



DNREC Virtual Public Hearing

ARTESIAN PERMITS FOR THE SUSSEX REGIONAL RECHARGE FACILITY (Docket #2025-P-W-0022)

Welcome. Any visual content that is part of this hearing will appear in this window.

Computer Audio: Use the **audio connections menu** to turn audio on or off.

Telephone Audio: DIAL-in Number: 1-408-418-9388

Access code: 2338 948 3371

Comments will be accepted using the DNREC Comment form, via email, or by USPS mail as noted on the hearing event page (de.gov/dnrechearings)

Introduction

Artesian Wastewater Management, Inc. is currently authorized to operate and maintain the Sussex Regional Recharge Facility (SRRF)

Artesian designed SRRF to be operated and upgraded in multiple phases to allow for increase treatment capacity and operational improvements

The purpose of this presentation is to provide an overview of the existing system, the permit applications, and the proposed draft Construction and Operations Permits for Phase 3 upgrades



Phased Permitting

- Phase 1 is constructed and operated under Operations Permit 359288-02 (April 2024)
- Phase 2 is currently under construction as authorized by Construction Permit 359288-03 and once completed will be operated under Operations Permit 359288-02 (April 2024)
- On January 17, 2025
 - DNREC received an application to renew Operations Permit 359288-02 (Expired March 2025 and currently administrative continued)
- On May 16, 2025
 - DNREC received an application to construct Phase 3 upgrades
- On June 6, 2025
 - DNREC received a letter requesting to amend as well as renew the Operations Permit 359288-02 authorizing the operation of Phase 3 once construction is completed

Phase 1 Construction & Operations Permits

- Authorized the construction and use of a 90 million gallon synthetically lined lagoon to receive treated wastewater (effluent) from Allen Harim Foods Harbeson Processing Facility for storage prior to spray irrigation
- Authorized the construction and use of Fields F and G for spray irrigation (approximately 587 acres)
- Authorized the construction and use of Fields D and E for spray irrigation (approximately 181 acres)
- Included various construction, operational, monitoring and reporting requirements

Phase 2 Construction & Operations Permits

- Authorized the construction and use of an advanced onsite wastewater treatment system designed to treat up to 625,000 gallons per day of municipal wastewater from Artesian's wastewater service territories in Sussex County
- The project currently under construction includes a three-million-gallon equalization/off-spec diversion lagoon, screening and grit removal equipment, a Hybrid Bardenpho process treatment system, two cloth media filters and ultra-violet disinfection system
- Once completed treated wastewater (effluent) will be mixed with the treated effluent from Allen Harim in the existing storage lagoon and discharged via spray irrigation to the agricultural fields previously permitted under Phase 1
- Included various construction, operational, monitoring and reporting requirements

Phase 3 Construction Application

- Artesian is applying for a Construction Permit for Phase 3 upgrades at SRRF
- The proposed upgrades would increase SRRF's treatment capacity to 1.875 MGD
- The proposed upgrades include additional screening equipment, four additional Hybrid Bardenpho process treatment trains, additional cloth media filtration, ultra-violet disinfection equipment, and associated pumps and infrastructure
- The proposed upgrades do not change SRRF's approximately 75-acre footprint
- The proposed upgrades use the same technology (as Phase 2) to treat municipal wastewater from Artesian's wastewater service territories in Sussex County
- The proposed upgrades do not change SRRF's disposal capacity limits

Proposed Phase 3 Construction Permit

- The Department shall be notified of construction start-up at least fifteen days prior to commencement
- All systems shall be constructed/installed by a Department licensed Class E.4 system contractor
- The Department is authorized to conduct inspections during construction and upon completion of construction
- Upon completion of construction, the Permittee shall submit the following items:
 - Design Engineer Inspection Report certifying the system has been constructed in accordance with the approved Design Engineer Report, Plans and Technical Specifications
 - Wastewater Treatment System As-Builts
 - Amended Operation and Maintenance (O&M) Plan

Operations Permit Application

- Artesian is applying to renew and amend their Operations Permit to operate and maintain the Sussex Regional Recharge Facility (SRRF) to serve as a regional on-site wastewater treatment and disposal system (OWTDS) meeting the existing and future wastewater treatment and disposal needs of AWM's service territories in Sussex County, Delaware
- Artesian is seeking to renew the authorization covering Phase 1 and 2 operations and authorize Phase 3 operations upon completion of Phase 3 upgrades

