National Pretreatment Virtual Event

PART 1
Pretreatment Regulatory Update: What You Need to Know Now

The National Association of Clean Water Agencies
May 12, 2020 | 2:00 PM - 3:30 PM EST
Moderators

Frank Dick, Moderator
NACWA Pretreatment & Pollution Prevention Committee Chair
Wastewater Engineering Supervisor
Department of Public Works
City of Vancouver
Vancouver, WA

Kerry Britt, Moderator
NACWA Pretreatment & Pollution Prevention Committee Vice Chair
Pretreatment Manager
Narragansett Bay Commission
Providence, RI
Featured Speakers

Jan Pickrel
National Pretreatment Team Coordinator
Water Permits Division
US Environmental Protection Agency
Washington, DC

Phillip Flanders
Office of Science and Technology
US Environmental Protection Agency
Washington, DC

Todd Doley
Acting Chief
Engineering and Analytical Support Branch
Engineering and Analysis Division
US Environmental Protection Agency
Washington, DC

Jeffrey Lape
National Program Leader for Water Reuse
Office of Water
US Environmental Protection Agency
Washington, DC
From Covid-19 to PFAS
https://www.epa.gov/coronavirus

Coronavirus (COVID-19)

This is an emerging, rapidly evolving situation and the Centers for Disease Control and Prevention will provide updated information as it becomes available, in addition to updated guidance. This website provides key EPA resources on the coronavirus disease (COVID-19).

Information on Disinfectants

Information on Drinking Water and Wastewater

Related Resources

State, Local and Tribal
- Coronavirus Resources for State, Local, and Tribal Agencies and Associations
- Frequent Questions from State, Local and Tribal Leaders about
Topics

CoViD-19
  • Don’t Flush WIPES!
  • Utility Resources
  • Worker Safety/ CoViD-19 in Wastewater Guidance
  • Research / Webinar
  • Compliance Guidance

NPDES Updates Rule and Applications
Hazardous Waste Pharmaceuticals – Don’t Flush!/Sewer Ban
CROMERR
NPDES Electronic Reporting Rule
EPA Encourages Americans to Only Flush Toilet Paper

03/30/2020

https://www.epa.gov/newsreleases/epa-encourages-americans-only-flush-toilet-paper

Frequent Questions about Wastewater and Septic Systems and Coronavirus (COVID-19)

Is it okay to flush disinfecting wipes?

https://www.epa.gov/coronavirus/is-it-okay-flush-disinfecting-wipes

EPA urges Americans to only flush toilet paper. Disinfecting wipes and other items should be properly disposed of in the trash, not the toilet. These wipes and other items do not break down in sewer or septic systems and can damage your home's internal plumbing as well as local wastewater collection systems. As a result, flushing these wipes can clog your toilet and/or create sewage backups into your home or your neighborhood. Additionally, these wipes can cause significant damage to pipes, pumps, and other wastewater treatment equipment. Sewer backups can be a threat to public health and present a challenge to our water utilities by diverting resources away from the essential work being done to treat and manage our nation's wastewater. Disinfecting wipes, baby wipes, and paper towels should NEVER be flushed.
Water Utility Resources for the COVID-19 Pandemic


Water and Wastewater Agency Response Networks (WARN)

If resource needs arise for any reason, the Water and Wastewater Agency Response Network (WARN) provides water and wastewater utilities with the means to quickly obtain help in the form of personnel, equipment, materials and associated services from other utilities to restore critical operations impacted during any type of emergency, big or small. Utilities can find contact information for their WARN on each state's website or can contact EPA via email.

Emergency Management Assistance Compact (EMAC)

EMAC is the only congressionally ratified mutual aid & assistance compact between all 50 states plus the D.C., the U.S.V.I., Puerto Rico and Guam. EMAC allows states to send personnel, equipment and commodities to other states to help during governor-declared states of emergency. View additional information on EMAC and how it can support utilities.

U.S. Department of Agriculture (USDA) Circuit-Rider Program

USDA funds Circuit Riders to respond to natural disasters and emergencies in the regular line of duty. Under this program, certified Circuit Riders can be deployed to provide technical assistance and expertise to support systems in need, including providing temporary operational assistance. The EPA will work with USDA, states, and systems to connect small systems to this resource. Water systems must be eligible for USDA funding in order to receive assistance. Learn more about circuit riders.

