Office of Water Quality

Compliance Branch

Kim Rohr
Wastewater Inspections and Operator Certification Section Chief

ESP Annual Meeting

July 18, 2024

New Operator Certification Rule

- At the August 9, 2023, meeting of the ERB, a new rule was finally adopted (327 IAC 5-23) which repealed and replaced 327 IAC 5-22.
- At that same meeting, a Non-Rule Policy Document was adopted formalizing allowable substitutions for the education and experience prerequisites needed to sit for the exam.
- Became effective on January 5, 2024

Industrial Classification Changes

- Revises industrial plant classifications, in part to accommodate on-site groundwater remediation systems which were previously classified as A or B
- Activated carbon filtration or membrane filtration systems with replaceable filter cartridges will now be classified as A-SO systems
- Groundwater remediation systems associated with fueling stations using air stripping which discharge less than 25,000 gallons per day will now be classified as A systems
- Many of these simple systems have struggled to obtain certified operators (5-23-4(a)), and this rule change will help to resolve that problem without reducing the quality of oversight.

Nonrule Policy Document (NPD)

- Eliminates the substitutions table in the prior rule
- Class I or A on-site experience will now count at ½ time on a Class III or C application as acceptable experience.
- Class II or B on-site experience will now count at ½ time on a Class IV or D application as acceptable experience.
- This enable lower class operators to seek advancement at larger facilities.
- Class I-SP, A-SO through II, B – previous rule, education could not substitute any experience and new rule some education can substitute for experience.

How Does New Rule affect operators?

- Less on-site experience required for lower licenses
  - Class I-SP and A-SO, 3 months from 6
  - Class I and A, 9 months from 1 year
  - Class II and B, 2 years from 3
  - All other classes remain the same
- Fail exam 3 times, you must take an IDEM approved exam prep class
- Class I, A and II, B experience can now count toward Class III, C and IV, D at half time to help operators advance to larger systems

DMRQA

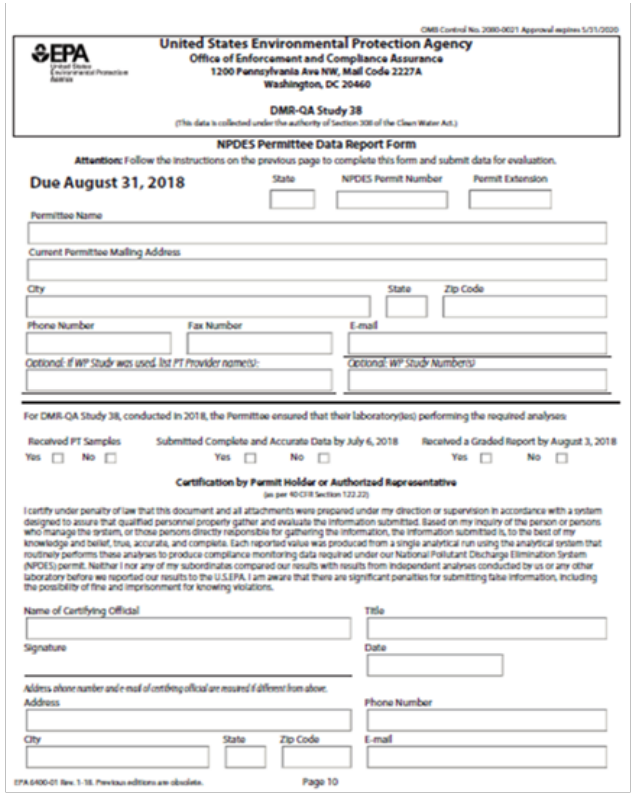
- EPA's lab QA/QC program
- Majors every year
- Minors on three-year rotation
  - 2024 – Semi-Publics and State Facilities
  - 2025 – Industrials, some Water Plants, and Pretreatment Industries
  - 2026 – Municipals and Municipal Water Plants

DMRQA

❑ Signed Complete Reports to IDEM

- One complete signed report must be submitted **BY THE PERMITTEE** to IDEM by the date listed in the EPA DMRQA study announcement
- This report must be signed
- This report must include the NPDES Data Report Form, the List of Labs page, all relevant Analyte Checklists, and a copy of the graded results
- If Corrective Action has been completed by the initial report deadline that can be included with the report

DMRQA



United States Environmental Protection Agency
Office of Enforcement and Compliance Assurance
1200 Pennsylvania Ave NW, Mail Code 2227A
Washington, DC 20460

DMR-QA Study 38

NPDES Permittee Data Report Form

Attention: Follow the instructions on the previous page to complete this form and submit data for evaluation.

