

PRETREATMENT BULLETIN

Volume 24 Summer 2025

2024 & 2023 PRETREATMENT RECOGNITION AWARD WINNERS



Each spring, WSSC Water recognizes the regulated community as a critical partner in environmental stewardship through its annual Pretreatment Recognition Award ceremony. These awards historically recognized three tiers (gold, silver and bronze) of consistent compliance achieved by our significant industrial users (SIUs). In 2023, we added a fourth

tier (platinum). Additionally, SIUs who may not yet have reached compliance but have displayed remarkable efforts or innovations toward achieving compliance receive the Spotlight Award.

On April 29, 2025, WSSC Water held its 17th Annual Pretreatment Recognition Awards Ceremony. The Industrial Discharge Control Section hosted the event, led by Section Manager Alex DeWire.

Regulatory Services Division Manager I-Hsin McConnell and Acting Chief Engineer Caville Stanbury-Woolery shared their gratitude to the SIUs, emphasizing the critical relationships between the regulated community and WSSC Water. Deputy General Manager Akile Tesfaye, who delivered the keynote speech on behalf of WSSC Water GM/CEO Kishia L. Powell, also recognized the significance of these collective achievements and how continued teamwork is critical to our Smart One Water Future.

For the calendar year 2024, 27 SIUs received recognition for their efforts to maintain compliance with pretreatment regulations. There were two platinum, three gold, three silver and 19 bronze recipients. Nineteen of the 27 were return award winners, and the other eight were new winners!

WSSC Water would also like to recognize the winners for the calendar year 2023. Last year, 26 SIUs received recognition: two platinum, six gold, three silver, and 15 bronze awardees. In addition, one investigator-nominated Spotlight Award Industry - Alsco, Inc. —was highlighted for its responsiveness in implementing corrective actions to resolve Fats, Oil, and Grease (FOG) violations in 2023.

WSSC Water appreciates the efforts our regulated community puts into ensuring regulatory compliance. We hope to have more SIUs recognized at next year's Pretreatment Recognition Award ceremony. Honorees from 2023 and 2024 include:

PLATINUM AWARD

(15 or more consecutive years of consistent compliance)



- De Perini Metal Fabricators, Inc.
 (ZDP) 19 years 2024 & 2023
- Mid-Atlantic Finishing, Inc. 16 years – 2024 & 2023

GOLD AWARD

(Five or more consecutive years of consistent compliance)

- Bethesda Art Metal Works (ZDP) 2023
- Parkway Generation Keys Energy Center, LLC – 2024 & 2023
- United Therapeutics Corporation 2024 & 2023
- Thales Defense & Security, Inc. (ZDP) – 2023
- WMATA (Greenbelt) 2023
- WSSC Water Potomac Water Filtration Plant – 2024 & 2023

SILVER AWARD

(Three consecutive years of consistent compliance and five years without being in significant non-compliance)

- Human Genome Sciences, Inc. (LSM) – 2024 & 2023
- NASA/Goddard Space Flight Center
 2023
- U.S. Army Fort Detrick Forest Glen Annex – 2024 & 2023
- U.S. Food and Drug Administration
 Muirkirk Road Complex 2024

BRONZE AWARD

(demonstrating compliance for at least one full calendar year)

- Capital Electro-Circuits, Inc. (ZDP)
 2024
- Bottling Group, LLC (Pepsi) –
 2023
- CCBCC Operations, LLC (Coca-Cola) – 2024
- Eaton Corporation 2024
- Emergent BioSolutions 2023
- Five Star Laundry Washington, DC, LLC 2024 & 2023
- GlaxoSmithKline LLC –
 2024 & 2023
- Human Genome Sciences, Inc. (SSM) 2024
- KMC Thermo, LLC 2024
- Naval Support Activity Bethesda (NSAB) – 2024 & 2023
- National Institute of Standards and Technology (NIST) — 2024 & 2023
- National Institutes of Health 2024 & 2023
- National Institutes of Health-5625 Fishers Lane — 2024
- Nixon Uniform Service, Inc. 2024 & 2023
- Northrop Grumman Systems
 Corporation (ZDP), formerly ATK
 Space Systems, Inc. (ZDP) –
 2024 & 2023
- O3 Technologies, LLC dba Metro Laundry Service – 2024 & 2023
- Oaks Sanitary Landfill 2024 & 2023
- Ritchie Land Reclamation, LLC 2024
- Tricon Chemical Corporation –
 2024
- UniFirst Corporation –
 2024 & 2023
- University of Maryland /
 Department of Defense, Laboratory
 for Physical Sciences —
 2024 & 2023
- U.S. Food and Drug Administration
 Muirkirk Road Complex 2023
- WMATA (Shady Grove) –
 2024 & 2023

