



July 30, 2025

Onondaga County  
1100 Civic Ctr, 421 Montgomery St  
Syracuse, NY 13202  
[OdeanDyer@ongov.net](mailto:OdeanDyer@ongov.net)

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

The New York State Department of Environmental Conservation (DEC) received the Permit Application, and Basis of Design Report for the purposes of modifying your SPDES permit for the above referenced project. Based upon the initial review of the submitted information, DEC determined the application to be incomplete (6 NYCRR Part 621.6(e)) and offers the following comments. Additionally, to meet Micron's construction timeframes, DEC requests that a response be submitted within 30 days. DEC is available to discuss the identified requirements at your earliest convenience.

**Uniform Procedures Act (UPA) Requirements (6 NYCRR Part 617)**

1. The municipal wastewater treatment expansion project was not evaluated as a connected action in the Micron New York Semiconductor DEIS and must be reviewed under SEQR. This application will remain incomplete until a negative declaration is filed or a draft environmental impact statement has been accepted by the lead agency (6 NYCRR Part 621.3(a)(7)). DEC recommends that the County begin the SEQR process and coordinate a lead agency as soon as possible.
2. Per 6 NYCRR Part 621.3(a)(4), the County must submit all required DEC permit applications simultaneously or provide justification for not doing so. Based on the information available to DEC, this application will remain incomplete until the County submits the following:
  - a. a freshwater wetland permit application for the facility expansion and the industrial wastewater conveyance line which connects the facility to the Micron Campus
  - b. 401 Water Quality Certification associated with the Federal 404 permit application
  - c. a protection of water permit for upgrades to the outfall located within the Oneida River
  - d. an Air State Facility or Air Title V permit application
3. When an action requires a determination by the Office of Parks, Recreation and Historic Preservation pursuant to section 14.09 of the Parks, Recreation and Historic Preservation Law (New York State Historic Preservation Act of 1980), the application is not complete until the Office of Parks, Recreation and Historic Preservation has made a determination whether;

- a. any historic, architectural, archeological or cultural resources present in the project impact area are significant (listed on or eligible for listing on the State or National Register of Historic Places); and
- b. the project may have any impacts on such significant resources.

### **Permit Application**

4. Will there be any sanitary sewer extension as part of the project?
5. Item 1.7, Collection System
  - a. A POSS Registration and Notifier Application form found on the Sewage Pollution Right to Know - NYSDEC page (<https://dec.ny.gov/environmental-protection/water/water-quality/sewage-pollution-right-to-know>) was submitted to DEC on July 17, 2025, from the Town of Cicero. The POSS ID for Cicero to Oak Orchard is NYS700086. Please include this ID in the application edits.
6. Item 1.24, Variance Requests
  - a. Please check one of the boxes to indicate a variance request or "not applicable."
7. Item 2.2, Inflow and Infiltration
  - a. Extraneous flows of 1.1 MGD are considerable. Provide an estimated timeframe for implementing I/I reduction efforts.
8. Item 2.4, Flow Diagram
  - a. To where will solid wastes from the upgraded facility (e.g. screenings, grit, sludge cake) be hauled for disposal?
9. General Instructions for Reporting, Sampling, and Analysis
  - a. Please provide analytical reports for any parameters sampled for the SPDES application which are not reported on DMRs.
10. Tables A-D
  - a. Please provide the Excel spreadsheet file for Tables A-D.
  - b. The maximum and average daily discharge concentrations reported in Table A for total mercury (25 ng/L and 13 ng/L respectively) are inconsistent with the values reported on the facility's DMRs. According to the Mercury Minimization Plan Annual Status Report submitted May 29, 2025, the facility has been using EPA Method 245.2 for internal monitoring purposes. DOW 1.3.10 indicates that EPA Method 1631 is acceptable for SPDES permit compliance and MMP internal monitoring, and EPA Method 245.7 is acceptable for MMP internal monitoring only (see Table 8). Please resubmit Table A including only data using EPA Method 1631.
  - c. No data were provided in Table A for PFUnA, NMeFOSE, NEtFOSE, or 9CI-PF3ONS. Please explain why these data are unavailable.
  - d. Please indicate how many non-detects are included in the sample sets for the following parameters:
    - i. Table A: BOD5 (403 samples total), 1,4-dioxane (4), and each PFAS parameter
    - ii. Table B: Oil & grease (12), nitrite (4), nitrate (4), total nitrogen (4)
    - iii. Table C: total selenium (20)

