



The Authority™
ONEIDA-HERKIMER SOLID WASTE AUTHORITY

Co-Digestion of Food Waste at Wastewater Treatment Facilities

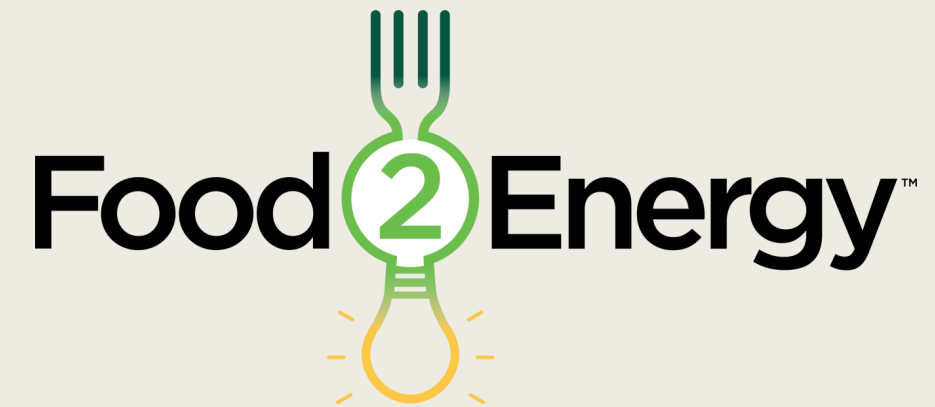
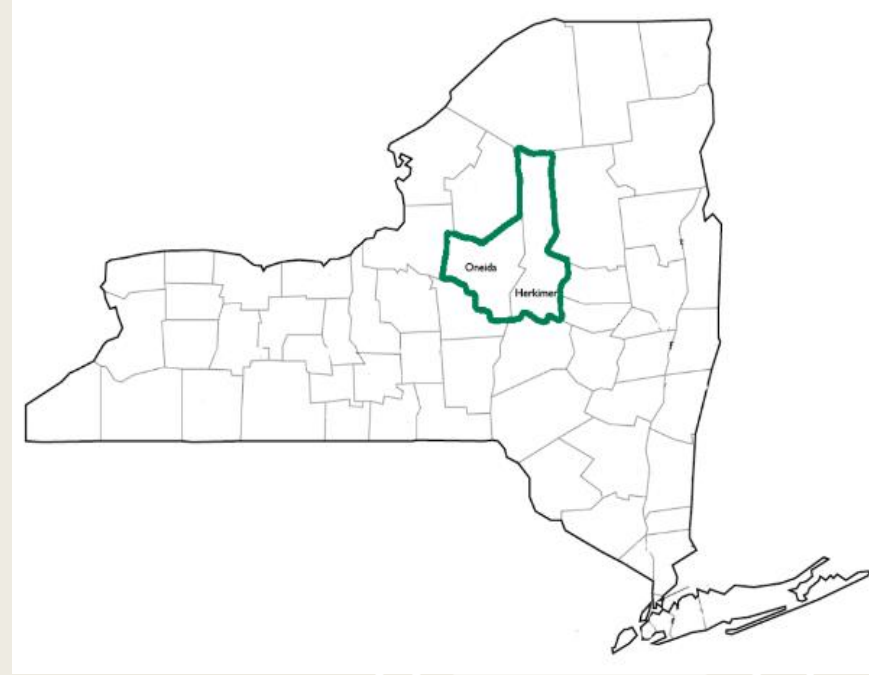
**NERC Webinar
October 23, 2025**

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About Us

- Oneida-Herkimer Solid Waste Authority
- Formed in 1988
- Public Benefit Corporation
- Serve 300,000 Residents
- 10 Facilities
- 74 Cities, Towns, Municipalities



