



Public Hearing

Sussex Regional Recharge Facility (SRRF)

12-18-2025

Presented by Artesian Wastewater Management,
Inc. (AWMI)

SRRF Wastewater Treatment Plant Expansion

What is SRRF?



Sussex Regional Recharge Facility (SRRF) is a regional wastewater facility in Sussex County, Delaware.



Serves existing and future wastewater needs within Artesian's wastewater service territories and neighboring utilities.



Located on a 75-acre site south of Reynolds Pond Road and east of Route 30 just outside of The Town of Milton



Wastewater is treated and stored onsite before being applied by spray irrigation on surrounding agricultural land as beneficial reuse.



ROAD - DE ROUTE 30
- OF WAY VARIES

3 Million Gallon Influent
Equalization & Diversion
Lagoon

RECIRC. LINE

3MG COMBINED
EQUALIZATION AND
DIVERSION LAAGOON
BOTTOM EL. 238.0

FUTURE LAAGOON

INFLUENT PUMP
STATION &
VALVE VAULT
24' x 45' HEADWORKS
BUILDING

C-1.02

Headworks Facility

C-1.03

INFLUENT FORCE MAIN TO
HEADWORKS (BY OTHERS)

90 Million Gallon
Treated Effluent
Storage Lagoon

INFLUENT PS FM
TO DUTCHLAND
COMBINED PLANT DRAIN
AND DIVERSION LINE TO
LAAGOON

Primary and Tertiary
Treatment Facility

EFFLUENT PUMP STATION & VALVE VAULT
OFFICE & PROCESS BUILDING

PLANT DRAIN P.S.

FUTURE
BIOLOGICAL
PROCESS
STRUCTURE
BIOLOGICAL
PROCESS
STRUCTURE



Current SRRF Facilities

- SRRF currently operates with disposal authorized up to 3.75 million gallons per day (MGD).
- Disposal is via spray irrigation on active farm fields surrounding the site which grow corn, wheat and soybeans.
- Existing wastewater treatment system is permitted for 0.675 MGD of treatment.
- Currently, there is more disposal capacity (3.75 MGD) than treatment capacity which creates a mismatch this project is designed to balance.