Due August 31, 2018

State | NPDES Permit Number | Permit Extension

Permittee Name

Current Permittee Mailing Address

City | State | Zip Code

Phone Number | Fax Number | E-mail

Optional: If WP Study was used, list PT Provider name(s): | Optional: WP Study Number(s)

For DMR-QA Study 38, conducted in 2018, the Permittee ensured that their laboratory(ies) performing the required analyses:

Received PT Samples Yes ☐ No ☐ | Submitted Complete and Accurate Data by July 6, 2018 Yes ☐ No ☐ | Received a Graded Report by August 3, 2018 Yes ☐ No ☐

Certification by Permit Holder or Authorized Representative
(as per 40 CFR Section 122.22)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Each reported value was produced from a single analytical run using the analytical system that routinely performs these analyses to produce compliance monitoring data required under our National Pollutant Discharge Elimination System (NPDES) permit. Neither I nor any of my subordinates compared our results with results from independent analyses conducted by us or any other laboratory before we reported our results to the U.S.EPA. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Certifying Official | Title

Signature | Date

Address, phone number and e-mail of certifying official are required if different from above.

Address | Phone Number

City | State | Zip Code | E-mail

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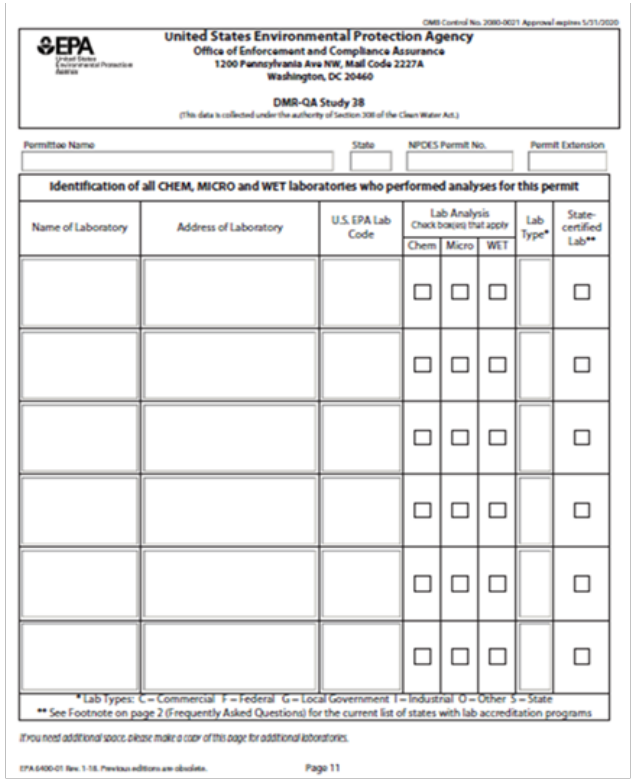

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1200 Pennsylvania Ave NW, Mail Code 2227A
Washington, DC 20460

DMR-QA Study 38

Permittee Name | State | NPDES Permit No. | Permit Extension

Identification of all CHEM, MICRO and WET laboratories who performed analyses for this permit

Name of Laboratory	Address of Laboratory	U.S. EPA Lab Code	Lab Analysis (Check box(es) that apply) Chem	Micro	WET	Lab Type*	State-certified Lab**
			☐	☐	☐		☐
			☐	☐	☐		☐
			☐	☐	☐		☐
			☐	☐	☐		☐
			☐	☐	☐		☐
			☐	☐	☐		☐

* Lab Types: C – Commercial F – Federal G – Local Government I – Industrial O – Other S – State
** See Footnote on page 2 (Frequently Asked Questions) for the current list of states with lab accreditation programs

If you need additional space, please make a copy of this page for additional laboratories.