THE ROLE OF THE NATIONAL PRETREATMENT PROGRAM - A PARTNERSHIP IN COMPLIANCE

The National Pretreatment Program aims to protect publicly owned treatment works (POTWs) and receiving waters. Wastewater resource and recovery facilities (WRRFs) are generally designed to treat only domestic sewage, so industrial discharge can pass through untreated or interfere with the operation of a POTW, leading to inadequately treated wastewater entering receiving waters.

One requirement of the National Pretreatment Program is that industrial and commercial users, called industrial users (IUs), that meet federal criteria (40 CFR 403.3(v)(1) must obtain permits to discharge wastewater to a POTW. Understanding how a WRRF treats wastewater can help explain why this level of oversight is so crucial.

Typically, wastewater treatment at a WRRF involves **five distinct** stages:

- Preliminary Treatment: This first step screens out large debris and grit—think rags, sticks and sand—preventing damage to downstream equipment.
- 2. **Primary Treatment:** Wastewater enters settling tanks where the flow slows down, allowing heavier organic solids to settle at the bottom. These solids are typically pumped to a sludge digester for further breakdown.
- 3. Secondary Treatment (Aeration): Often called the heart of the plant, this stage relies on a careful balance of air, mixing and organic waste. Here, beneficial microorganisms consume organic pollutants. It's a living, breathing ecosystem highly sensitive to chemical disruptions.

4. Secondary Clarification: The now-treated water flows into secondary settling

flows into secondary settling tanks. Solids once again settle out and are directed to aerobic or anaerobic digesters, where they are dewatered using equipment like belt filter presses.



5. Filtration & Disinfection: The remaining floating solids are removed through filtration. Then, disinfection—typically using chlorine or ultraviolet light—ensures pathogens are destroyed or sterilized before the treated water is safely released into the environment.

A single unregulated industrial discharge can severely damage or even kill the microorganisms in the aeration tanks, throwing the entire treatment process into disarray. That's why **industrial** users in the WSSC Water service area must properly pretreat their waste, prevent slug discharges and immediately report any unpermitted releases to WSSC Water.

By working together, we can protect our treatment infrastructure and preserve the health of our waterways for generations to come.

Visit the U.S. Environmental Protection Agency's website for more information about the National Pretreatment Program: https://www.epa.gov/npdes/national-pretreatment-program.

INDUSTRIAL DISCHARGE CONTROL PROGRAM STAFF UPDATES



Over the past two years, the Industrial Discharge (IDC) Program has experienced some significant staffing changes. IDC Investigator David Aries was promoted to Industrial Investigations

Supervisor at the beginning of March 2024 to replace Peter Holland, who took a position closer to home. IDC Section Manager Philip Rindge retired to sunny Delaware at the end of March 2024 – A huge thanks to Phil for the leadership he provided to our team for many years!

IDC Industrial Investigations Supervisor Alex DeWire was promoted to the IDC Section Manager at the end of April 2024. Alex started as a WSSC Water Industrial Investigator with David Aries in 2017 and was promoted to IDC Industrial Investigations Supervisor in May 2022. As the new section manager, Alex's first task was hiring his replacement and several new IDC investigators, all while continuing to meet our pretreatment program requirements!

