination System (NPDES) Program





# **State Primacy**



- U.S. EPA is authorized to directly implement the NPDES Program. U.S. EPA may; however, authorize states, territories, or tribes to implement all or part of the national program.
- The State of Indiana was granted primacy from U.S. EPA to administer the NPDES Program on January 1,1975.



- The granting of primacy was and continues to be contingent upon the state having NPDES Program rules in place that are at least as stringent as the federal rules.
- The Indiana NPDES Program rules are predominantly found in 327 Indiana Administrative Code (IAC) 5.
- U.S. EPA, Region 5, has oversight authority for Indiana's NPDES Program.





### **Definitions**

Understanding the terms:



Pollutant



Point source



Waters





 "Pollutant" is broadly defined and essentially includes any type of industrial, municipal, and agricultural waste discharged into water.







For regulatory purposes,
 "pollutants" have been grouped into three general categories under the NPDES Program:



Conventional



Toxic



Non-conventional







 Conventional pollutants include: five-day biochemical oxygen demand (BOD5), total suspended solids, pH, fecal coliform, and oil and grease



 <u>Toxic pollutants</u> are those defined in Section 307(a)(1) of the CWA and include metals and manmade organic compounds.



 Non-conventional pollutants are those that do not fall under either of the above categories, and include such parameters as: ammonia, nitrogen, phosphorus, chemical oxygen demand and whole effluent toxicity (WET)





- "Point Source" is a regulatory term used to describe a certain type of pathway by which pollutants can enter water.
  - In Indiana, "point source" is defined in 327 IAC 5-1.5-40







 Typical point source discharges include discharges from publicly owned treatment works, discharges from industrial facilities, and discharges associated with urban runoff.







- In Indiana, "waters" as defined by IC 13-11-2-265
- The term "waters" includes all waters of the United States that are defined in Section 502(7) of the federal Clean Water Act that are located in Indiana.







- The term "waters" does not include:
  - an exempt isolated wetland
  - a private pond
  - an off-stream pond, reservoir, wetland, or other facility built for reduction or control of pollution or cooling of water before discharge





a. A

Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

# Applicability NPDES Program

- At the national level, the NPDES Program applies to, and a permit is required for, the discharge of *pollutants* from *point* sources into waters of the United States.
- In Indiana, the NPDES Program applies to, and a permit is required for, the discharge of *pollutants* from *point sources* into *waters of the State of Indiana.*







- In Indiana, pursuant to 327 Indiana Administrative Code (IAC) 5-2-2, a discharge of pollutants from a point source into waters of the state is *prohibited* unless:
- The discharge is in conformity with a valid NPDES Permit obtained prior to the discharge; or...





### **Exclusions:**

# Discharges which do not require an NPDES permit are identified in 327 IAC 5-2-1.8.





## Types of NPDES Permits



The two basic types of NPDES Permits that exist are:

- Individual Permits
- General Permits



### **Individual Permits**

- An individual permit is a permit specifically tailored to an individual facility, and is developed based on the information contained in the permit application.
- IDEM has established three broad categories of individual permits- "municipal" permits, "industrial" permits, and "wetweather" permits.





a. A

- The "municipal" permits category includes various types of facilities discharging sanitary wastewater, such as:
  - Major Municipal
  - Minor Municipal
  - Semipublic
  - State Owned
  - Federally Owned







The "industrial" permits
 category includes various
 types of facilities discharging
 wastewater resulting from the
 production of a product.

Within this category, dischargers are designated as:

- Major
- Minor





iDEM

Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment



# The "wet-weather" permits category includes:

- Stormwater related permits
- Combined Sewer Overflow permits





### **General Permits**

- Established for categories of point sources having common elements, such as facilities that involve the same or substantially similar types of operations or facilities that discharge the same types of wastes
- Prior to 2011 IDEM utilized "permits by rule" for all general permits.
   IDEM now uses "master general permits"
- The general permit program provides for a streamlined permitting process and helps to ensure consistency of permit conditions for similar facilities



a a

Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Indiana established a number of general permits. The following list identifies the permit number or rule citation for the type of activity/type of discharge regulated by these general permits:

327 IAC 15-5
Stormwater RunOff Associated
with
Construction
Activity.

327 IAC 15-6
Stormwater
Discharge
Associated with
Industrial
Activity.

327 IAC 15-7
Facilities
Engaged in Coal
Mining, Coal
Processing, and
Reclamation
Activities.

NPDES Permit
No. ING250000:
Facilities
Discharging Once
Through
Noncontact
Cooling Water