Water Sector Technical Assistance Programs

Organizations such as the National Rural Water Program (NRWA) EXIT and the Rural Community Assistance Partnership (RCAP) EXIT may be able to provide technical assistance through water and wastewater Circuit Riders that may work onsite with utility system personnel to troubleshoot problems and respond to natural disasters and other emergencies. They may not be able to provide extended coverage but may be available to assist as necessary.
Frequent Questions about Wastewater and Septic Systems and Coronavirus (COVID-19) POTW Worker Safety

Can the COVID-19 Virus Spread through Sewerage Systems?

Is the virus that causes CoVID-19 found in feces?

Will my septic system treat COVID-19?

Do wastewater treatment plants treat COVID-19?

Can I get COVID-19 from wastewater or sewage?

Should wastewater workers take extra precautions to protect themselves from the virus that causes COVID-19?
This webinar will highlight research EPA is working on with CDC including the following:

**Environmental Cleanup and Disinfection:** EPA researchers are assessing the use of disinfectants on many different surfaces and objects. They will also determine the best environmental sample collection methods and the limits of detection for SARS-CoV-2. To determine the effectiveness of these approaches, researchers are also developing a method to quickly analyze surface samples for the live virus, both before and after the disinfection process. Strategies to decontaminate PPE will also be developed.

**Wastewater Virus Detection:** Researchers are studying whether SARS-CoV-2 can be detected in wastewater. This work will focus on understanding viral loads, or how much of the virus is present, whether it is in an infectious state, and how it moves through the wastewater system. This information could help public health agencies by acting as an ‘early warning system’ and can identify if there is an outbreak in a specific community.

**Salivary Antibody Assay Development:** Researchers are developing an easy, non-invasive, and reliable antibody assay as a tool for public health agencies to help determine the true rate of infection across the country.

To Register:  [https://www.epa.gov/healthresearch/research-covid-19-environment](https://www.epa.gov/healthresearch/research-covid-19-environment)
CoViD-19 Compliance Considerations

Memorandum  Dated:  March 26, 2020:
“COVID-19 Implications for EPAs Enforcement and Compliance Assurance Program”

From:  Susan Parker Bodine
To:  All Governmental and Private Sector Partners

[“Temporary Enforcement Policy”]
1. Entities should make every effort to comply with their environmental compliance obligations.
2. If compliance is not reasonably practicable, facilities with environmental compliance obligations should:
   a. Act responsibly under the circumstances in order to minimize the effects and duration of any noncompliance caused by COVID-19;
   b. Identify the specific nature and dates of the noncompliance;
   c. Identify how COVID-19 was the cause of the noncompliance, and the decisions and actions taken in response, including best efforts to comply and steps taken to come into compliance at the earliest opportunity;
   d. Return to compliance as soon as possible; and
   e. Document the information, action, or condition specified in a. through d.

- Temporary Advisory for NPDES Reporting in Response to COVID-19 Pandemic
- Frequent Questions About the Temporary COVID-19 Enforcement Policy

Pandemic Incident Action Checklist
Water Infrastructure Improvement Act

Public Law No: 115-436 (01/14/2019)

Amends the Clean Water Act to allow municipalities to develop a plan that integrates wastewater and stormwater management

NPDES Permit may incorporate the integrated plan, including requirements related to CSOs, SSCS, TMDLs, green infrastructure, and projects to reclaim, recycle, or reuse water

Establishes Office of the Municipal Ombudsman in EPA, to provide:

- Technical assistance to municipalities seeking to comply with the CWA
- Information to EPA to ensure policies are implemented
- https://www.epa.gov/ocir/municipal-ombudsman
- Introducing: Jamie Piziali, Municipal Ombudsman
NPDES Applications and Program Updates Rule

Focus: Eliminate inconsistencies between regulations and application forms

Final Rule Published: Federal Register on February 12, 2019, 84 FR 3324
Effective: June 12, 2019

Changes to: 40 CFR 122, 124, 125

40 CFR 122.21 – NPDES Application form contents

https://www.epa.gov/npdes/npdes-applications-and-forms
Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine, 84 FR 5816

Federal Register: 02/22/2019

Rule Effective Date: 08/21/2019

Rulemaking affected the following CFR parts:

- 40 CFR Part 261-265
- 40 CFR Part 268
- 40 CFR Part 270
- 40 CFR Part 273
- 40 CFR Part 266


Webinar archived on March 4, 2019
§ 266.505 Prohibition of sewering hazardous waste pharmaceuticals.