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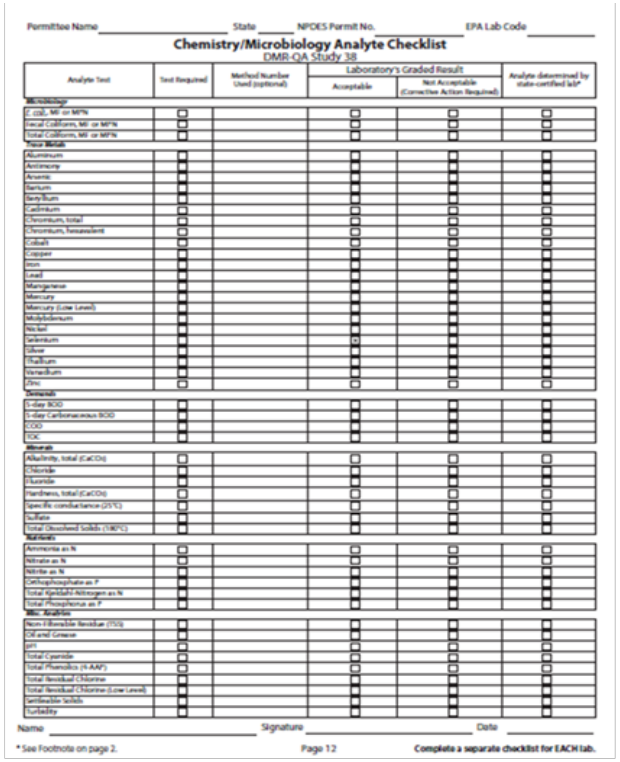

Permittee Name | State | NPDES Permit No. | EPA Lab Code

Chemistry/Microbiology Analyte Checklist
DMR-QA Study 38

Analyte Test	Test Required	Method Number Used (optional)	Laboratory's Graded Result: Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab*
Microbiology					
E. coli, MF or MPN	☐		☐	☐	☐
Fecal Coliform, MF or MPN	☐		☐	☐	☐
Total Coliform, MF or MPN	☐		☐	☐	☐
Trace Metals					
Aluminum	☐		☐	☐	☐
Antimony	☐		☐	☐	☐
Arsenic	☐		☐	☐	☐
Barium	☐		☐	☐	☐
Beryllium	☐		☐	☐	☐
Cadmium	☐		☐	☐	☐
Chromium, total	☐		☐	☐	☐
Chromium, hexavalent	☐		☐	☐	☐
Cobalt	☐		☐	☐	☐
Copper	☐		☐	☐	☐
Iron	☐		☐	☐	☐
Lead	☐		☐	☐	☐
Manganese	☐		☐	☐	☐
Mercury	☐		☐	☐	☐
Mercury (Low Level)	☐		☐	☐	☐
Molybdenum	☐		☐	☐	☐
Nickel	☐		☐	☐	☐
Selenium	☐		☐	☐	☐
Silver	☐		☐	☐	☐
Thallium	☐		☐	☐	☐
Vanadium	☐		☐	☐	☐
Zinc	☐		☐	☐	☐
Demands					
5-day BOD	☐		☐	☐	☐
5-day Carbonaceous BOD	☐		☐	☐	☐
COD	☐		☐	☐	☐
TOC	☐		☐	☐	☐
Minerals					
Alkalinity, total (CaCO3)	☐		☐	☐	☐
Chloride	☐		☐	☐	☐
Fluoride	☐		☐	☐	☐
Hardness, total (CaCO3)	☐		☐	☐	☐
Specific conductance (25°C)	☐		☐	☐	☐
Sulfate	☐		☐	☐	☐
Total Dissolved Solids (180°C)	☐		☐	☐	☐
Nutrients					
Ammonia as N	☐		☐	☐	☐
Nitrate as N	☐		☐	☐	☐
Nitrite as N	☐		☐	☐	☐
Orthophosphate as P	☐		☐	☐	☐
Total Kjeldahl Nitrogen as N	☐		☐	☐	☐
Total Phosphorus as P	☐		☐	☐	☐
Misc. Analytes					
Non-Filterable Residue (TSS)	☐		☐	☐	☐
Oil and Grease	☐		☐	☐	☐
pH	☐		☐	☐	☐
Total Cyanide	☐		☐	☐	☐
Total Phenolics (4-AAP)	☐		☐	☐	☐
Total Residual Chlorine	☐		☐	☐	☐
Total Residual Chlorine (Low Level)	☐		☐	☐	☐
Settleable Solids	☐		☐	☐	☐
Turbidity	☐		☐	☐	☐

Name | Signature | Date

* See Footnote on page 2.

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Complete a separate checklist for EACH lab.

These pages **must** be completed and signed by the permittee and along with graded results from the PT provider must be either emailed to dmrqa@idem.in.gov or physically mailed

Accurate Reporting

- **Don't be afraid** to report effluent limit violations
- **Do explain** the reason for the violation and any corrective action steps taken on the MRO/MMR/DMR

Examples of False Data

- Not performing analysis and documenting results
- Changing the results of analyzed samples

Not necessarily false data, but also bad.