- NPDES Permit No. ING340000: Wastewater Discharge Associated with Petroleum Products Terminals
- NPDES Permit No. ING080000: Wastewater Discharge Associated with Groundwater Petroleum Remediation Systems
- NPDES Permit No. ING670000: Wastewater Discharge Associated with Hydrostatic Testing of Commercial Pipelines
- NPDES Permit No. ING490000: Facilities Engaged in Sand, Gravel, Dimension Stone or Crushed Stone Operations
- 327 IAC 15-13 Stormwater Run-Off Associated with Municipal Separate Storm Sewer System Conveyances





## Major Components of a Permit



- Cover Page
- Treatment Facility Description
   & Classification
- Effluent Limitations
- Monitoring & Reporting Requirements
- Standard Conditions





### Cover Page:

- Name of the permit holder
- Identification of facility/point sources discharges for which the permit applies
- Identification of the receiving water(s)
- Conditional authorization for the discharge from the specified outfalls to the specified receiving water(s)
- Permit effective date and permit expiration date.





### **Effluent Limitations**



- Primary mechanism for controlling discharges of pollutants to receiving water
- Effluent limitations can be water quality based or technology based
- Effluent limitations can be expressed in narrative or numeric form
- Numeric effluent limitations can be expressed in terms of mass or concentration



a de la companya de l

Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

# Monitoring & Reporting Requirements

- Used to evaluate wastewater treatment efficiency and determine compliance with permit conditions.
- Permit identifies the parameters that must be monitored and the minimum monitoring frequencies
- Permit requires the submittal of monitoring results to IDEM







### **Standard Conditions**



 Pre-established conditions that apply to all NPDES permits and delineate the legal, administrative, and procedural requirements of the permit.

These conditions are incorporated into all NPDES permits, and include the following:



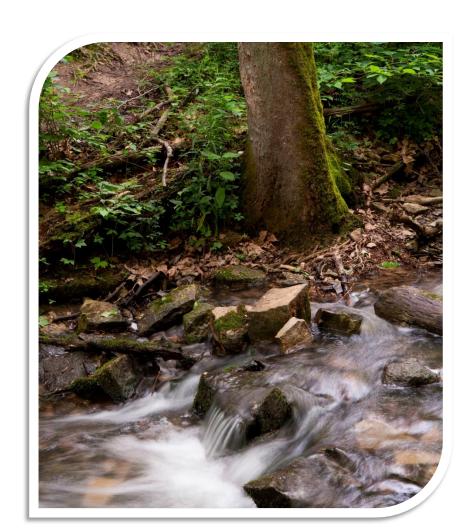


- Duty to comply with terms and conditions of the permit.
- Duty to apply for and obtain a new permit in order to continue to discharge beyond the expiration date of the permit.
- Duty to take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit.
- Duty to provide information to IDEM that the permittee knows or has reason to know would constitute cause for modification or revocation and reissuance of the permit.
- Duty to provide IDEM representatives with access to the permitted facility and to records that must be kept under the terms and conditions of the permit.





- Duty to maintain in good working order and efficiently operate all facilities and systems for collection and treatment that are installed or used by permittee and necessary for achieving compliance with terms and conditions of the permit.
- Duty to report certain types of noncompliance within 24 hours of becoming aware of the noncompliance.
- Bypass Prohibition/limited conditions under which a permittee would not be subject to enforcement action for bypass.
- Upset Defense applicable to certain noncompliance with technology-based limitations effluent limitations under very limited circumstances.







# Permitting Process: Individual Permits

- Permit Application
- Review Application for Completeness & Accuracy
- Request Additional Information as Necessary
- Prepare Draft Permit & Justification for Proposed Permit Conditions (Fact Sheet)
- Place Draft Permit on Public Notice
- Consider & Respond to Comments and, if warranted, make changes to Draft Permit
- Issue Final Permit



## Permit Application



- The owner of a facility seeking to discharge is responsible for submitting the permit application
- New dischargers are required to submit permit applications at least 180 days prior to the date that discharge is expected to commence.



IDEM



- Existing permittees are required to submit renewal applications at least 180 days prior to the date of expiration of their existing NPDES permits.
- The type of application forms that needs to be submitted vary, depending on the type of facility/nature of the discharge for which a permit is being sought.



### Required information includes:

- General information, such as name and address of the facility, the facility owner, and the facility certified operator.
- Owner/Operator affidavit
- Information regarding the use of water treatment additives.
- Identification of Potentially Affected Persons.