All healthcare facilities—including very small quantity generators operating under § 262.14 in lieu of this subpart—and reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. Healthcare facilities and reverse distributors remain subject to the prohibitions in 40 CFR 403.5(b)(1).

Healthcare facilities and pharmaceutical reverse distributors are banned from sewering hazardous waste pharmaceuticals

Terms defined in 40 CFR 266.500
Guidance issued May 2018


“Roles and Responsibilities: POTW Pretreatment Program” . . . for POTWs that want to receive reports from their Industrial Users

- Verify Legal Validity of Electronic Signatures
- Prepare CROMERR System Documentation, If Needed
- Review and Update Pretreatment Program Requirements
NPDES programs submit NPDES program data to EPA (data they collect and generate, such as inspections and enforcement actions).

DMRs reporting began Dec. 21, 2016
Biosolids reporting began Feb. 19, 2017

Pretreatment Annual Reports to begin reporting electronically December 21, 2020 **

*NPDES Electronic Reporting Rule –Phase 2 Extension
Contact Information:

Jan Pickrel

Pickrel.jan@epa.gov
Update: Effluent Guidelines Program and Planning

U.S. EPA, Office of Water, Engineering and Analysis Division

Phillip Flanders, Ph.D., P.E., ELG Planning Team Lead
flanders.phillip@epa.gov

May 12, 2020
What is Effluent Guidelines Planning?

- The 1987 Clean Water Act Amendments added Section 304(m), which re-enforced Congress' intent that effluent guidelines keep pace with pollution prevention and treatment technology.

- EPA must review all promulgated effluent guidelines annually.

- Every other year: after proposal and public comment, EPA must publish a plan for the guidelines program which:
  - Identifies and establishes a schedule for any effluent guidelines revisions that have been identified.
  - Identifies any industries not currently subject to effluent guidelines that discharge nontrivial amounts of toxics and establishes a schedule to take final action.

We call these Effluent Guidelines Programs Plans.
**Review & Planning Process**

1. **START**
   - Solicit stakeholder recommendations

2. Issue Final Plan
   - Decide which categories to identify for (1) detailed study or (2) potential guidelines revisions or new guidelines

3. Conduct screening level analyses that review pollutant discharges by point source category

4. Publish Preliminary Plan identifying categories for further study

5. Collect public comments

6. Perform preliminary investigations including further stakeholder outreach
Outreach is important!

START

Solicit stakeholder recommendations

Issue Final Plan

Conduct screening level analyses that review pollutant discharges by point source category

Publish Preliminary Plan identifying categories for further study

Collect public comments

Decide which categories to identify for
(1) detailed study or
(2) potential guidelines revisions or new guidelines

Perform preliminary investigations including further stakeholder outreach

Collect public comments

Outreach is important!
Review of Existing Effluent Guidelines:

Screening level review
Prioritize categories warranting further investigation

Preliminary Category Review
Evaluate readily available information

Detailed Study
In-depth review of an industrial category or a wastewater discharge concern

Decision Points

Report findings and decisions

ELG Program Plans
Present findings, decisions, and next steps
Review of Existing Effluent Guidelines:

Screening level review: Prioritize categories warranting further investigation

Preliminary Category Review: Evaluate readily available information

Detailed Study: In-depth review of an industrial category or a wastewater discharge concern

Report findings and decisions

(1) No further action necessary
(2) Continue to study
(3) Identify for ELG rulemaking

ELG Program Plans: Present findings, decisions, and next steps
Preliminary ELG Program Plan 14

Where we are in the planning cycle:

- Preliminary Effluent Guidelines Program Plan 14
  - Published in the FR on October 24, 2019
  - The comment period ended on November 25, 2019

Note: We simplified the naming convention:

- The most recently published plan was the Final 2016 Plan and was the 13th that EPA has published,
- Thus this is plan the 14th plan.