- Avoiding sampling when you know you will exceed parameters

Operator Certification Announcements

- You have 90 days after taking a class to submit for credit. You can email it.
- You won't get credit for taking the same class twice in the same renewal period
- For providers, you can submit course approval up to 60 days prior to the class. The sooner you submit the better.
- Contact hour list is updated once a month.
- Renewals with expiration 6/30/24 should have been submitted

Common Non-Compliance Found During Inspections

- Lack of documentation (sampling, analysis, chain of custody, sludge removal)
- pH sampling/analysis issues
  - Out of hold time
  - No calibration or no calibration log (Minimum 2 buffers)
  - Proper reporting for online probes
- Inaccurate MMRs/DMRs
  - No comments for exceedances
  - Number of exceedances column incorrect

Possible New Effluent Reporting

- PFAs is coming for industries that are known contributors, monitoring only. Possible at receiving POTWs. Strong push from EPA.
- More stringent Phosphorus limits for major dischargers to the Lake Eerie Basin is possible (5 facilities affected)
- Phosphorus - report only for small dischargers to impaired streams
- Just a note, EPA is looking closely at facilities in SNC for effluent violations.

Additional Announcements

- New Pretreatment Coordinator – Mary Armacost
- New DMR-QA Coordinator – Maggie Kroeger
  - IDEM issued Non-Compliance Letters for DMR-QA Study 43
- Rose McDaniel retired
- Amari Farren has been promoted to Stormwater, Wetlands, Operations Branch Chief from Enforcement Section Chief
- Jessica Irvine is new enforcement section chief

Contact Information

Inspections: Kim Rohr, 317-605-6489, krohr@idem.IN.gov

Contact hours & license renewals: Tonja Fuller-White, 317-233-0479, tfullerw@idem.IN.gov

Exam/Certification: Rebecca McMonigle, 317-232-8791, rmcmonig@idem.IN.gov

Lab Assistance: Becky Ruark, 317-691-1909, bruark@idem.in.gov

Operations Assistance and Stream Flow: Aaron Deeter, 317-691-1915, adeeter@idem.in.gov

DMR-QA: Maggie Kroeger, 219-246-6148, mkroeger@idem.in.gov or DMRQA@idem.in.gov

Data Compliance: Gary Starks, 317-232-8694, gstarks@idem.in.gov

Pretreatment: Mary Armacost, 317-234-4815, marmacos@idem.in.gov

NetDMR: Helen Demmings, 317-232-8815, hdemming@idem.IN.gov

When in doubt: wwreports@idem.in.gov

ESP Annual Meeting
Regulatory Updates
July 18, 2024

IDEM Drinking Water Branch
Matt Prater, Branch Chief

U.S. EPA Drinking Water Regulation

On April 26th, 2024 U.S. EPA published a final drinking water regulation for PFAS.

EPA set enforceable Maximum Contaminant Levels (MCLs) at **4.0 parts per trillion (ppt)** for PFOA and PFOS individually.

For PFNA, PFHxS and HFPO-DA (GenX Chemicals), EPA is setting **MCLs of 10 parts per trillion**.

Regulatory Levels: Hazard Index

- The Hazard Index is a long-established approach that the EPA regularly uses, for example in the Superfund program, to determine the health concerns associated with exposure to chemical mixtures.
- The Hazard Index is calculated by adding the ratio of the water sample concentration to a

$$HI\ MCL = \left(\frac{[HFPO\text{-}DA_{water}]}{[10\ ppt]}\right) + \left(\frac{[PFBS_{water}]}{[2000\ ppt]}\right) + \left(\frac{[PFNA_{water}]}{[10\ ppt]}\right) + \left(\frac{[PFHxS_{water}]}{[10\ ppt]}\right) = 1$$

Regulatory Levels: Summary

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
Mixture of two or more: PFHxS, PFNA, HFPO-DA, and PFBS	Hazard Index of 1	Hazard Index of 1

