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Pretreatment Bulletin

Since 2007, WSSC Water’s Industrial Discharge Control Section’s prestigious Pretreatment Recognition Award has been presented to outstanding industries within the Washington Suburban Sanitary District. At this year’s awards ceremony, the Industrial Discharge Control Program staff, along with Chief Engineer Mike Harmer and Regulatory Services Division Manager I-Hsin McConnell, recognized 28 facilities for their efforts to maintain consistent compliance.

This award program was created to identify permitted industrial users who demonstrated consistent compliance with all federal and local requirements. There are three levels of recognition: Gold, for industries that had five or more consecutive years of consistent compliance; Silver, for industries that had three consecutive years of consistent compliance and five years without being in Significant Non-Compliance; and Bronze, for industries that had consistent compliance for at least all of 2019. All of this year’s Gold Award winners were repeat gold winners; they have had consistent compliance for at least six consecutive years!

The annual award has become the standard by which we recognize our industrial partners who work to ensure our waterways are kept free



2019 Gold Winners: The Six-Year Champs!

of harmful pollutants. The industries receiving these awards have demonstrated consistency in environmental stewardship, one of WSSC Water’s core values.

This year’s March 12 award ceremony was impacted by the COVID-19 outbreak, with some industry representatives unable to attend due to their company’s policy in response to the virus. Those who could attend enjoyed the company of other representatives of WSSC Water permitted industries and a Mission BBQ lunch.

Congratulations to all of the 2019 winners!

The 2019 Pretreatment Recognition Award Winners

GOLD

- ATK Space Systems, Inc. (two facilities)
- Capital Electro-Circuits, Inc.
- De Perini Metal Fabricators, Inc.
- District Photo, Inc.
- Eaton Corporation
- KMC Thermo, LLC
- Mid-Atlantic Finishing, Inc.
- Tricon Chemical Corporation

SILVER

- Bechdon Company, Inc.

- Maryland Metal Plating & Polishing, Inc.
- Thales Defense & Security, Inc. (Bronze last year)
- United Therapeutics Corporation (Bronze last year)
- WMATA (Greenbelt)

BRONZE

- Adelphi Laboratory Center
- Bethesda Art Metal Works*
- Coca-Cola Bottling Company Consolidated*
- Fort Detrick-Forest Glen Annex*
- GlaxoSmithKline LLC

- National Institutes of Health - 5625 Fishers Lane
- Naval Support Activity Bethesda*
- Oaks Sanitary Landfill
- Ritchie Land Reclamation, LLC*
- University of MD/DOD, Physical Sciences Laboratory
- WMATA (Shady Grove)
- WSSC Water Patuxent WFP*
- WSSC Water Potomac WFP
- UniFirst Corporation*+
- *New winner for 2019

+UniFirst Corporation was also recognized as this year’s *Spotlight Award Winner*, as 2019 was UniFirst’s first full calendar year of consistent compliance since 2014. They have not had a reporting violation since 7/7/18, and a parameter violation since 10/31/17. We wanted to recognize their persistence and determination on tackling issues to become compliant. Good Job!

Industrial Discharge Control Program Staff Updates

The Industrial Discharge Control (IDC) Program is proud of its former section manager, I-Hsin McConnell, who was promoted to Regulatory Services Division Manager last September. While her pretreatment expertise and steady management are greatly missed for the day-to-day operations of IDC, her replacement, Philip (Phil) Rindge is keeping IDC “delivering the essential.”

Phil’s experience with pretreatment began in an unlikely place; as the authorized representative at a WSSC Water permitted industrial user. He also spent seven years as an investigator and another seven as an industrial investigations supervisor. Replacing Phil as Industrial Investigations Supervisor is our own Peter Holland, who had been a WSSC Water industrial investigator for more than four years. Congratulations to all three!