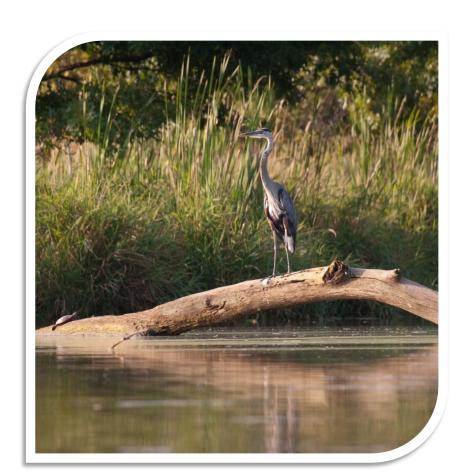
- Information regarding each point source to be covered by the permit, including location, receiving stream, a description of the process contributing to the wastewater flow, the frequency of flow, and the flow rate.
- Information regarding production rates for any process that is subject to an effluent guideline that is calculated based on production rate.
- Identification of pollutants that the discharger believes to be present in the discharge and, for specified pollutants, analytical results depicting the concentrations of such pollutants.
- Site Maps, Water Balance Diagrams, and Flow Diagrams
- Data Collected during the previous two-year period





- Review Application for Completeness & Accuracy
- Request Additional Information as Necessary

 Prepare Draft Permit & Justification for Proposed Permit Conditions







#### Determine Proposed Effluent Limitations

Generally, effluent limitations are developed in the following manner:

Identify all pollutants known or believed to be present in the discharge.

Determine effluent limitations as either Technology, or water quality based.





Determine water quality based effluent limitations for pollutants believed to be present in the discharge in amounts that would create the "reasonable potential" for the discharge to violate a state water quality standard.

For each pollutant for which effluent limitations are needed, incorporate either the technology based limitations or the water quality based limitations, whichever are more stringent.





In the case of existing dischargers, the effluent limitations incorporated into the draft permit cannot be less stringent than the effluent limitations contained in the existing permit, unless an "antibacksliding" exception applies and applicable antidegredation requirements are satisfied.

The permit may contain a time schedule for the permittee to achieve compliance with effluent limitations that were either not included in the previous permit or are more stringent than the effluent limitations in the previous permit.



a. A

Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

# Place Draft Permit on Public Notice

 Prior to issuance, the permit is placed on public notice for a minimum of 30 days to receive comments from the public and the permittee.







# Consider & Respond to Comments, and if Warranted, Make Changes to Draft Permit

 IDEM must consider and respond to all oral and written comments prior to or in conjunction with the issuance of the final permit.







# Issue Final Permit



After permit conditions are finalized, the permit is issued, for a term not to exceed five years. Any affected party may appeal the permit by filing a petition for review with the Indiana Office of Environmental Adjudication within the statutory timeframe, which in many cases means that the appeal must be filed within 18 days of permit issuance.





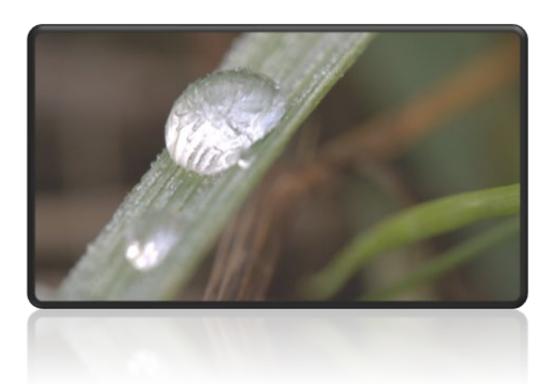
# Permitting Process: General Permits



- In order to obtain coverage under an NPDES general permit, an applicant must meet the applicability requirements for the particular general permit for which coverage is sought. Additionally, the applicant must submit a Notice of Intent (NOI) letter for the specific NPDES general permit under which coverage is sought.
- For NPDES general permits still classified as permit-by-rule, the applicant must submit a NOI letter which contains the information required by 327 IAC 15-3 as well as the information specified by the applicable general permit rule.







- IDEM reviews the NOI and if the information provided is insufficient, issues a Notice of Deficiency. If the information provided is sufficient, IDEM issues either:
  - 1) a Notice of Coverage letter, or
  - 2) a Notice of Sufficiency
- IDEM provides public notice of the issuance of Notice of Coverage/Notice of Sufficiency or a Denial of Coverage.
- For the non-stormwater general permits, notice is posted on the IDEM public notice website: https://www.in.gov/idem/5474.htm.
- We also notify potentially affected persons
   (as per IC 4-21.5) and a standard mailing list of interested parties (see 327 IAC 5-3-12).





# Improvements Resulting from the Implementation of the NPDES Program



According to EPA reference materials, the NPDES Program has led to dramatic water quality improvements throughout the Nation.