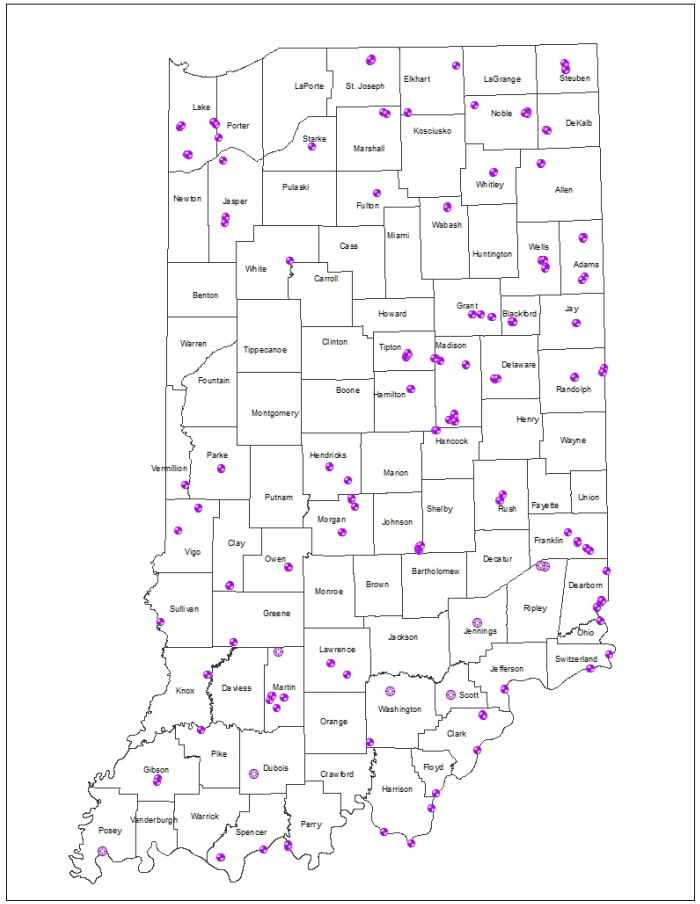
*Compliance is determined by running annual averages at the sampling point

IDEM PFAS Sampling Initiative

- The purpose of the sampling project was to evaluate the state-wide occurrence of PFAS compounds at approximately 778 Community Public Water Systems across the state.
- Workplan began to be developed in Spring of 2020
- In July 2020, IDEM applied for an Emerging Contaminants Grant from the EPA from the Public Water System Supervision (PWSS) Grant Program; approved in September 2020
- Matching funding also provided by the Indiana Finance Authority (IFA)

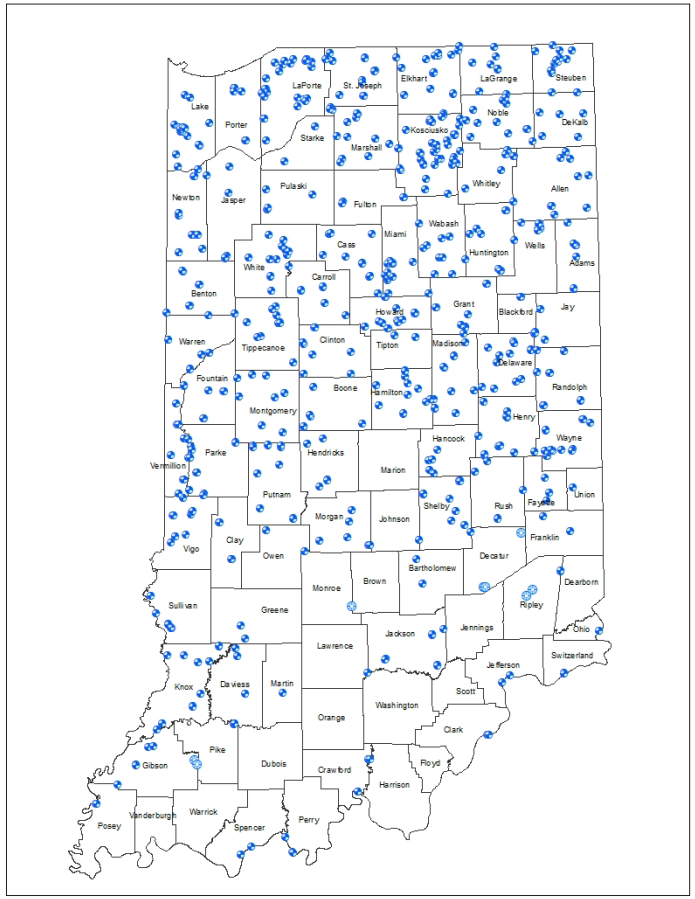
IDEM PFAS Sampling Initiative

	Population Served	Active Systems	Dates
Phase 1	3,300 to 10,000	123	March 2021 - October 2021
Phase 2	< 3,300	570	November 2021 – January 2023
Phase 3	>10,000	85	January 2023 – June 2024