Phil’s first task in 2020 was hiring several new IDC investigators. Industrial Investigators Joseph Bieberich and Jeffrey Hillebrand left to work for a federal agency, and Tonya Penn-Huff retired after more than 10 years in IDC and 25 with WSSC Water. IDC wishes them success in their new adventures and a big thanks to Tonya for her service at WSSC Water. While in IDC, Tonya’s experience and knowledge from working as a WSSC Water chemist frequently proved helpful.

The first new member of the IDC team is Roberto Azevedo, who is transferring from WSSC Water’s Permit Services Section to help IDC support our industries in meeting their permit and regulatory requirements. Rob loves fishing and enjoying time with his wife and newborn.

Marianna Eberle and Brenden Hogan left the Maryland State Department of Environment to apply their regulatory experience at WSSC Water. When not at work, Marianna enjoys traveling, camping, hiking, gardening and reading. In his free time, Brenden enjoys fishing and crabbing on the Chesapeake Bay.

Finally, Elizabeth Shearn comes to us with industry experience and expertise as a process engineer. Recently married, Elizabeth likes watching films while snuggling with her new husband and three cats.



Roberto Azevedo



Marianna Eberle



Brenden Hogan



Elizabeth Shearn

Prohibited Discharges



WSSC Water prohibits discharges into the sanitary sewer that can pose a health hazard, cause interference of wastewater treatment operations, pass-through treatment into local waterways, and/or jeopardize the quality of treatment plant sludge.

Below is a partial list of WSSC Water’s prohibited substances.

- Any storm, surface, ground water as well as roof runoff is not permitted into the WSSC Water collection system.
- Any liquid, solid or gas that can by itself or by interaction with other wastes cause a fire or explosion hazard and result in a public nuisance or hazard.
- Dilution water used as a partial or complete substitute for proper pretreatment.
- Any substance containing a viable pathogenic or parasitic organism.

- Any liquid or vapor having a temperature greater than 140 degrees Fahrenheit or raises the temperature at any of the water resource recovery facilities (WRRFs) to greater than 104 degrees Fahrenheit.

- Any liquid, solid, or gas not amenable to treatment, which can cause obstruction of flow or interfere with the proper operation of the wastewater collection system and result in pass-through at the WRRF resulting in a violation of the National Pollution Discharge Elimination Permit.

- Discharge of wastewater with a pH of less than 5.0 standard units for any period of time.

For a full list of prohibited discharges, please refer to your Discharge Authorization Permit and the WSSC Water Plumbing and Fuel Gas Code Section 804.

Type www.wsscwater.com/IDC into your browser and scroll down to the link for Industrial and Special Waste Regulations.

Covid-19 Update

Many industrial users throughout the WSSC Water service area have been impacted by the Covid-19 public health crisis. As you work through the challenges at your facility, it is important to keep open lines of communication with your WSSC Water industrial investigator. Please remember, all aspects of your Discharge Authorization Permit remain in effect and need to be adhered to.



Please notify your industrial investigator of changes in your facility operations or wastewater discharges. Notification to WSSC Water needs to be made for the following:

- If your facility plan includes altered schedules or closings (certain days/temporarily)
- If there are changes in production/operations
- If there are changes in wastewater discharges
- If there may be any planned slug discharges
- If there is an inability to monitor wastewater as per your permit requirements

This list is meant to cover some of the typical changes and may not be all inclusive, so notify your investigator if unsure.

WSSC Water Industrial Discharge Control's mission of preventing the introduction of pollutants that will interfere or pass through our water resource recovery facilities, improving opportunities to recycle or reclaim industrial wastewater and sludge, and now more than ever, protecting the health and safety of the general public and WSSC Water workers remains our focus. During this public health crisis, WSSC Water is following alternative work schedules with increased telework, implementing physical and social distancing measures, and using masks and hand washing/hand sanitizer when necessary. Your investigator will coordinate to complete WSSC Water's Clean Water Act mandated sampling and investigations as safely as possible. Thank you for your continued partnership to keep our waterways free of harmful pollutants and protect the health and safety of our community.

