



September 24, 2025

Onondaga County
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RE: Municipal SPDES - Surface Discharge– Permit Modification
DEC ID: 7-3124-00018/00001, Onondaga Co Oak Orchard WWTP Expansion
4300 Oak Orchard Rd, Town of Clay, Onondaga County

The New York State Department of Environmental Conservation (DEC) has reviewed your resubmission received on August 28, 2025. This resubmission was based on the Notice of Incomplete Application issued by DEC and sent July 30, 2025. Based on our review of this updated material, DEC offers the following comments as a request for additional information. In order to meet Micron’s construction timeframes, DEC requests that a response to these comments be submitted by October 20, 2025. DEC is available to discuss the identified comments at your earliest convenience.

Municipal Basis of Design Report (BODR)

1. Section 1.3.8: Please describe the “RP # oo.1975g13” assumption used to evaluate the hydraulic gradient of the outfall structure.
2. Section 1.4.1: Section 2.5 of the Report anticipates that PFAS/PFOS regulatory limits may be imposed. To address this, the County is planning for the installation of a sludge dryer to destroy these compounds prior to the product’s ultimate destination in either a landfill or for land application purposes. Based on the public comments to the DEIS, the discharge of emerging contaminants is forefront. Has OCDWEP evaluated installing MBRs with nanofiltration capabilities and/or reverse osmosis treatment to remove these pollutants to levels recommended by the NYSDOH?
3. Table 1-12: This table lists the peak hour flow at full build-out as 38.86 million gallons per day (mgd), however Response 36 specifies the peak hour flow of 38.6 mgd. Please correct or clarify this discrepancy.
4. Table 1-12 and Section 2: Given the understanding that Total Dissolved Solids (TDS) will be included as a permit limit in the modified SPDES permit (500 mg/l WQ Standard), TDS is not included as a parameter of concern for consideration in the design criteria. The BODR should discuss how the proposed recommended treatment design will meet the TDS limit, especially under the treatment capabilities of receiving wastewater from the FAB1 alone, prior to advanced treatment from the planned IWWTP.
5. Table 2.1.9 and Section 3.7: Explain the operational details and differences between the MBBR Stages 1 and 2.
6. Section 4.1.3.1: It is DEC’s understanding the OCDWEP uses sodium hypochlorite, rather than Bioxide, to control hydrogen sulfide in the forcemains

conveying flow from the Davis Road pump station. Please confirm or correct as needed.

7. Table 4.2: We understand from the response to comment number 35 that the approach velocity to the climber screens is intended to meet *Ten States Standards* at average flow. Please provide the calculated velocity based upon the channel dimensions to verify this statement.
8. Section 4.10.2: Drawing 00G07 indicates that the proposed MBBR tanks will be located north of where the existing chlorine disinfection tanks are presently sited. This is a significant distance from the existing HPO treatment basins. How will flow be routed to and from the MBBRs during the MOPO treatment phase?
9. TM1 Section 1.3: DEC agrees that additional composite sampling of BOD and TSS is warranted at the Davis Rd. pump station, at the influent bunker, and at the current influent sampling point at the Oak Orchard WWTP. Additional sample will assist in verifying whether the current sampling location is representative of the characterization of the influent flow received at OOWWTP.
10. Appendix B, TM-1: While the methodology used to estimate the expected growth of new residential and commercial properties and the associated potential average gallons per day per capita (gpdc) is detailed in Appendix B of the Technical memo, the response to DEC's comment #86 together with the revised report do not provide sufficient detail on the determination of peaking factors and the subsequently presented peak hourly flowrates. Please discuss whether *Ten States Standards* or *TR-16* (or another professionally recognized reference) was used for calculating the peaking factors. The narrative simply states that when determining the values in the tables, a peak hourly factor was applied to calculate the flowrates. The value of the peaking factor(s) is not provided, nor the methodology of its derivation. In Section 3.1.5 of this appendix, I/I contributions are based on the historical average of 89 gpdc. The report then states that the assumption of the standard 100 gpdc will account for extraneous inflow and infiltration. Keeping in mind that when the existing Oak Orchard WWTP was designed, a peaking factor of 3.95 was implemented, which is a conservative peaking factor based upon the methodology stipulated in *Ten States Standards*. How do the peaking factors in Appendix B compare to that used during the design of the existing facility?
11. Appendix F, Section 1.2: Please clarify what the "validation period" is, specifically in the context to the Ready for Equipment (RFE) and Ready for Manufacturing (RFM) periods.
12. Drawing 00G09: Please explain the presence of the injection of a brine source to the effluent pipe prior to discharge to the Oneida River.