Preliminary Plan 14 discussed:

- Ongoing rulemaking
- Reviews of Industrial Wastewater Treatment Technology
- Updates on ongoing studies
Ongoing ELG Rulemaking

- Revisions to the Steam Electric Power Generating Effluent Guidelines
  - Proposed rule published in the FR on November 24, 2019
  - The comment period ended on January 21, 2020
  - EPA proposed to reconsider limitations for
    - Flue gas desulphurization wastewater
    - Bottom ash transport water
  - EPA intends to publish a final rule in 2020

- No other categories warrant revisions or new ELGs at this time.
Reviews of Industrial Wastewater Treatment Technology

- Effluent Limitations Guidelines Database
  - Will allow users to search the regulations for a specific point source category or compare ELG regulations.

- Nutrient Review
  - This is a cross-industry review of DMR and TRI data on nutrient discharges
  - Additional review on nutrient discharges of:
    - Pulp and Paper
    - Meat and Poultry Products

- Per- and Polyfluoroalkyl Substance (PFAS) Review
  - Multi-Industry study on PFAS surface water discharges.
  - EPA plans to conduct a detailed study focusing on airports, organic chemical manufacturers, paper and paperboard manufacturers, and textiles and carpet manufacturers.
  - Announced in EPA’s PFAS action plan.
Reviews of Industrial Wastewater Treatment Technology

- Industrial Wastewater Treatment Technology Database (IWTT)
  - www.epa.gov/iwtt

- Industrial Wastewater Treatment Technology Reviews
  - A new technology review methodology to gather information earlier in its screening process on industrial wastewater treatment technology capabilities.

- Economic Screening Analysis
  - A screening-level prioritization based on economic factors of three industrial sectors: manufacturing, mining, and utilities.
Updates on Ongoing Studies

1. Detailed Study of the Petroleum Refining Category
   - This study evaluated the discharges associated with Petroleum refining. Program Plan 14 announced EPA is concluding the study.

2. Detailed Study of the Electronics and Electrical Components Category
   - This study is intended to identify the population of facilities and review manufacturing techniques, chemicals used, wastewater treatment technologies, and changes to the industry since the ELGs were promulgated.

3. Study of Oil and Gas Extraction Wastewater Management
   - Preliminary Plan 14 directed readers to the May 15, 2019 draft study report which describes the outreach activities that the EPA conducted during the study period and potential next steps.
Public Comments (Closed November 25, 2019)

- 17 unique comment submissions received of which 10 were substantive letters
- Commenters consisted of trade groups, environmental organizations, and public citizens
- Popular topics included
  - PFAS study
    - General support of efforts
    - Support for development of method
  - Meat and Poultry Products (AKA slaughterhouses)
  - Nutrients Review
We are working to publish Effluent Guidelines Plan 14 this fall

We appreciate any Feedback

www.epa.gov/eg/effluent-guidelines-plan

Contact me directly: flanders.phillip@epa.gov
Standards to be achieved by July 14, 2020

Requires dental offices to use amalgam separators and two best management practices recommended by the American Dental Association (ADA)

Contains provisions that significantly reduce oversight and reporting requirements

Dental dischargers that do not place or remove dental amalgam (with certain exceptions) exempt from further requirements by certifying such in Compliance Report
study updates
Wastewater sources to POTWs

<table>
<thead>
<tr>
<th>Wastewater Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>□ Percent of flow</td>
</tr>
<tr>
<td></td>
<td>□ MGD</td>
</tr>
<tr>
<td>Commercial/Institutional (e.g.,</td>
<td>□ Percent of flow</td>
</tr>
<tr>
<td>schools, hotels, restaurants)</td>
<td>□ MGD</td>
</tr>
<tr>
<td>Septage</td>
<td>□ Percent of flow</td>
</tr>
<tr>
<td></td>
<td>□ MGD</td>
</tr>
<tr>
<td>Industrial</td>
<td>□ Percent of flow</td>
</tr>
<tr>
<td></td>
<td>□ MGD</td>
</tr>
<tr>
<td>Stormwater and other</td>
<td>□ Percent of flow</td>
</tr>
<tr>
<td></td>
<td>□ MGD</td>
</tr>
<tr>
<td>Describe other:</td>
<td></td>
</tr>
</tbody>
</table>
17. Did your treatment works receive process wastewater from one or more of the following industrial sources in 2018? Select all that apply.