Proper Disposal of Hazardous Waste

Per the Environmental Protection Agency (EPA), hazardous waste has characteristics that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste can take many forms: liquids, solids, gases and sludge.

WSSC Water does not accept hazardous waste discharges in our sanitary sewer collections systems. In fact, most, if not all, hazardous wastes are listed as prohibited discharges in Section 804 of the WSSC Water Plumbing and Fuel Gas Code. Basic guidelines for the "cradle-to-grave" handling of hazardous wastes are presented here to help you understand how to properly manage waste that WSSC Water cannot accept.



A waste generator must first determine whether or not their waste is hazardous. The EPA's website (<https://www.epa.gov/hwgenerators>) provides many resources for helping potential hazardous waste generators. Once this determination is made, the industry must then ensure that all federal and local guidelines are met for the handling, storage and disposal of their waste.

After hazardous waste is generated, each industry is required to store the waste until it is properly disposed of. Regulations on the storage of hazardous waste can be found in Title 26, Subtitle 13 of the Code of Maryland Regulations (COMAR 26.13). A copy of COMAR 26.13 can be found on EPA's website, at the following link:

<https://www.epa.gov/sites/production/files/2016-11/documents/comar26-13-01.pdf>.

Finally, after generation and proper storage, industries are then required to arrange for the shipment of these wastes to an MDE-permitted disposal facility through a licensed waste hauler. A waste manifest must accompany the hazardous waste that tracks it from its generation, transport and eventual disposal; hence the term "cradle to grave."

WSSC Water encourages industries to speak to their contracted waste haulers and local hazardous waste regulators to ensure they are compliant with all applicable hazardous waste disposal regulations.



Why Does a pH Meter Need to be Calibrated?

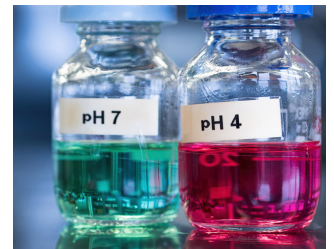
Back by popular demand: A pH meter reminder.

Discharge Authorization Permits (DAPs) require that samplers calibrate their pH monitoring meter at the start of each monitoring day to ensure accuracy prior to collecting pH data. But what exactly is pH calibration?

For a little background, pH is a measurement of the concentration of hydrogen ions. Fundamentally, pH meters consist of a voltmeter attached to electrodes (probe) that measure changes in voltage based on fluctuations in hydrogen ion activity. Most meters compare the voltages of known solutions to that of an unknown solution and then mathematically calculate the pH. Typically, higher voltages correlate to low pH and lower voltages correlate to high pH. Of course, pH meters vary from manufacturer to manufacturer, so please refer to your user manual to determine exactly how your pH meter works.

pH calibration is the process of taking standard buffer solutions with known pH values to “reprogram” pH meter electrodes to ensure accurate measurements. This process is vital to recording accurate information, as over time the measurements collected by meter electrodes can “drift” causing potentially inaccurate pH measurements. By calibrating your pH meter routinely, you can correct these variations and ensure accurate pH measurements.

There are several ways to calibrate pH meters including a two-point and/or three-point calibration. These calibration techniques use two and three known buffer solutions, respectively, to adjust the meter’s measurements. These calibrations typically use 4.0, 7.0 and 10.0 buffer solutions.



Which buffer solutions are best to use? That depends entirely on your pH meter and your wastestream. Your pH meter user manual will tell you what type of calibration you need to perform and what buffers to use. If your user manual offers you a range of buffer solutions, try to bracket your wastestream with the appropriate pH buffers. For example, if you are expecting wastestream pH values ranging between 6 and 7, and your pH meter allows it, calibrate with 4.0 and 7.0 buffer solutions. Conversely, if you expect your wastestream pH values to range from 8-10, a 7.0 and 10.0 pH buffer calibration would be appropriate.

Routine pH meter calibration will help ensure you get the most accurate data you can acquire. Perform your pH meter calibrations according to your manufacturer’s specifications prior to each sampling event, per your DAP.