



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Water Resources Division Update

Teresa Seidel, Division Director

seidelt@michigan.gov

Greatest Challenges Facing WRD



WRD Staffing

49% have less than 5 years of experience

76% have less than 10 years

Adding 30+ new staff

Training and succession planning

Infrastructure

Due to flooding issues in SE Michigan this summer from intense rains, EGLE, state partners, federal partners, and local partners served on four workgroups established by the Governor's office.

Projects were determined to help reduce the risk of basement backups, while still protecting water quality.

Projects are immediate, short-term, and long-term studies.

Funding is being pursued through ARPA, FEMA, Corps of Engineers, and potentially Congress. Billions will be required.

Why do we need the Collection System GP?

Collection systems must be inspected and maintained, and some haven't been

Collection systems have capacity restrictions

~500 collection systems not covered by NPDES permits

Currently address collection systems reactively instead of proactively; SSOs in ACOs

High wet weather flows at some Regional WWTPs; flows have not been adequately reduced over time

Requirements in Draft Collection System GP

Proper operations. Note that separate sanitary collection systems are a POTW

Asset management (AM)

Outlet and internal capacity restrictions (CMOM), address flows to meet excessive I/I definition or another acceptable regional criteria

Inspection program

SSO prohibition

Fiscal sustainability

Operator certification in future

Proposed Implementation

GP should be issued by Spring 2022. COCs will be issued incrementally during the first 5-year general permit 2022-26;

Contributing municipalities at Regional WWTPs that currently blend;

Contributing municipalities that contributed to SSOs and basement backups;

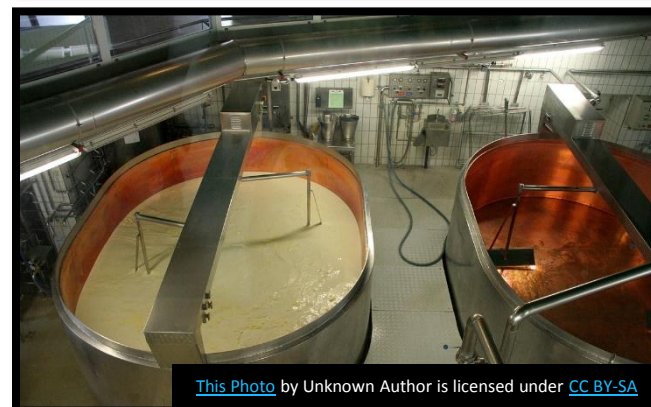
Remaining contributing municipalities.

Groundwater

- Part 31, Waters of the State
 - Part 22 Groundwater Rules, Adequately protecting groundwater
 - Part

Groundwater Discharge Program

- Permits many types of wastewater discharges
 - Sanitary sewage greater than 6,000 gallons per day
 - Industrial wastewater
 - Fruit/vegetable processors
 - Slaughterhouses
 - Wineries
 - Breweries
 - Distilleries
 - Creameries
 - Cheese making
 - Non-contact cooling water
 - Portable power washing
 - Laundromats
- EGLE regulates mixed wastewater discharges



High Strength Wastewater

- Methods exist to adequately treat different types of wastewater
 - Pretreatment
 - Additional tankage to address elevated total suspended solids
 - Grease traps to address fats, oils and grease
- Metal Mobilization
- The mobilization of metal is a result of oxygen becoming depleted in the soil
 - Naturally occurring preexisting metal oxides such as iron, manganese oxide, and arsenic can become mobilized into the groundwater
 - These concentrations of metals often exceed the aesthetic standards in Part 201



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Inadequate Wastewater Treatment

- Problems can occur due to inadequate or inappropriate wastewater treatment can lead to:
 - Contamination of residential drinking water wells
 - Installation of new drinking water wells
 - Installation of costly groundwater monitoring well network
 - Designation as a facility under Part 201
 - Installation of new treatment system



Michigan's PFAS Wastewater Strategies

Municipal Wastewater

- Industrial Pretreatment Program PFAS Initiative
- NPDES Municipal Permitting PFAS Strategy
- Interim Biosolids PFAS Strategy

Industrial Direct Compliance Strategy

- Prioritization
- Inspections/Short-term Characterization Studies
- Compliance/Corrective Action Plans in Voluntary Orders

Industrial Direct & Industrial Storm Water Discharges

- Highest priority facilities:
 - Sampled by EGLE
 - Facility directed to sample
- Other facilities with potential:
 - EGLE sampling inspections
- PFAS questions:
 - Permit application process
 - Routine compliance inspections
 - Calls to sector specific facilities



Information gathered through NPDES applications, EGLE inspections, and sector-specific interviews, e.g.:

- Use or generate PFAS chemicals?
- Is there venting (stacks, fans, etc.) outside related to industrial process?
- Historical trainings, fires, or leaks/spills with firefighting foam?
- Known soil or groundwater contamination?



PFAS Strategic Roadmap

EPA's Commitments to Action 2021-2024

- Released on October 18, 2021. Will support Michigan's on-going efforts to address PFAS through actions such as:
 - Restrict PFAS discharges from industrial sources through ELG program (*2022 & Ongoing*)
 - Issue guidance to state permitting authorities to address PFAS in NPDES permits (*Winter 2022*)
 - Monitoring; Product substitution/elimination; BMPs; Public Notification; IPP
 - Complete multi-laboratory validation of analytical method for 40 PFAS for use in wastewater, surface water, and biosolids (*Fall 2022*). *Approved Method 2024*
 - Publish recommended ambient water quality criteria (*Winter 2022 & Fall 2024*)
 - Finalize risk assessment for PFOS/PFOA in biosolids (*Winter 2024*)

Thank You!

seidelt@michigan.gov