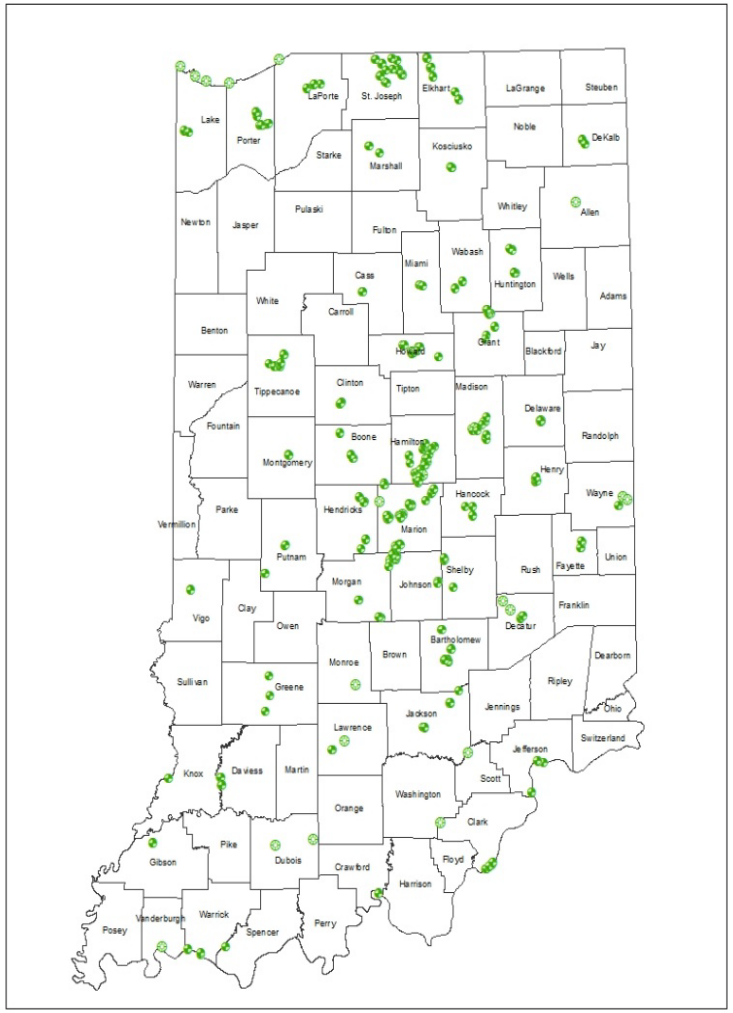
Phase 1 Sampling

- 3,300 to 10,000 population served
- 59 systems participated
- 400 total samples collected during Phase 1 (excluding field blanks)
- Six systems had PFOS or PFOA results above the MCL in finished drinking water



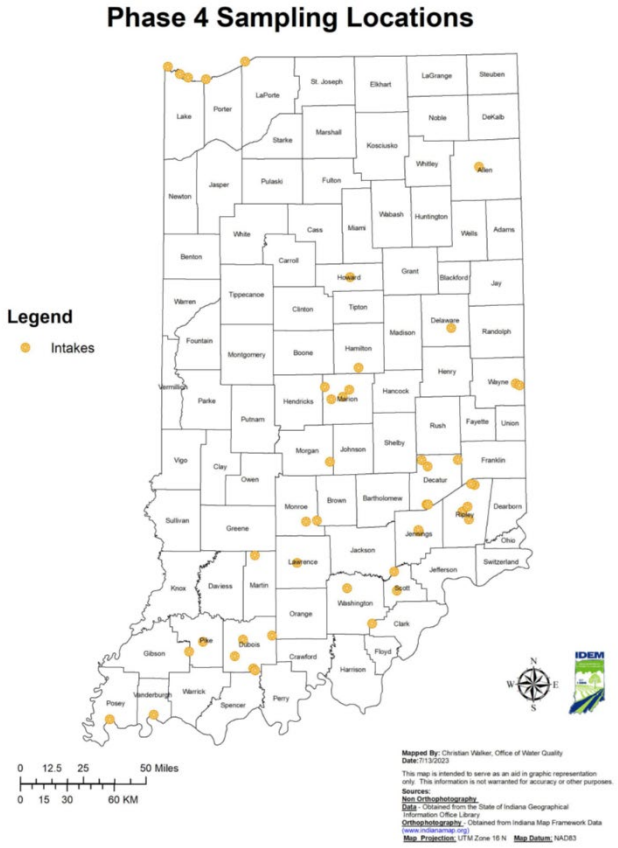
Phase 2 Sampling

- < 3,300 population served
- Total number of PWSs participating: 339 out of 562
- Four systems contained finished water PFAS results above the MCL