About Us



**Recycling Center
& EcoDrop Utica**



**Household Hazardous Waste
Collection Facility**



Regional Landfill



**Three Solid Waste
Transfer Stations**



EcoDrop Rome



Green Waste Composting Facility



Landfill Gas To Energy Facility



Food2Energy Facility

Oneida County Sewer District

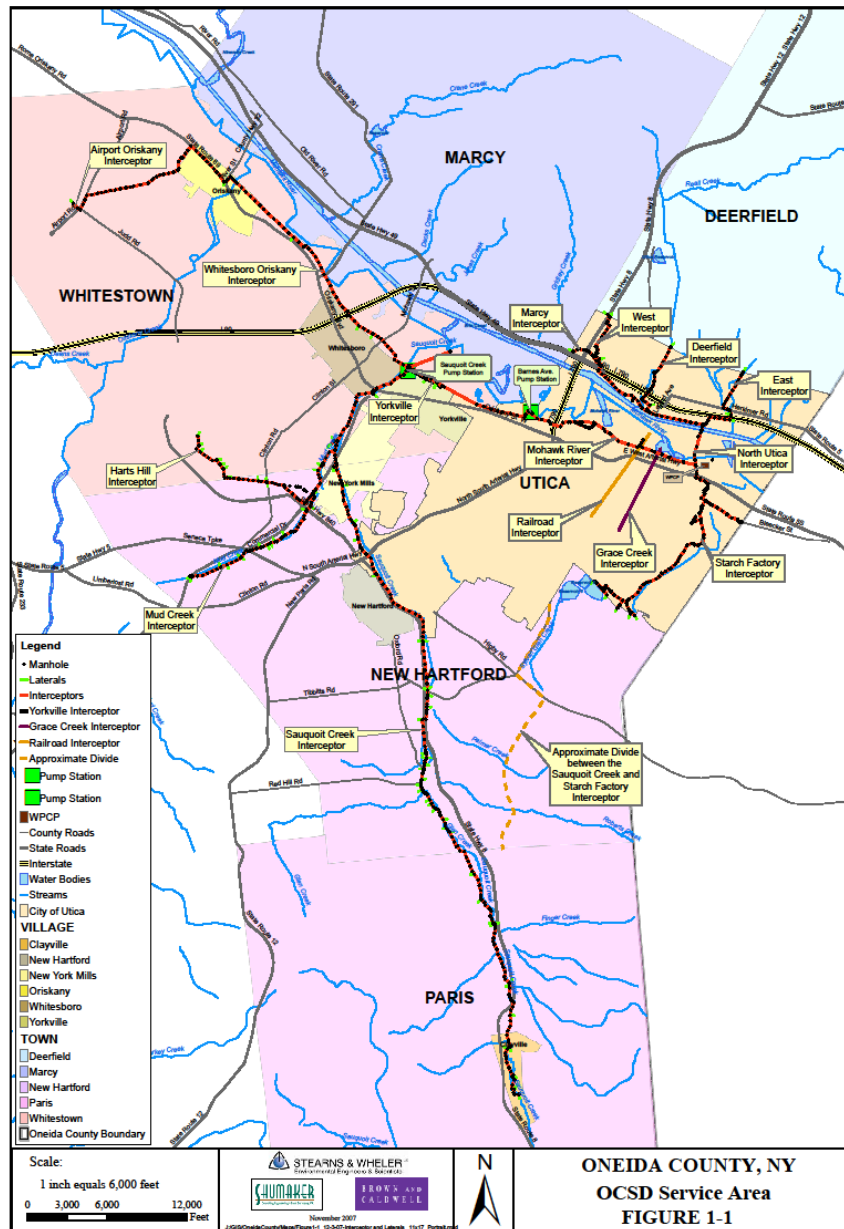
The Oneida County Sewer District was formed in 1965. It is administered by the Oneida County Department of Water Quality and Water Pollution Control, which is responsible for the operation and management of the District's facilities and personnel.

District facilities include 45 miles of interceptor sewers, two main pump stations (Sauquoit Creek and Barnes Ave), and the County Water Pollution Control Plant (WPCP). The District serves the municipal wastewater treatment capacity needs of 15 municipalities.