IDC Investigator Brenden Hogan was promoted to the other Industrial Investigations Supervisor position in August 2024. IDC was also happy to welcome three new Industrial Investigators to our team: Gabrielle LaFayette and Matthew Slappo, who

joined our team in August 2024, and Jacob Ascione, who filled in Brenden's vacant Investigator position in December 2024. Gabbie has her master's from the University of Oregon in Earth Sciences and comes to WSSC Water from the private sector, working on several landfills in Michigan with multiple treatment issues, including PFAS sampling. Gabbie was selected to represent WSSC Water on the Future Water Leaders Tour and to participate in the Global Water Summit in 2025, where she was able to visit water utilities across the world, including in China, Singapore and Australia!

Matt joined our team after working for Howard County Utilities for eight years. Two of those years as a wastewater operator at the the Little Patuxent Water Reclamation Plant, followed by six years in their pretreatment program. He brings a wealth of field sampling experience and wastewater knowledge to the IDC Team. Matt also served in the US Army Reserve for six years and is a very talented baker!

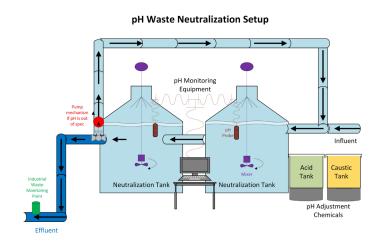
Jake grew up on Maryland's Eastern Shore and studied environmental science and technology at the University of Maryland, College Park. He worked in the wastewater industry as an engineering technician at RJN Group for almost two and a half years before coming to WSSC Water, focusing on flow monitoring and sanitary sewer system evaluation work. He is a Pittsburgh Steelers fan and loves to cook and play golf in his free time!

MAINTAINING A NEUTRALIZATION SYSTEM

pH neutralization systems are a type of pretreatment used to adjust the pH of wastewater before discharge to the sanitary sewer collection system. The allowable pH range for wastewater discharged to the WSSC Water collection system is between 6.0 and 10.0 standard units (s.u.), as described in Table 804.1.9 of the WSSC Plumbing and Fuel Gas Code.

Wastewater with a pH too high (caustic) or too low (acidic) could damage the collection system, create issues for the receiving wastewater resource recovery facility and threaten human health and the environment. Industrial Users (IU) should evaluate their waste streams and determine if a pH adjustment is required. Some common industries that require pH treatment systems include commercial and industrial laundries, pharmaceutical laboratories and manufacturing, beverage manufacturers, metal finishers, and research laboratories.

pH neutralization systems often consist of either a single or series of treatment tanks, with control valves that fill or drain the tank depending on whether the optimum pH levels have been achieved as programmed. An example of a pH neutralization system is included.



Without a proper maintenance schedule, pH neutralization systems can quickly stop working as designed and become a risk to the collection system, the treatment plant, its maintenance crews, and the environment. An IU is responsible for maintaining and ensuring an installed pH neutralization system's functionality to comply with the acceptable local discharge limits. Failure to maintain wastewater effluent within the established limits can result in potential violations and monetary penalties issued to the IU.

General maintenance tips for a pH neutralization system:

- Develop and follow a maintenance schedule for operational components to ensure system components are functioning properly:
 - ✓ Mixers, pumps, valves, acid/base feed lines, tank structure, monitoring systems, power supply and secondary containment systems.
 - ✓ Create a checklist for these maintenance inspections and maintain this documentation.
 - ✓ Have spare parts on hand for crucial system components.
- ✓ Calibrate pH probes per the manufacturer's guidance. Frequent pH calibration checks using the same buffers helps ensure the system is functioning properly and avoid potential violations. Document all calibrations and calibration checks in a log.
- ✓ Check pH buffer expiration dates before using for calibrations or calibration checks.
- ✓ Replace faulty pH probes. A faulty or out-of-calibration probe could throw off the system and overpump unnecessary chemical adjustments into the wastewater.