EFC Municipal BODR Comments provided to DEC on 9.24.25

13. Section 1.2.1 Establishment of Sewer Debt Responsibility – Provide the updated EDU breakdown to EFC when available.
14. Section 1.3.2 Plant Current Conditions - It is noted that the need for additional CCTV of the existing outfall is under evaluation. Prior to closing a SRF financing, provide a revised report with the outfall CCTV inspection results and summary of

proposed capital improvements and associated costs if included in the project scope.

15. Section 1.4.1 Future Flow Projections and Needs – This section notes that a closed vessel UV disinfection system will be installed in place of the existing chlorination and dechlorination system. However, the Section 2.4.1 alternatives analysis section calls out an open channel UV Disinfection System as the disinfection system of choice. Please clarify if the selected alternative will be an open channel or closed vessel UV disinfection system and revise the report as needed.
16. Section 1.4.3 Reuse Facility – Table 1.13 dictates that the water quality target for UPW Source Water has a total chlorine target of less than 2mg/l. Chlorine and other oxidative chemicals pose a serious risk to the membrane functionality of reverse osmosis filters, and leads to reduced permeate quality, increased operating costs, and increased energy needs. Please confirm that a method of dechlorination is present prior to flows reaching the RO system.
17. Section 2.4 Disinfection Alternatives – Please provide a 30 Year Life Cycle Cost comparative analysis between Chlorination/Dechlorination and UV Disinfection. Confirm whether UV Transmittance testing has been conducted to confirm viability of this technology.
18. Section 3.4 Biosolids Facility - It is noted that the construction of the biosolids facility will serve as a source of income to by accepting solids from various sources within Onondaga County. Please provide a Net Present Worth analysis of anticipated cash flows generated from the biosolids facility over the next 30 years.
19. Section 4.7.9 Chemical Feed Systems - It's noted that ferric chloride is being used in the proposed solids handling system. Confirm whether recycled flows are sent to the head of the plant. Please note that ferric chloride has been known to cause operational issues for UV disinfection systems as it may foul the lamps and may not be the best chemical for this application.

Industrial BODR

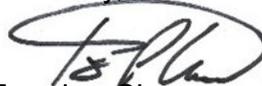
20. Section 1.4.3: Are pipe sizing specifications for the Reverse Osmosis system based on manufacturer recommendations or other design standard(s)?
21. Section 1.4.3: Response 33 of NOIA Comments states the comment pertaining to water treatment chemical usage for a future cooling water needs is not relevant. Please be advised that a Water Treatment Chemical Notification Form will need to be submitted to DEC if any chemical (i.e., a biocide) is applied to a cooling tower wastestream. This is to ensure the SPDES permit accounts for the discharge of any such chemical.
22. Section 3.2: The opening paragraph states: *“Following the completion of FAB2, the IWWTP will be required to treat flows from both FAB1 and FAB2. This requires essentially doubling the biological treatment and biosolids management systems described in Alternative 10. It also requires adding chemical and physical treatment for appropriate TDS and other water quality criteria removal to comply with anticipated NY SPDES permit requirements....”* Since FAB1 will

have the identical SPDES parameter limits for TDS as will both FAB1 and FAB2 combined, please describe the treatment methods for assuring that TDS concentrations will be reduced to assure that the municipal WWTP will not be overwhelmed with TDS loadings under the conditions when FAB1 alone is in operation.

23. Section 3.2.8: This section contains a typo: the existing effluent outfall is 001, not 01B.
24. Table 1-2 and Response 21 of NOIA Comments: It is assumed that “maximum design conditions” for FAB1 and FAB2 wastestreams represents the treatment capacity (versus the hydraulic capacity) of the respective phase of treatment at the ITT. Please confirm this assumption.
25. Response 26 of NOIA Comments: Please provide any discussion and/or calculations pertaining to the peaking factors applied to Micron’s wastestream.

If you have any technical questions, please contact DEC’s Valarie Ellis, at 315-426-7500. If you have questions on the administration of the permit application, please contact DEC’s Trendon Choe at 315-426-7445. Please be advised that the application will remain incomplete until SEQRA has been satisfied. Thank you.

Sincerely,



Trendon Choe
Deputy Regional Permit Administrator
Division of Environmental Permits, Region 7

- CC: D. Glance – DEC R7 Director
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