Phase 3 Sampling

- > 10,000 population served
- Total number of PWSs participating: 69 out of 85
- Six systems reported finished water results above the MCL
- Many of these systems are expected to be sampled under UCMR 5 from 2023 to 2025



Proposed Phase 4

- A number of PFAS detections in the first 3 phases of the project come from systems that purchase water from larger surface water systems
- IDEM has received an Emerging Contaminants Grant extension to study PFAS in Indiana surface water bodies that are used for drinking water

Treatment technologies

- Activated Carbon, Ion Exchange Treatment, High Pressure Membranes (Reverse osmosis and Nanofiltration)
- Some technologies are more effective against longer or shorter chains
- Based on design choices, 100% removal of PFAS compounds can be achieved, but costs and remediation targets may make complete removal impracticable or unnecessary
- None of these technologies destroy the PFAS molecule, so PFAS are essentially being concentrated, and the waste stream will have to be properly disposed.

https://www.epa.gov/sciencematters/reducing-pfas-drinking-water-treatment-technologies

IFA Infrastructure Law Funding

- $1 Billion in Bipartisan Infrastructure Law Funding
- “This is part of a $9 billion investment through the Bipartisan Infrastructure Law to help communities with drinking water impacted by PFAS and other emerging contaminants.”
- “The Indiana State Revolving Fund (SRF) provides low-interest loans to Indiana communities for projects that improve drinking water infrastructure. Communities impacted by PFAS contaminated drinking water may qualify for grant funding through the Bipartisan Infrastructure Law (BIL) designed specifically for PFAS mitigation efforts. To find out how to access SRF funds, please visit in.gov/ifa/srf.”

Resources

- IDEM PFAS website: https://www.in.gov/idem/resources/nonrule-policies/per-and-polyfluoroalkyl-substances-pfas/
- EPA PFAS Drinking Water Regulation: https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas
- PFAS Treatment Options:

  Fact Sheet: Treatment Options for Removing PFAS in Drinking Water (pdf)

Indiana Department of Environmental Management
Office of Water Quality
Stormwater Section

Emma Kramer
Stormwater Specialist
July 18, 2024

General Permit Conversion Process

- In response to U.S. EPA, IDEM is in the process of converting from Rule 6 to an Industrial Stormwater General Permit
- Reason for change:
  - Potential conflicts with approval process for administrative rules
  - Rules are not up to date with U.S. EPA federal permits
- The status of the three stormwater programs:
  - Construction Stormwater (Effective: December 18, 2021)
  - Municipal Separate Storm Sewer Systems (MS4s) (Effective: December 18, 2021)
  - Industrial Stormwater General Permit (ISGP)

General Permit Eligibility

- SIC are the basis to determine eligibility under 327 IAC 15-6 (Rule 6)
- ISGP (Draft) Eligibility:
  - Based on the Sector and Subsector designations
  - Sector descriptions are based on Standard Industrial Classification (SIC) Codes
  - Permit eligibility is limited to discharges from facilities:
    - 29 Sectors that describe industrial activities

General Permit Application Process

- Notice of Intent
  - To obtain permit coverage
- Stormwater Pollution Prevention Plan (SWP3)
  - The federal MSGP has specific SWP3 requirements based on the Sector, Indiana has proposed a standard SWP3 that applies to all facilities
    - 303(d) list of impaired waters and if they have a US EPA approved TMDL
    - Total drainage area delineation for each stormwater outfall/monitoring point and the acres for each
    - A summary of all stormwater discharge sampling data collected at the facility, and if available data from the previous permit term
- Stormwater Pollution Prevention Plan Certification Checklist

General Permit Requirements

- ISGP (Draft) Performance Standards:
  - Exposure Elimination or Reduction:
    - Where feasible limit exposure to stormwater
  - On-site Operations:
    - Perform good housekeeping measures onsite, including trash containers, storage areas, loading docks, etc.
  - Stormwater Measures:
    - Ensure long-term functionality; including preventive maintenance schedules, documentation of maintenance and corrective action
  - Spill Prevention and Response Plan:
    - Reduce potential for leaks and spills
    - Material handing procedures and storage (i.e. secondary containment)

General Permit Requirements

- ISGP (Draft) Performance Standards:
  - Erosion and Sedimentation Prevention and Control:
    - Implement stabilization of eroding areas
    - Obtain CSGP permit coverage when applicable
  - Stormwater Run-off Management:
    - Manage run-off to optimize the effectiveness of control measures
    - Use diversions and other measures to direct stormwater away from fueling areas, storage areas, etc.
  - Salt Storage Piles or Piles Containing Salt
    - Enclose and/or cover storage piles and eliminate run-on
  - Dust Generation and Vehicle Tracking
  - Discharge of Waste, Garbage, and Floatable Debris