- iv. Table D: heptachlor (4)
  - e. No data were provided in Table B for total residual chlorine or dissolved oxygen. No data were provided in Table C for total phenolic compounds. Please fill out these rows using all sampling data available including those taken for DMRs.
  - f. A maximum of 68 mg/L was reported in Table C for total cadmium. Please confirm the units on these reported samples.
  - g. On March 27, 2025, Micron shared with DEC the pretreatment discharge application which Micron submitted to Onondaga County. This application included a list of "Worse-Case Organic Wastewater Constituents to OCDWEP." Please include in the Oak Orchard SPDES application any parameters on this list which are expected to be present in the effluent of the industrial wastewater treatment plant (IWWTP).
  - h. Please provide concentration data, tabulated in a separate Excel spreadsheet, for the following parameters for the last 5 years (i.e. the concentration data used to calculate and report loading for these parameters on DMRs): total iron, chloroform, total cadmium, total chromium, total copper, total nickel, total zinc, total arsenic, and total phenols.
- 11. Table F, Water Treatment Chemical Listing
  - a. Please provide records of water treatment chemical authorization for aluminum sulfate and sodium bisulfite. If records are unavailable, please submit new WTC request forms.
- 12. Table G, Industrial Discharge Information
  - a. Please submit all applicable SIC and NAICS codes for all significant industrial users.
  - b. Please provide industrial discharge information for Micron in Table G.
- 13. Project Design and Schedule
  - a. Please provide design flow and loading rates for the maintenance of plant operations (MOPO) phase of the upgrade project. Include a design (annual) average flow, design maximum day flow, design peak hourly flow, and design peak instantaneous flow (Ten States Standards 2014, 11.24).
  - b. Please provide a high-level schedule showing major milestones in the phasing of the project, including: the start and end of the maintenance of plant operation phase (MOPO); completion of construction of the upgraded municipal treatment train; completion of construction of the industrial treatment train (FAB1 and FAB2 portions); and receipt of Ready for Equipment (RFE), Ready for Manufacturing (RFM), and production wastewaters from Micron.
- 14. Table H, Facility & Collection System Resiliency
  - a. Include the Gaskin Road Pump Station in Table H.
- 15. Item 3.1, Description of Outfalls
  - a. Please provide estimated lat/long coordinates for proposed new internal Outfalls 01A (municipal treatment train effluent) and Outfall 01B (industrial treatment train effluent).