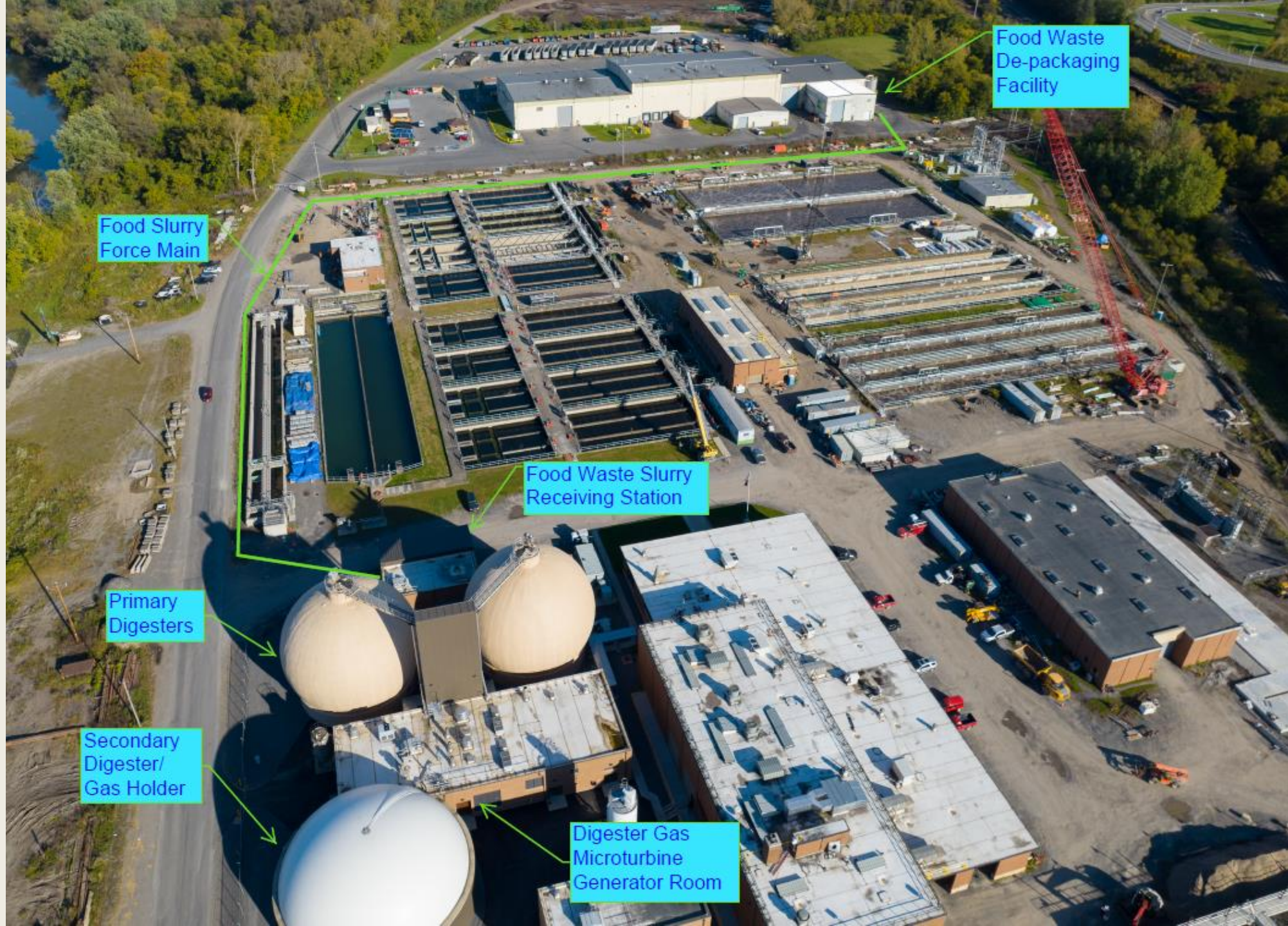
The County WPCP treats wastewater from the municipalities throughout the County, although these municipalities own and operate their own collection systems. Wastewater from the City of Utica (City) is combined sewage, while wastewater from all other regions other than the City consist of sanitary sewage.