Proposed Operations Permit

Influent Volume Limitations

- Allen Harim Foods, LLC
 - Average daily flow 1.5 MGD and Peak daily flow of 2.0 MGD (NO CHANGE)
 - Added new condition for allowing minor flow changes upon approval of Allen Harim's Operations Permit (THIS DOES NOT CHANGE SRRF'S DISPOSAL CAPACITY)
- SRRF wastewater treatment system
 - The total treatment capacity of SRRF will increase to 1.875 MGD (NEW)

Effluent Disposal Limitations

- Spray Fields D, E, F, and G
 - Design Disposal Capacity: 3.73 MGD (NO CHANGE)

Proposed Operations Permit

Design Effluent Nitrogen Concentration

- Allen Harim wastewater treatment system (NO CHANGE)
 - SRRF is designed to receive an effluent Total Nitrogen concentration of 27.7
- Phase 2 SRRF wastewater treatment system (NO CHANGE)
 - SRRF is designed to achieve a daily average Total Nitrogen concentration of 10 mg/L
 - Combined blended effluent: 22.5 mg/L
- Phase 3 SRRF wastewater treatment system (NEW)
 - SRRF is designed to achieve a daily average Total Nitrogen concentration of 10 mg/L
 - Combined blended effluent: 17.9 mg/L Total Nitrogen Concentration

Proposed Operations Permit

Retains the Following Operational and Monitoring Conditions

- SRRF is required to be operated under a Class IV Licensed Operator
- Influent and Effluent Monitoring with Contingency Plans for failure to achieve treatment requirements for Total Nitrogen, Fecal Coliform Bacteria, and Turbidity which includes diversion to the off-spec lagoon as appropriate
- Nitrogen Loading Limits (lbs/acre/year)
- Enhanced Groundwater Network (34 Monitoring Wells, 12 Piezometers, 7 Lysimeters)
- Surface Water Monitoring (7 Points on Ingram and Sowbridge Branches)
- Soils Monitoring with Annual Metals Testing
- Vegetative Monitoring and Analysis Annually

Proposed Operations Permit

Retains the Following Compliance and Enforcement Conditions

- Submission of Monthly Discharge Monitoring Reports and Annual Monitoring Reports
- Non-Compliance Notifications (verbally within 24-hrs and written report with five days)
- Spill Notification and Corrective Action Requirements
- Routine Inspections Conducted by the Department
- Violations of any limit or conditions of the Permit is a violation of 7 *Del. C.* Chapter 60 and is grounds for enforcement including the issuance of Notices of Violation and Administrative Orders with Penalties

Summary

- Applications received by the Department
 - For Phase 3 Construction and Expansion of the Wastewater Treatment System
 - For the Amendment and Renewal of SRRF Operations Permit: State Permit 359288-02
- If approved, the Department would issue a Construction Permit and an Amended Renewal Operations Permit
- The permits have been drafted to include construction, operational, monitoring and reporting requirements and contingency plans designed to protect public health and the environment

Public Hearing Exhibits

- Exhibit 1: DNREC On-Site Regulations
- Exhibit 2-12: Artesian May 2025 Application Package
- Exhibit 13: DNREC Draft Construction Permit 359288-04 – AWM
- Exhibit 14: DNREC Draft Amended Renewal Operations Permit 359288-05 – AWM
- Exhibit 15: Public Meeting Calendar Notice of the Public Hearing
- Exhibit 16: Virtual Public Hearing Event Page
- Exhibit 17: DNREC Website Public Notice of the Public Hearing



Public Hearing Exhibits

- Exhibit 18: Public Notice of the Public Hearing in the Delaware State News
- Exhibit 19: Public Notice of the Public Hearing in the News Journal
- Exhibit 20: DNREC Construction Permit 359288-03 – AWWMI -SRRF Phase 2
- Exhibit 21: DNREC Operations Permit 359288-02 – AWWMI -SRRF Phase 1 & 2
- Exhibit 22: DNREC Presentation



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ARTESIAN PERMITS FOR THE SUSSEX REGIONAL RECLAMATION FACILITY (Docket #2025-P-W-0022)

Thank you for joining us. We will accept comments on this matter through March 10, 2022.

Comments may be submitted in writing

via [DNREC Comment form](https://dnrec.alpha.delaware.gov/public-hearings/comment-form/) - <https://dnrec.alpha.delaware.gov/public-hearings/comment-form/>

via [email](mailto:DNRECHearingComments@delaware.gov) - DNRECHearingComments@delaware.gov

or by USPS mail:

Lisa A. Vest, Hearing Officer

DNREC – Office of the Secretary

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The full verbatim transcript will be posted when it becomes available.

For more information, find the event page for this hearing on the DNREC Public Hearings page

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