Some notable statistics are as follows:







- Prior to inception of the NPDES Program, only one-third of our nation's waters were considered to be safe for fishing and swimming. Today, it is estimated that twothirds of our waters are fishable and swimmable.
- Prior to implementation of the NPDES
   Program, approximately two and a quarter billion tons of soil was being deposited in our waters annually due to erosion caused by various activities. Today, the amount of soil lost due to these activities has been reduced by one billion tons annually.
- Prior to the NPDES Program, wastewater treatment plants served only eighty-five million people. Today, nearly 80% of all households in the United States are served by municipal sewage collection systems.





#### IDEM's Compliance and Technical Assistance Program



# Compliance and Technical Assistance Program

Indiana Department of Environmental Management

Helping Indiana businesses one step at a time

Visitidem.IN.gov/ctap for more information





#### CTAP Staff

- 1 Northwest Regional Office:
  - Charles Breitenfeldt, (219) 250-0119
- 2 Northern Regional Office:
  - Joseph Neuklis, (574) 245-4879
- 3 Indianapolis Central Office:

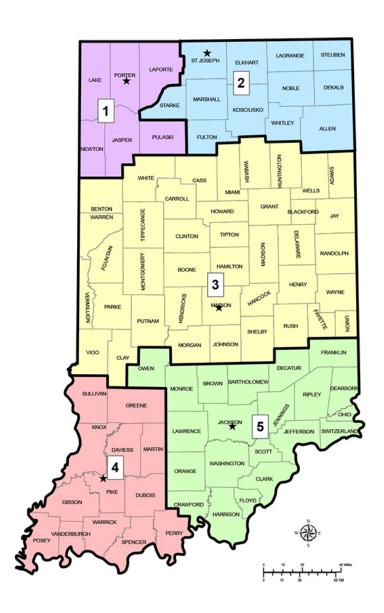
HOTLINE (800) 988-7901 or (317) 232-8172

- Tracy Barnes
- Hani Sharaya
- Mark Stoddard
- Chrystal Wagner

CTAP Small Business Regulatory Coordinator:

- Angela Taylor, (317) 233-0572
- 4 Southwest Regional Office:
  - Heath Dill, (812) 698-7077
- 5 Southeast Regional Office:
  - Andrew Dryden, (812) 919-2145

Website: www.idem.IN.gov/ctap







### New CTAP Online Portal

IDEM has launched a new Compliance and Technical Assistance Program online portal through Access Indiana. This new portal is a secure online system that makes it easier for businesses and organizations to request confidential assistance regarding environmental regulations, compliance, and permitting.

In the new CTAP portal, businesses, companies, organizations, and individuals can:

- Create a secure account and submit confidential requests directly
- Request confidential site assessments for your business or specific equipment/processes
- Communicate and track interactions with CTAP staff
- Invite collaborators within the company or designated consultants to access and view the CTAP request and recommendations
- Provide feedback to the CTAP team through surveys

To submit a confidential request using the new CTAP portal, visit portal.idem.IN.gov







# Available Services



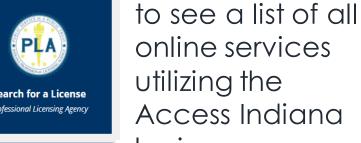












Check the



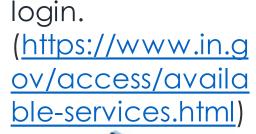












Available Services







INCONNECT

**IN Connect** 

Family and Social Services Administration

























### New CTAP Online Portal



CTAP Online Portal can also be accessed through IDEM's Electronic Resources

https://portal.idem.in.gov/



# New CTAP Online Portal





By entering information into this portal, you are requesting confidential regulatory and technical assistance from the IDEM Compliance and Technical Assistance Program as indicated in Indiana Code 13-28. It is understood that such assistance will be held in confidence as required by Indiana Code 13-28-3-4.

The CTAP Portal is not to be used for filing complaints. Please call the IDEM Complaint Coordinator at 800-451-6027 Option 3 or submit online.

The CTAP Portal is not to be used to report an environmental emergency. Call IDEM's 24-Hour Emergency Spill Line toll free at (888) 233-7745 or (317) 233-7745.

Please visit About CTAP to view the user guide and portal demonstration video.

Please sign in to open a new case or to view a list of your existing cases.





#### **Contact Information**

#### **Charles Breitenfeldt,**

Compliance and Technical Assistance Northwest Regional Office

Email: chbreite@idem.IN.gov

Phone: (219) 250-0119

&

#### Heath Dill,

Compliance and Technical Assistance Southwest Regional Office

Email: HDill@idem.IN.gov

Phone: (812) 698-7077





#### Questions?





Visit IDEM's NPDES Web Page at <a href="https://www.in.gov/idem/cleanwater/2429.htm">https://www.in.gov/idem/cleanwater/2429.htm</a> for More Information