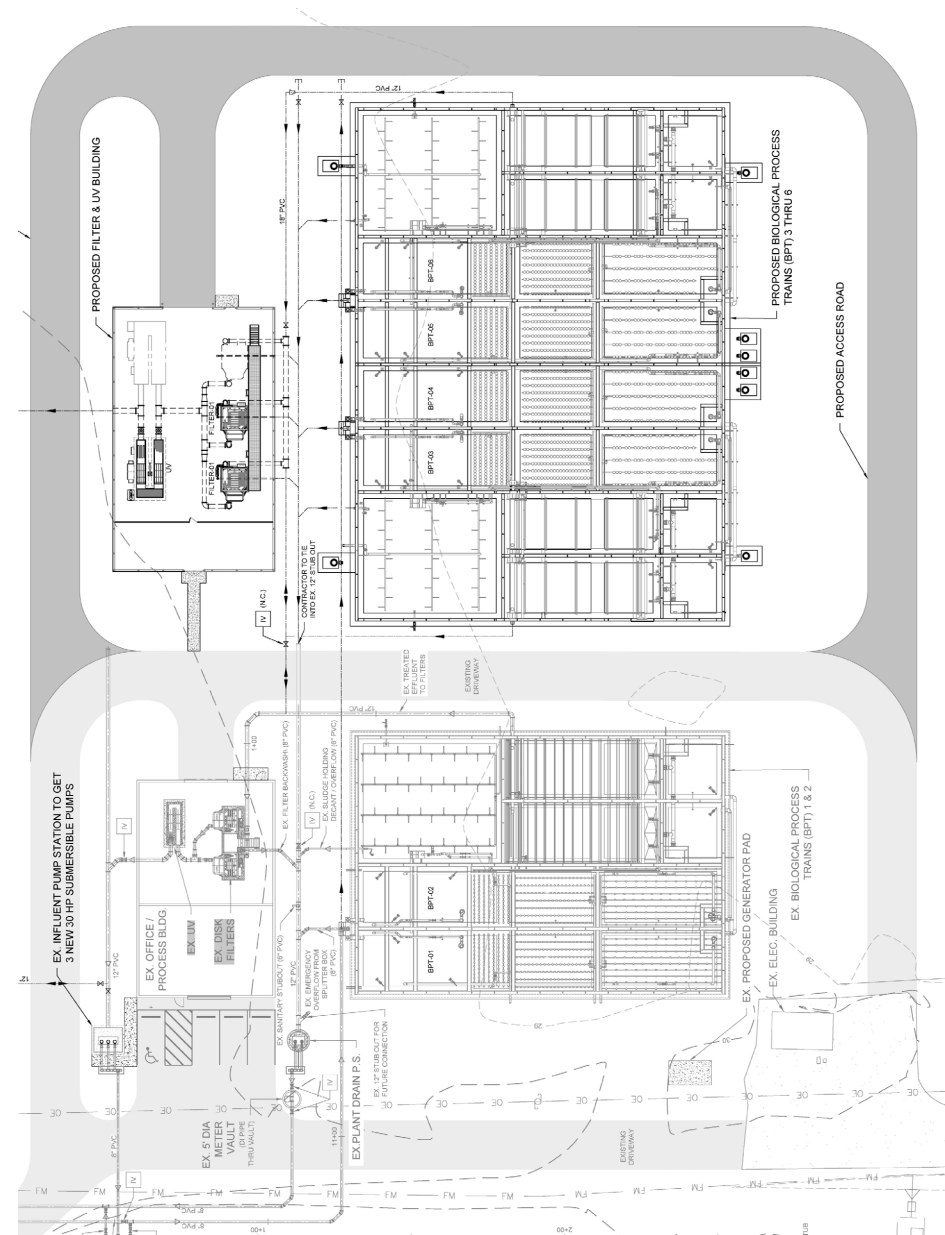
How we got Here: Phases 1 and 2

- Phase 1: Constructed a 90-million-gallon (MG) storage lagoon, finished effluent pump station and pipelines to spray fields; designed to dispose of treated flows from Allen Harim Foods, LLC.
- Phase 2: Added an onsite treatment system designed for 625,000 gallons per day from Artesian's Sussex County customers.
 - Phase 2 included a 3.0 MG equalization/diversion lagoon, headworks a hybrid (modified) Bardenpho treatment system, cloth media filters, UV disinfection, and an effluent lift station.



What this Permit Application is Requesting

- The proposed Construction Permit and Operations Permit request authorization to construct and operate four (4) additional, modified Bardenpho treatment systems, each rated at 625,000 gallons per day, additional cloth media filtration and UV systems, a second effluent pump station, and associated piping, aeration, and electrical improvements.
- This will increase the total treatment capacity of the SRRF plant to 1.875 MGD.
- No additional disposal capacity is being requested at this time; any future increase in disposal will be a separate application.



How the Expanded Plant Will Meet Regulatory Limits


- Expanded headworks screening for grit removal.
 - Existing facility sized for this expansion.
- Modified Bardenpho treatment system is proven technology for nutrient removal
 - Nitrogen to below drinking water standard of 10 mg/l.
 - Phosphorus to less than 8 mg/l.
- Clarifiers and filters for solids removal.
- UV disinfection for destruction of pathogens and other contaminants.



Protecting the Environment and Meeting Permit Limits

- The expanded plant will continue to comply with strict state regulations and permit limits for flow and water quality.
- All added treatment trains use the same proven process already reviewed and approved by DNREC.
- No changes are being requested to the existing 3.75 MGD disposal limit or spray field locations.
- By increasing treatment capacity, AWMF can better protect local groundwater and surface waters while serving regional growth.
- A network of monitoring installations including wells, piezometers and lysimeters are already in place and will continue to be used to regularly monitor the regional groundwater.
- Samples are tested at a third party certified lab.



A yellow scissor lift is shown from a low angle, looking up at its platform and railings. The background is a clear blue sky. A white silhouette of the state of Ohio is visible in the upper right portion of the image, partially overlapping the sky and the lift.

How and When Additional Capacity Will be Built

- New treatment systems will be built on the existing 75-acre SRRF site within the current treatment area footprint as designated on the Sussex County approved Conditional Use.
- Disposal will be through the existing, beneficial reuse, spray irrigation systems.
- Construction will begin within three (3) months of Construction Permit issuance and is expected to take approximately one (1) to one-and-a-half (1.5) years.

Big Picture Benefits

- SRRF is a key part of a regional wastewater plan that supports communities throughout Sussex County.
- Reduces reliance on septic systems in the region.
- The added treatment capacity will provide long-term reliability for customers.
- Tied into AWWI's regional network with flow able to be routed to various facilities as needed.
- AWWI will continue to monitor flows and effluent characteristics to verify continued compliance.