- No significant industrial sources
- Unknown
- Decline to Respond
- Airport deicing
- Dairy products (e.g. milk or cheese), animal processing (e.g., meat processing, poultry processing, aquaculture)
- Breweries/microbreweries
- Chemical, fertilizer, or phosphate manufacturing
- Grain milling
- Metals manufacturing and processing (e.g., electroplating, smelting, iron and steel)
- Non-animal food processing
- Petroleum refining
- Pharmaceutical manufacturing
- Pulp and paper manufacturing
- Steam electric power
- Oil and gas
- Other significant industrial source of nutrients

Describe ‘Other significant industrial source of nutrients:’ ____________________
study updates

National Study of Nutrient Removals and Secondary Technologies

• Study benefits:
  • Help POTWs optimize nutrient removal by providing operation and performance information
  • Technical assistance and peer resources
  • Some programs now loan equipment for pursuing facility optimization
  • Significant cost-savings opportunities
  • Help stakeholders evaluate and develop achievable nutrient reduction values
  • Reduced nutrients in effluent
  • Provide a rich database of nutrient removal performance for POTWs, states, academic researchers, and other interested parties
www.epa.gov/eg/potw-nutrient-survey
Our goal is to issue a[n]...Action Plan that includes clear commitments and accountability for actions that will further water reuse and help [ensure] the sustainability, security, and resilience of the nation’s water resources. Water quantity, supply, and quality decision-makers have historically worked through independent management regimes. Addressing future water resource challenges will require more holistic thinking that embraces the ‘convergence of water’ through more integrated action.¹

—David Ross, Assistant Administrator for Water, U.S. EPA
The WRAP features 11 strategic themes:

- 2.1 Integrated Watershed Action
- 2.2 Policy Coordination
- 2.3 Science and Specifications
- 2.4 Technology Development and Validation
- 2.5 Water Information Availability
- 2.6 Finance Support
- 2.7 Integrated Research
- 2.8 Outreach and Communications
- 2.9 Workforce Development
- 2.10 Metrics for Success
- 2.11 International Collaboration

Public landscapes throughout Northern California’s City of Roseville are irrigated with recycled water.
Action Implementation Plans

- Demonstrate leadership for action.
- Promote partnerships and collaboration to leverage resources and expertise of many stakeholders.
- Demonstrate progress and accountability for actions.
- Initiate an enduring, dynamic, and iterative approach that will lead to subsequent versions of the WRAP.
Print and online versions released on 2/27/20

37 developed actions across 11 strategic themes

WRAP Online Platform
- Repository for all actions (developed and undeveloped)
- Provides background and opportunities to be gained
- Identifies leaders, partners, interested collaborators
- Captures milestones and progress
- Helps form the pipeline of new actions and collaboration
“We support this plan because it integrates water reuse opportunities across multiple sectors including drinking water, agriculture, industry, recreation, and environmental protection.”

– State of Oklahoma, Office of the Secretary of Energy & Environment
Federal Policy Statement on Water Reuse

Water is critical to our nation’s health, strength, security, and resilience, but the solutions available to manage water and its availability are often complex. When incorporated into an integrated water management plan, water reuse can be a valuable tool to enhance the availability and effective use of water resources. The federal government recognizes, acknowledges, and respects the primacy of states in the management of water resources within their borders.

The federal government supports the consideration of water reuse to increase water security, sustainability, and resilience, especially when considered through integrated and collaborative water resource planning approaches, typically at the watershed or basin-scale.

This policy statement is intended to guide federal agencies to:

- Encourage consideration of water reuse and integrated watershed-scale planning approaches;
- Communicate the value and benefits of water reuse; and
- Leverage existing programmatic, funding, and technical resources.
Policy Coordination – Action 2.2.4

Enhance Wastewater Source Control through Local Pretreatment Programs to Support Water Reuse Opportunities for Municipal Wastewater (Action 2.2.4)

DESCRIPTION: Develop case studies of examples of how local pretreatment programs can mitigate and reduce problematic pollutants discharged into publicly owned treatment works and enhance reuse opportunities for reclaimed wastewater.

