



WASTEWATER DIVISION

Rebuilding Headworks Air Diffusers



Wastewater Division January 2024 Statistics

- Average Influent flow - 140.36 mgd
- Average Effluent TSS – 23 mg/l
- Average Effluent BOD – 15 mg/l
- Biosolids production – During January, MCUA produced 11,845 wet tons of filter cake, all of which was processed through the dryers resulting in 4,934 wet tons of class A product.

*Rainfall for the month was 6.50 inches as measured at the Treatment Plant.

Recently, the MCUA rebuilt and replaced one of the many air diffusers at headworks, as the previous air diffuser had reached its life expectancy. An air diffuser is used to transfer oxygen into the sewage or industrial wastewater. Oxygen is required by microorganisms/bacteria residents in the water to break down pollutants.

At Headworks, wastewater from the collection system enters the Central Treatment Plant. There are four aerated grit chambers that are used to remove inorganic compounds such as grit and coarse debris. It is important these materials are removed because they can cause abrasions to the equipment and impede the rest of the treatment process.

The aerated grit chambers use air blowers to freshen the raw influent and reduce its specific gravity. The air flow in the chambers causes a spiral of water to flow through the tank and remove heavier particles out of the water. This process leaves behind lighter organic particles which pass through the tank.

Approximately two times per year, each of the grit chambers are individually taken out-of-service so that the settled grit can be removed, and the chamber can be inspected and cleaned. A crane bucket is used to remove the grit, which is put into luggers and sent to the landfill.



SOLID WASTE DIVISION

Snow Boxes in Operation



Solid Waste Division

January 2024

Year	Monthly Tons	Cumulative Tons
2024	39,422	39,422
2023	43,767	43,767

An average of 220 trucks hauled an average of 1,577 tons of waste to the Landfill facility each day.

While we haven't seen a true blizzard this winter, the Solid Waste Division recently deployed two snow boxes for snow clean-up operations late last month. The utilization of the equipment is anticipated to yield significant time savings in snow removal efforts. It is estimated that the division can effectively double snow removal capacity in a single pass. This efficiency enhancement not only streamlines operations but also ensures prompt and thorough snow clearance, ultimately contributing to improved safety and accessibility within the Solid Waste facilities.



**Employee
Spotlight
ON
TJ Miara**

Congratulations on passing the Solid Waste Association of North America: Manager Of Landfill Operations Exam!!!

TRAINING SCHEDULE

MARCH TRAINING: FALL PROTECTION / LADDER SAFETY

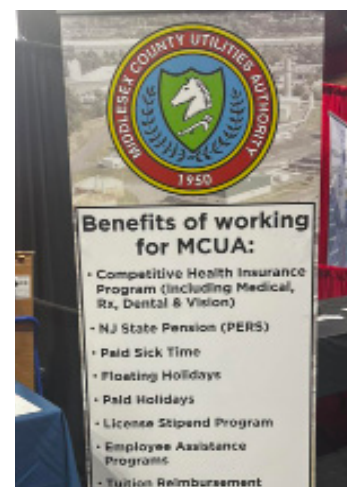
MARCH 5TH	7:30 AM; 9:30 AM; 12 PM; 2 PM	PUBLIC MEETING ROOM	MAINTENANCE; OPS; DUO; IT/ OT; LAB/EQ; L&M
MARCH 7TH	7:30 AM; 9:30 AM; 12 PM; 2 PM	PUBLIC MEETING ROOM	MAINTENANCE; OPS; DUO; IT/ OT; LAB/EQ; L&M
MARCH 12TH	7:30 AM; 9:30 AM; 12 PM; 2 PM	PUBLIC MEETING ROOM	MAINTENANCE; OPS; DUO; IT/ OT; LAB/EQ; L&M
MARCH 14TH	7:30 AM; 9:30 AM; 12 PM; 2 PM	PUBLIC MEETING ROOM	MAINTENANCE; OPS; DUO; IT/ OT; LAB/EQ; L&M

**ELECTRICAL SAFETY TRAINING HAS BEEN RESCHEDULED
TO MARCH 12TH - 15TH**



ASSIGNMENTS DUE MARCH 14TH

MCUA Attends Rutgers Mega Career and Internship Fair



The MCUA participated again this year in the Rutgers Mega Career and Internship Fair, showcasing their commitment to engaging with talented students and fostering future leaders in the field. With a focus on recruiting students passionate about environmental sustainability, science in wastewater operations and engineering, MCUA representatives engaged with students, both current and alumni, offering insights into the dynamic opportunities available within the organization.

By leveraging the diverse talent pool at Rutgers University, MCUA aims to continue its tradition of excellence in providing essential utility services while nurturing the next generation of professionals dedicated to making a positive impact on the environment and communities they serve.