



Industrial Pretreatment Program (IPP)

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A little history:

- The Clean Water Act
- EPA issues effluent guidelines and funded the construction of sewage treatment plants under the construction grants program.
- Sewage treatment plants, (aka publicly owned treatment works (POTWs))
- Explosions
- Interference
- Pass-through
- Toxic chemicals

Establishing an Account Video (www.youtube.com/watch?v=8whu6eiuTVA)

- An account is needed to:
 - Submit new permit applications
 - Submit service requests for existing permits
 - Submit schedules, reports, and DMRs for existing permits
- Each user should have a unique email address/account

Road map for today

- What is the pretreatment program
- Regulations and their application
- Who's affected
- Roles and responsibilities

Common terms and phrases

- Approved pretreatment program
- Control Authority (CA)
- Approval Authority (AA)
- Nondomestic User
- Interference
- Pass through

What is the Pretreatment Program?

- National program
- Implemented through EPA Regions', States', and local programs
- Pretreatment = pollutant control requirements for nondomestic sources discharging wastewater to sewer systems that are connected to publicly owned treatment works

Purpose of the Pretreatment Program

- Prevent
 - Damage
 - Interference
 - Pass Through
- Beneficial Reuse of biosolids
- Protect POTW Workers

Who is regulated by the Pretreatment Program

- IUs – Nondomestic/Industrial Users
- SIUs – Significant industrial Users
- CIUs – Categorical Industrial Users

Who regulates industrial discharges to POTWs?

- DEQ's Role
 - NPDES Permit
 - Federal IPP > 5 MGD Design
 - Michigan IPP ≤ 5 MGD Design
 - Approve Program
 - Inspect
 - IPP Annual Report
 - Enforcement
- POTW Pretreatment Program
 - Legal authority
 - Local limits
 - Procedures
 - Identify
 - Permit
 - Sample
 - Inspect
 - Enforcement Response Plan
 - Funding

Pretreatment Standards

- General prohibitions - Rule 323.2303(1)
A nondomestic discharger may not introduce into a POTW any pollutant(s) which cause pass through or interference.
- Specific Prohibitions - Rule 323.2303(2)
 - Fire or Explosion (Flashpoint <140°F)
 - Corrosive (pH<5)
 - Block Flow
 - Flow Rate or Concentration
 - Heat (<140°F)
 - Oil
 - Toxic Gases
 - Trucked Wastewater (except at designated points)
- Categorical Pretreatment Standards
 - 40 CFR Parts 405-471
 - National, uniform, technology-based standards
 - Account for treatment capability of the POTW
 - "Level playing field"
 - Prevent "pass through" and "interference" at POTWs
 - Examples
 - Metal Finishing
 - Iron and Steel Manufacturing
 - Pulp, Paper and Paperboard
 - Transportation Equipment Cleaning
- Local Pretreatment Standards
 - Local Limits
 - Best management practices (BMPs)
 - Additional specific prohibitions

- Industrial user management plans
 - Case-by-case discharge limits
- Industrial Users
 - General and Specific Prohibitions
 - Local Limits
 - Other Local Ordinance Requirements
 - General Permits
- SIU/CIU Permits
 - Statement of duration
 - Statement of nontransferability
 - Effluent limits
 - Self-monitoring, sampling reporting, notification and recordkeeping requirements
 - Applicable civil and criminal penalties
- SIU/CIU Monitoring
 - SIU/CIU Permit identifies
 - Location
 - Frequency
 - Pollutants
 - Sample Type
 - Flow/time proportional
 - Representative of the discharge
 - 40 CFR 136 Approved Methods
- Self-Monitoring Reports
 - Flow
 - Sampling data
 - Analytical methods
 - Additional monitoring
 - Signature
 - Certifications
- Other SIU Reports
 - Slug discharge control plan
 - Compliance schedule progress reports
- CIU Reports
 - Baseline Monitoring Report (BMR)
 - 90-Day Compliance Report
 - Toxic Organic Management Plan (TOMP)
- Signatory and Certification Requirements
 - Reports that must be signed and certified by an authorized representative
 - Baseline Monitoring Reports
 - 90-day compliance reports
 - Periodic Compliance Reports
 - TOMP
- SIU/CIU Record Keeping
 - Maintain a minimum of 3 years
 - Available to POTW and AA for review and copying
 - Records include:
 - Monitoring
 - BMP Documentation
 - Any other records required by POTW
- Notification Requirements
 - Potential problems including slug loadings
 - Change in potential for slug discharge
 - Noncompliance notification and repeat sampling report

- Substantial change in volume or character of the discharge
- Discharge of hazardous waste
- Bypass
- Additional Notification Requirements for CIUs
 - New processes
 - Changes in production level
 - Material or significant change affecting the alternative limit calculation
- POTW Oversight
 - Comprehensive Inspection
 - Sample all regulated pollutants
 - Evaluate Slug/Spill Potential
 - Investigate Noncompliance
 - Enforcement
- Significant Noncompliance
 - Chronic - $\geq 66\%$ of all measurements exceed the limit
 - TRC - $\geq 33\%$ of all measurements exceed the technical review criteria
 - Interference or pass through
 - Imminent danger to human health or environment
 - Compliance schedule milestone > 90 days late
 - Required reports > 30 days late
 - Failure to accurately report noncompliance
 - Evaluated Quarterly for the previous 6 months
 - Annual publication in newspaper

Additional Resources

[MDEQ Industrial Pretreatment Program Home Page \(www.michigan.gov/ipp\)](http://www.michigan.gov/ipp)

[Michigan Part 23 Rules \(http://w3.lara.state.mi.us/orr/Files/AdminCode/311_10289_AdminCode.pdf\)](http://w3.lara.state.mi.us/orr/Files/AdminCode/311_10289_AdminCode.pdf)

[USEPA National Pretreatment Program home page \(www.epa.gov/npdes/national-pretreatment-program#overview\)](http://www.epa.gov/npdes/national-pretreatment-program#overview)

[General Pretreatment Regulations – 40 CFR Part 403 \(www.gpo.gov/fdsys/pkg/CFR-2015-title40-vol29/pdf/CFR-2015-title40-vol29-part403.pdf\)](http://www.gpo.gov/fdsys/pkg/CFR-2015-title40-vol29/pdf/CFR-2015-title40-vol29-part403.pdf)

Categorical Standards

www.gpo.gov/fdsys/pkg/CFR-2014-title40-vol29/xml/CFR-2014-title40-vol29-chapI-subchapN.xml

www.gpo.gov/fdsys/pkg/CFR-2014-title40-vol30/xml/CFR-2014-title40-vol30-chapI-subchapN.xml