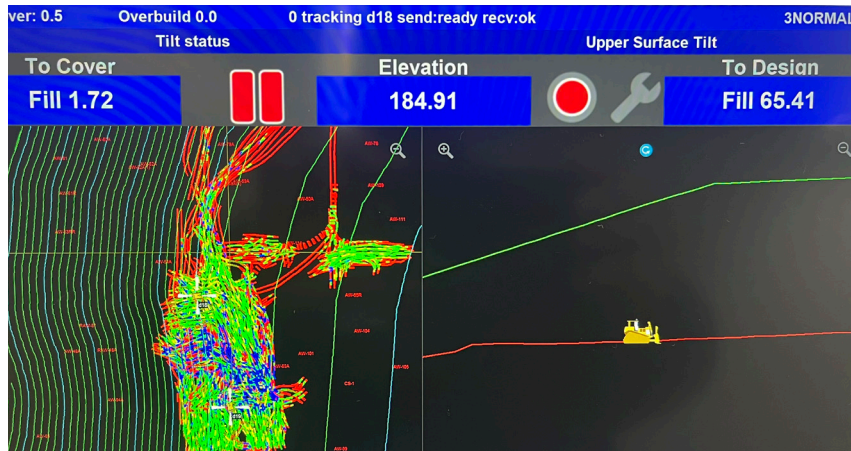




SOLID WASTE DIVISION

Geologic Computer System Helps Save Air Space at Landfill



A view of the satellite to ground mapping to help Operators on active workfaces

Solid Waste Division January 2024		
Year	Monthly Tons	Cumulative Tons
2025	37,335	37,335
2024	39,422	39,422

An average of 234 trucks hauled an average of 1,493 tons of waste to the Landfill facility each day.



An example of the GPS device

The MCUA recently expanded the number of heavy equipment vehicles with GPS data point tracking to 3 vehicles. The device, purchased from Geologic Computer Systems, is mounted on top of heavy equipment vehicles and corresponds with satellites to map ground elevation and position points accurate to approximately two centimeters. The position points are simultaneously used to generate a real-time contour map of the landfill. These devices are used on either a compactor or a bulldozer.

When used on Compactors the software measures incremental settlement to show operators areas of the active workface that could benefit from additional compaction. This helps operators more efficiently compact material and enables more material to be placed in the finite volume of space available. The real time elevation data is also used to maintain a uniform elevation across the work face that is in line with that of previous days' workfaces.

For bulldozers, the data is used to place a uniform depth of cover, allowing the cover material to be used more efficiently. By maintaining a uniform cover depth operators can ensure that the material is sufficiently covered without needing to use unnecessary volumes of cover material.

Additionally, the data collected can be used to track operating times on vehicles, calculate periodic waste/cover densities, visualize remaining air space, and generate projections of air space depletion. The MCUA uses these functionalities, as well as the aforementioned to improve operational efficiencies and allow rates to remain low for customers.



WASTEWATER DIVISION

MCUA Assists Edison's Water Main Break



Wastewater Division January 2024 Statistics

- Average Influent flow -82.51 mgd
- Average Effluent TSS -12 mg/l
- Average Effluent BOD - 14 mg/l
- Biosolids production -During January, MCUA produced 12,616 wet tons of filter cake, all of which was processed through the dryers resulting in 4,577 wet tons of class A product.

*Rainfall for the month was 0.56 inches as measured at the Treatment Plant.

A 20-inch water main broke in Edison Township on Christmas night, affecting thousands of residents and businesses. The break was caused by aging pipes, freezing temperatures, and pressure shifts. The rupture, which occurred around 10 p.m. on December 25th, flooded streets and caused widespread loss of water pressure. Edison issued a boil water advisory and many schools were affected.

Crews worked nonstop to repair the break. The MCUA Lines and Meters team assisted with dewatering operations and hydroexcavation using a vacuum truck to support the contractors work on the pipe repair. The Maintenance Department also coordinated delivery of a back up pump to use as needed. Public employees distributed bottled water and set up distribution centers. Community centers offered access to showers, and temporary hotel stays were provided for the most affected residents.

The break highlighted the aging water infrastructure, with cast iron pipes under pressure from growing demand and environmental factors. Freezing temperatures worsened the situation. As crews restored water over several days, the incident prompted calls for infrastructure upgrades to prevent future issues.

We applaud the hardwork put forth by Edison first-responders, Edison's DPW, The Middlesex County Utilities Authority as well as all business owners and residents throughout the township.

TRAINING SCHEDULES

MARCH TRAINING: HEARING CONSERVATION

MARCH 4TH	7:30 AM, 9:30 AM, 12:30PM, 2PM	PUBLIC MEETING ROOM	MAINT, OPS, DUO, IT/OT, LAB/EQ, IPP, L&M
MARCH 6TH	7:30 AM, 9:30 AM, 12:30PM, 2PM	PUBLIC MEETING ROOM (2PM - ANNEX CONFERENCE)	MAINT, OPS, DUO, IT/OT, LAB/EQ, IPP, L&M
MARCH 11TH	7:30 AM, 9:30 AM, 12:30PM, 2PM	PUBLIC MEETING ROOM	MAINT, OPS, DUO, IT/OT, LAB/EQ, IPP, L&M
MARCH 13TH	7:30 AM, 9:30 AM, 12:30PM, 2PM	PUBLIC MEETING ROOM	MAINT, OPS, DUO, IT/OT, LAB/EQ, IPP, L&M

Welcome New Employees!

Sean Fitzpatrick – Electrician
 Nicholas Ungano – Electrical Apprentice
 William Spatzier – Electrician
 Taylor Kuenze – LF Equipment Operator



Greg Soroka

Title: Relief “A” Operator

Previous Titles: “B” Operator

How long have you been with the Authority: 11 years

Hobbies Outside MCUA: Playing guitar, playing video games & going to craft beer breweries