General Permit Requirements

- ISGP (Draft) Performance Standards:
  - Employee education program:
    - Annual employee training
    - Training targeted to the job responsibilities of the employee
  - Training must include:
    - Operation and maintenance of stormwater management measures
    - Facility SWP3
    - Monitoring procedures
    - Material handling
  - Training documentation:
    - Date of training
    - Name of trainer and affiliation and Individual trained
    - Curriculum

General Permit Requirements

- ISGP (Draft) Monitoring Procedures:
  - Benchmark Monitoring:
    - ISGP requires sampling for pH, COD, and total suspended solids plus any parameter that is specific to a Sector
    - During the first eight quarterly monitoring periods (the first two years) of permit coverage, the permittee must perform benchmark monitoring in four of the eight quarterly monitoring periods
    - Benchmark exceedances are not a permit violation
    - Failure to implement corrective action as a result of a benchmark exceedance is a violation
    - Once obtaining samples in four (4) consecutive quarters those values are averaged to determine any benchmark exceedances

General Permit Requirements

- ISGP (Draft) Monitoring Procedures:
  - Effluent Limitation Monitoring Requirements:
    - Regulatory standards for wastewater discharged to surface waters. U.S. EPA issues these regulations for industrial categories, based on the performance of treatment and control technologies
  - Effluent limitations are assigned to facilities based on sectors. An exceedance of an effluent limitation will require a facility to implement stormwater measures and operational controls to address the pollutant; including updating the SWP3 and filing an exceedance report
  - An exceedance is a violation

General Permit Requirements

- ISGP (Draft) Measurable Storm Events and Documentation:
  - Monitor each outfall for a storm event that results in an actual discharge
  - A measurable storm event is defined as a precipitation event which results in a measurable amount of precipitation (i.e. a storm event that results in an actual discharge) and that follows the preceding storm event by at least 72 hours
  - Obtain a minimum of one grab sample from a discharge resulting from a measurable storm event during the first thirty (30) minutes of discharge at the stormwater outfall(s) identified for monitoring

General Permit Requirements

- ISGP (Draft) Quarterly Inspections:
  - Quarterly inspections of stormwater management measures and stormwater run-off conveyances must be documented:
    - Quarterly inspections must be conducted by qualified personnel
    - At least one of the quarterly inspections must be conducted during a rain event
  - Quarterly visual assessment of stormwater discharge from each outfall required in addition to quarterly inspections:
    - Visual assessments include collecting a stormwater grab sample from ALL outfalls
    - Visually evaluating sample for water quality characteristics (e.g. color, odor, etc.)

General Permit Requirements

- ISGP (Draft) Electronic Submittals:
  - U.S. EPA requires all states to utilize an electronic reporting system:
    - Notices of Intent
    - Termination/Exclusion Requests
    - Annual Reports (IDEM proposal Annual Reports are retained at the facility)
    - Discharge Monitoring Reports (NetDMR)
    - No Exposure
- IDEM Regulatory Services Portal:
  - https://www.in.gov/idem/stormwater/industrial-storm-water-permitting/
  - Allows users to submit:
    - Notice of Intent and Terminations/Exclusions
    - No Exposure

Industrial Stormwater General Permit

Contact Information

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317-460-5402

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Solid and Hazardous Waste Issues Pending or Future

John Naddy
Office of Land Quality
Compliance Branch
July 18, 2024

Issues

- EPA GIR Technical Corrections
- PFOS
- Contained-in Determinations
- Episodic Generation Events
- Identifying and Marking Hazards

Technical Corrections

- The EPA has completed a number of technical corrections addressing issues with the GIR and the Definition of Solid Waste.
- IDEM has not yet adopted the technical corrections.

PFOS

- It appears that the EPA is planning to try to make PFOS a hazardous waste.
- It has not happened yet.
- Most likely a listed hazardous waste if it happens.
- No details.

Episodic Generation of Hazardous Waste

- No changes to the policy.
- Notify within time limits of planned and unplanned events.
- No extensions.

Marking Hazards on Containers and/or Tanks

- If there are multiple hazards, then you must mark each hazard…
- Class 9 Placard is not sufficient.

Contact Information

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ANY
QUESTIONS
?