FIGURE 1 - SERVICE AREA MAP



Oneida County Sewer District Service Area Map



Food Waste
De-packaging
Facility

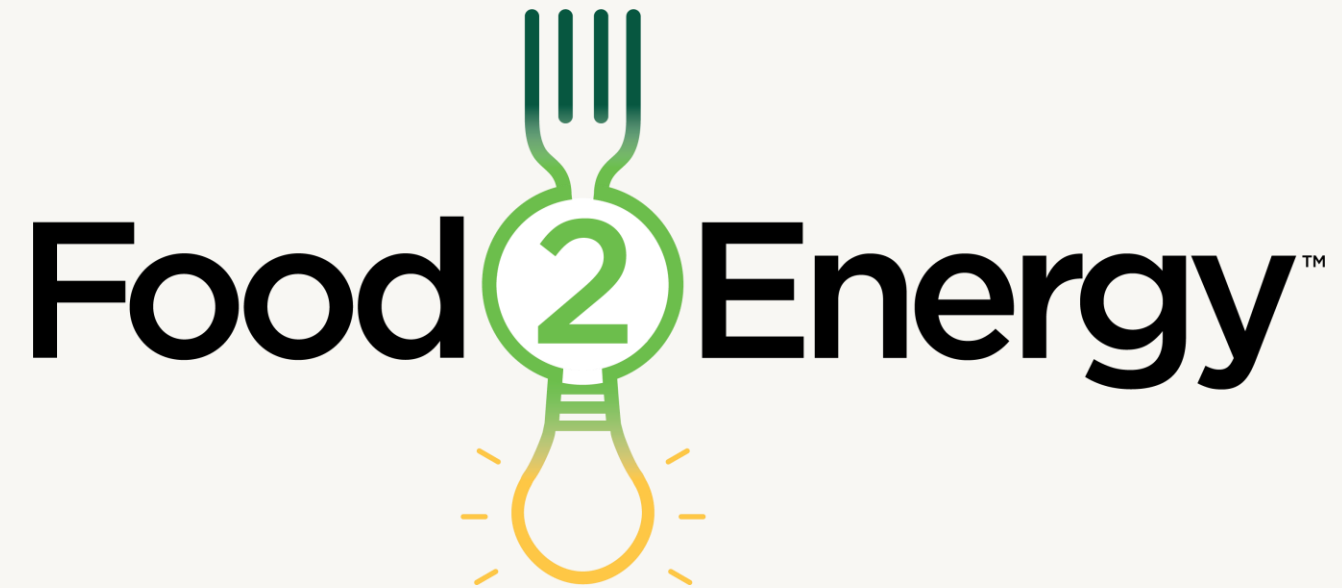
Food Slurry
Force Main

Food Waste Slurry
Receiving Station

Primary
Digesters

Secondary
Digester/
Gas Holder

Digester Gas
Microturbine
Generator Room



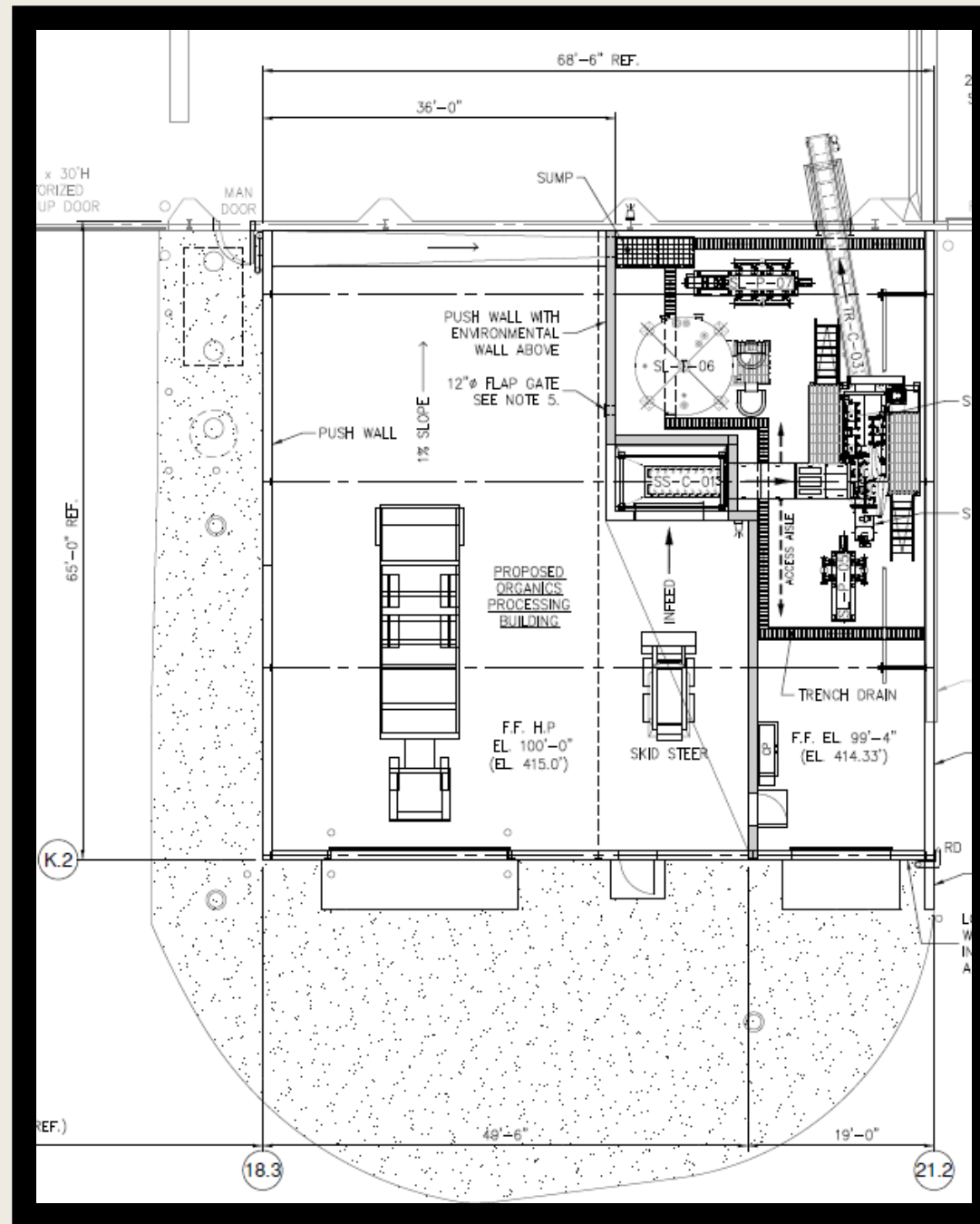
**Source Separated Organics
Processing Facility (SSOPF)**