ACTION LEADER(S):
- NACWA—Cynthia Finley
- WEF—Claudio Ternieden

PARTNER(S):
- ACWA, AMWA, AWWA, NWRI, WateReuse, EPA

2019 2020 2021 2022

2019
Engage WEF Industrial Wastewater Committee. May 2020

2020
Engage NACWA Pretreatment Committee to identify and develop project strategies.
Host a session on Pretreatment and Water Reuse at the National Pretreatment meeting and workshop.

See 1 more milestone in the WRAP Online Platform
Action 2.11.2 Showcase: Global Water Reuse Webchat

- World Water Day: March 19, 2020
- Co-hosted by State Department’s Bureau of Oceans and International Environmental and Scientific Affairs & the Bureau of Global Public Affairs
- Panel
  - Moderated by Jeff Lape
  - Featured Lynn Spivey from Plant City, Florida
  - Featured Ted Henifin from Hampton Roads Sanitation District in Virginia
- 11 different countries hosted watch parties at embassies, consulates, and American Spaces

Clockwise from top left: Ted Henifin, Lynn Spivey, and State Department webinar team, just prior to the current social distancing norms.

Webinar Recording
Supporting Water Reuse through Source Control

Framing the Discussion:

- How are pretreatment program tools (source investigation, local limits, permit conditions, etc.) being used to protect wastewater quality for potential reuse?

- What source control strategies can help ensure that municipal wastewater effluent is of the quality needed for reuse applications (e.g. aquifer recharge and recovery)?

- How do we share experiences and best practices across the Water Resource Recovery Facility community?

- Other key questions or opportunities?
Thank You!

Jeff Lape, National Program Leader for Water Reuse
EPA Office of Water
lape.jeff@epa.gov

https://www.epa.gov/waterreuse/water-reuse-action-plan

waterreuse@epa.gov

Together, we can ensure the sustainability, security, and resilience of our Nation's water resources.
Water Reuse Action Plan

• Enhance wastewater source control through local pretreatment programs to support water reuse opportunities for municipal wastewater

• Align Policies and Communication Tools to Promote Best Management of Unused and Expired Pharmaceuticals to Support Water Reuse and Recycling

Wipes Legislation

• Washington state labeling bill signed by governor on March 25, 2020

• California legislation still progressing

• Public education and media coverage of issue during coronavirus pandemic
Q & A

Frank Dick
Kerry Britt
Jan Pickrel
Todd Doley
Phillip Flanders
Jeffrey Lape
UPCOMING 2020

Conferences & Events

**Strategic Communications: H2O Virtual Event**
June 1 – June 2, 2020

**Dealing with Disruption: Operationalizing Resilience in the Water Sector Webinar Part 4**
June 3, 2020

**Hot Topics in Clean Water Law Webinar**
June 10, 2020

**Hot Topics in Clean Water Law Webinar**
September 16, 2020

**2020 National Clean Water Law & Enforcement Seminar**
Charleston SC
November 18 - November 20, 2020

Learn More and Register at [www.nacwa.org/events](http://www.nacwa.org/events)
NACWA’s strength is in our members.

NACWA is the nation’s recognized leader in clean water advocacy for public utilities, made possible through the collective voice of our members.

Experience the value in membership through...

- Legislative, regulatory, legal, and communications information and analysis.
- Peer-to-peer resources exchange and support.
- Interactive webinars and events.
- Recognition for your clean water utility’s achievements through our national awards programs.

Learn more at nacwa.org/join
THANK YOU TO OUR ALL-CONFERENCE SPONSORS

Clean Water Champions

AECOM

GREELEY AND HANSEN

RAFTELIS

xylem

Let’s Solve Water
THANK YOU TO OUR ALL-CONFERENCE SPONSORS

Clean Water Stewards

Beveridge & Diamond

Brown and Caldwell

CDM Smith

Jacobs
Thank you to our all-conference sponsors:

Clean Water Protectors

Aqua Law
Barnes & Thornburg LLP
Black & Veatch
HDR
Wade Trim
THANK YOU TO OUR ALL-CONFERENCE SPONSORS

Clean Water Allies
Let Us Know Your Thoughts.

Look for the survey in the follow-up email!