

**LIFT Scholarship Exchange Experience for Innovation & Technology (SEE IT)  
Sponsored by: WE&RF, WEF and NACWA**

**TRIP REPORT**

**SCHOLARSHIP UTILITY:** *Greeley Water Pollution Control Facility  
Greeley, Colorado*

**SCHOLARSHIP UTILITY CONTACT:** *Sean Cooney  
Wastewater Operations Supervisor  
sean.cooney@greeleygov.com*

**ATTENDEES:** *Sean Cooney, Operations Supervisor  
Steve Hettinger, Plant Operator*

**TRIP DATES:** *May 8-12, 2017*

**UTILITIES/SITES VISITED:** *Hampton Roads Sanitation District, Virginia Beach, VA  
York River Plant  
James River Plant  
Williamsburg Plant  
Alexandria, VA  
Alexandria Renew Enterprises  
Washington D.C.  
DC Water*

**TECHNOLOGIES/INNOVATIONS SEEN:**

Shortcut deammonification sidestream treatment processes. Primarily the Demon and AnitaMox brands.

**TRIP BACKGROUND and RATIONALE (250 WORDS):** *What technology did you select to visit? What is the problem you are trying to address? How did you envision the LIFT SEE IT scholarship trip helping your utility?*

The Greeley WPCF has been working to start up a Demon shortcut nitrogen removal system for centrate sidestream treatment since 2015. We want to see operating, full-scale systems that are performing deammonification for sidestream treatment of centrate using the same Demon technology.

A number of issues have sidetracked the startup of the Greeley system. Seeing other properly operating systems and providing an opportunity to discuss with various staffs how to move from startup to operation is important and valuable. The Demon process was selected by the City of Greeley as a part of the overall Master Plan that focused on increasing tighter nutrient limits for effluent discharge. A properly operating sidestream deammonification process is critical to the overall performance of the facility. The setbacks and disappointments with the Greeley startup have caused a number of issues with plant performance that in the future will be detrimental to the permit requirements for the facility.

The LIFT SEE IT opportunity will provide time to learn to work and understand the complexities of operating a Demon system from those successfully doing so. It's important to discuss lessons learned during startup from others and operating strategies that have been successful and useful for them. Most importantly we are seeking some confidence and reassurance for Greeley staff on operating this process that the trip will provide.

**TRIP SUMMARY (1 page max. Please include 10 photos and a 1-2 minute video montage from the trip. The video does not need to be professional, however if you have the means to create a professional video feel free to do so):** *Why did you select the specific utility and technology for the visit? Based on your visit, do you think this technology/approach works for your utility? How useful was the trip in your decision making process? What were some of the trip highlights and takeaways?*