Authority - SSOPF

- Based on an initial feasibility study, potential processing capacity of 5,000 to 20,000 tons annually
- Began processing SSO in June 2019
- Receive SSO from local grocery stores, colleges, food banks, dairy manufacturing, and residents
- Processed 5,900 tons of SSO in 2025
- Annual tonnage has grown between 500 and 800 tons per year since 2020



Facility Overlay





Authority - SSOPF

- “Batching Process” mixes effluent water from OCSD piped to SSOPF in order to achieve proper consistency
- Slurry is delivered at a <10% solids (in line meter used to verify)
- Utilize an underground pipeline (~1,500 feet) to transport slurry from SSOPF to Anaerobic Digesters.
- Daily average slurry discharge = 22,000 gallons in 2025
- Tipping fees for SSO \$40/ton (MSW is \$60/ton)
- Approximately 15 Haulers providing SSO feedstock





OCSD –Overview

- Original facility commissioned in 1972
- The WPCP has a design influent flow of 54MGD with a peak wet weather capacity of 111MGD.
- Anaerobic Digesters were part of a new construction and facility upgrades project that began in 2016.
- Sewage sludge was previously incinerated, and ash sent to Regional Landfill (Ava, NY)

OCSD Upgrade Projects

In 2007, the County and NYSDEC entered into an Order of Consent to eliminate Sanitary Sewer Overflows at the Sauquoit Creek Pump Station. This led to a series of major upgrade projects in order to treat all of the sanitary sewer flows that reach district facilities.

New air quality regulations and outdated facilities provided a need to upgrade existing facilities which included construction of Anaerobic Digesters in place of incinerators.



Other Projects

Contract C-4: SCPS Force Main

Contract C-5: Sauquoit Creek Pump Station Upgrades

Contract C-6: Headworks Upgrades

Contract C-7: Primary Treatment Upgrades

Contract C-8: Secondary Treatment Upgrades



Contract C-2: WPCP Solids Handling Upgrades

- New anaerobic digesters.
- Energy recovery (600 kW).
- Power production for up to 50% of WPCP demand.
- Additional heat recovery.
- Decommissioned incinerators.
- Septage receiving facilities for outside waste, including food waste from Authority.
- Miscellaneous upgrades to thickeners and dewatering.



OCSD – Anaerobic Digesters

- Utilize Fats Oils and Grease (FOG) screening machine to screen incoming slurry from the SSOPF.
- Co-digested in Anaerobic Digesters with sewage sludge
- Sewage sludge is continually fed into ADs, while the SSO is kept in a 50,000-gal storage tank and bled in as needed.
- SSO provides a high Chemical Oxygen Demand and volatile solids, which the bacteria in the digesters breakdown and turn into methane gas.
- Class B Biosolid is disposed at Regional Landfill (Ava, NY)

OCSD – Energy Production

- SSO provided accounts for 18% of the AD feedstock but is responsible for 30% of the methane gas production.
- Digester Gas is then used to produce electricity through methane gas microturbine generators.
- Originally three 200kW microturbines were commissioned in 2019. In 2023 two additional 200kW microturbines were installed, bringing the total power output to 1 mW.
- Exhaust heat is recovered to supplement heating of the digesters to maintain ~98 degrees F
- All energy produced is internally used on-site
- The gas produced by the AD's has the potential to provide up to 75% of the WPCP's electrical needs



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