- ✓ Conduct employee training on operation of the pH neutralization system. Train multiple personnel to build in resiliency and prepare for any staffing issues or changes.
- ✓ Obtain an Industrial Wastewater Works certification. As required under State regulations, COMAR 26.06.01, all Significant Industrial User (SIU) pretreatment system operators must obtain an Industrial Wastewater Works certification. Contact the Board of Waterworks and Waste Systems Operators at 410-537-3167 for applications.
- ✓ Assess and plan for industrial process changes, new chemicals, or increases/decreases in wastewater flow that may unexpectedly impact the system. Adjust the pretreatment system accordingly for any process changes. Notify WSSC Water of any proposed changes or modifications to an SIU pretreatment system in writing prior to the change. The change should be authorized by WSSC Water prior to implementation.
- ✓ Retain and preserve all records relating to the nature of the wastewater discharge and the maintenance and operation of the pretreatment system for at least three years and make the documents available to WSSC Water inspection upon request.



Linko Exchange...

As of January 2025, WSSC Water's Industrial Discharge Control (IDC) Program became the first Cross-Media Electronic Reporting Rule (CROMERR)-approved pretreatment program in Maryland and one of only 25 nationally out of 1,500 pretreatment programs. CROMERR approval allows for secure, real-time electronic reporting using the LinkoExchange platform, ensuring compliance with federal requirements and streamlining the process for everyone involved with direct upload of data from a spreadsheet, real-time comparison to water quality discharge limits, and direct upload to the IDC database.

LinkoExchange is a web portal interface that allows Industrial Pretreatment Control Authorities, like WSSC Water to accept electronic reports from regulated entities. We're in the process of onboarding Significant Industrial Users (SIUs) to this system and conducted a webinar in February 2025 with our SIUs. The system allows for CROMERR-compliant electronic submittal of Self-Monitoring Reports (SMRs), Monthly Reports, Compliance Reports and other permit-required reports through LinkoExchange.

To aid our industries in this transition, IDC has compiled a helpful list of tips and tricks to get the best experience from LinkoExchange:

Signatory Authority and Electronic Signature Agreements:

- As with hard-copy reporting, only authorized representatives or those delegated with signatory authority who have completed an Electronic Signature Agreement may submit report packages and sign copies of records through LinkoExchange.
- To add a new signatory or complete an Electronic Signature Agreement, fill out the form (found on the WSSC Water IDC website) and mail it to your assigned industrial investigator. Yes, we still need an ink-signed hard copy of this form. You can find the form on the WSSC Water <u>Industrial Discharge</u> <u>Control Website</u>.
- Email confirmation of a report submittal will only be transmitted to the signer. Communicate with others working on a report to ensure reports are submitted on time.

Data Management:

SIUs are provided with an electronic data deliverable (EDD)
 Excel file to import discharge data to the platform easily. EDD files contain an industry's monitoring parameters and outline other information that LinkoExchange requires to import and categorize the data. Check the EDD against the Discharge

- Authorization Permit to ensure all parameters are monitored.
- Contact your analytical laboratory and request that data be directly entered into the EDD for easy import.
- Enter your data into LinkoExchange as soon as you receive
 it. The system compares against your permit limits and flags
 results if there are potential violations. Reminder: You must
 notify your assigned investigator within 24 hours of becoming
 aware of a violation.
- Users may also input samples manually. LinkoExchange organizes samples by collection method. When inputting data, you must input Composite, Grab, Continuous or Metered parameters as separate samples.
- Use the copy sample function to speed up manual data input.
 After creating and saving the first sample (saved samples will be added to Draft Samples). Use "copy sample" to create subsequent samples for the same monitoring point and collection method. Update the date and parameter values after copying and saving the new sample.
- Additional supporting documents, such as continuous pH monitoring data and graphs, oil/water separator logs, and certification statements, will be submitted as attachments to the report.
- Did you make a mistake on a submitted report? Use the repudiate function if data on a submitted report is incomplete, incorrect or falsely reported. When in doubt, communicate with your assigned industrial investigator.

Thank you for your continued support as we work toward fully onboarding SIUs into LinkoExchange. This transition will improve customer service by streamlining data entry and saving the need to print and courier required reports.