- b. Add information for all stormwater outfalls to item 3.1. Please include lat/long coordinates and a map showing the stormwater outfall locations.
16. Item 6.1, Checklist and Certification Statement
  - a. Please check "Detailed MZ Form" to indicate submission of the form.
17. Detailed Mixing Zone Forms (Existing and Proposed)
  - a. The Detailed Mixing Zone Form for the existing facility provides a current summer average effluent temperature of 20.31°C and winter average effluent temperature of 10.64°C. The form also provides a current summer average influent temperature of 18.09°C and winter average influent temperature 14.02°C. After expansion, under future flow conditions, effluent temperature is assumed to be equal to the influent temperatures. Since the summer average influent temperature is less than the summer average effluent temperature (18.09°C < 20.31°C), using 18.09°C for effluent temperature is a less conservative assumption for the purposes of evaluating mixing. Please provide justification or clarification for use of the lower summer temperature for mixing zone modeling.
18. Process Flow Diagram, Dwg 00G09 (25% Design)
  - a. The process flow diagram in Dwg 00G09 indicates a change of influent sampling from the current location directly from the influent force main where it enters the Oak Orchard facility, to one that is after the bar screen and grit removal processes. Please provide a justification for this change in location, or correct, as appropriate.
19. Table 1.12, OOWWTP Expansion Program Basis of Design Report (June 2025)
  - a. Please provide a 30-day average design flow condition for the upgraded municipal treatment train.
20. Table 1.10, OOWWTP Expansion Program Basis of Design Report (June 2025)
  - a. Please provide a 30-day average design flow and loadings for the maintenance of plant operations (MOPO) phase of the overall project (formerly referred to as the "bridging project").
21. Table 1-2, Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report (June 2025)
  - a. Please explain what flow metric is used for the "maximum design condition" the new industrial treatment train included in Table 1-2 of the Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report (June 2025). Additionally, Table 1-2 gives a maximum design flow condition of 8.25 MGD, while other sections of the report use 8.5 MGD. Please clarify the discrepancy.
22. Additional Information
  - a. On DMRs from May 2020 through April 2025, non-detections of total residual chlorine (TRC) were reported as "0" – please provide the method detection limit for TRC.
23. Naming Conventions
  - a. DEC proposes using the following naming conventions to refer to Oak Orchard Wastewater Treatment Plant. Please confirm these names or propose alternatives.

- i. “Oak Orchard Wastewater Treatment Plant” (OOWWTP) to refer to the whole site including all treatment trains and discharges
- ii. “Municipal Treatment Train” (MTT) to refer to the existing/upgraded sanitary treatment system at Oak Orchard (new Outfall 01A)
- iii. “Industrial Treatment Train” (ITT) to refer to the new industrial treatment system to be constructed on site, which will treat Micron’s process wastewaters (new Outfall 01B)

**Basis of Design Report – OOWWTP Service Area Expansion Program (June 18, 2025)**

24. General comment: Throughout the Basis of Design Report, abbreviations and acronyms are scattered within in the narrative, tables, and figures without defining their meanings. To inform the general reader and to aid in clarity, these abbreviations must each be defined when they are first introduced in the report. Alternatively, supply a table listing all of the abbreviations used throughout the report, with each’s associated meaning.
25. Page 10 states the existing administration building shall be retained, however on Page 19 a new administration building is proposed. Please clarify.
26. Section 1.3.4: The description of the configuration of the existing preliminary treatment is incorrect. After coarse screening, influent proceeds through the climber screens. Then, it is next processed through the aerated grit removal system. Correct this process description so that the public will have a complete understanding of the of existing treatment process.
27. Section 1.3.5: Alum is currently applied in the effluent channel of the grit removal process, not during or before. Please correct.
28. Table 1.5: Include the surface overflow rate for the existing conditions.
29. Section 1.4.1: The applicable Technical Memo is located in Appendix F, not Appendix D.
30. Section 1.4.1: This section states that space will be allocated for future expansion of 33%. Clarify whether this is buildout associated beyond that generated from Fabs 3 and 4.
31. Section 1.4.3 (Page 20): For design of the water reuse facilities, please refer to DEC’s water reuse website which contains EPA’s 2012 Guidelines for Water Reuse. Review of water reuse applications will include consultation with DOH. DEC Website: [Water Reuse - NYSDEC](#)
32. Section 1.4.3: Discuss any known pipe sizing and material requirements for the ultra-pure water (UPW) system.
33. Section 1.4.3: Discuss any known or expected water treatment chemical usage for the cooling water component.
34. Section 2.2: Provide the design sidewater depth for the new, proposed primary clarifiers.
35. Table 2.2: Given the proposed channel dimensions, provide the design approach velocity for the mechanical coarse screens.

36. Table 2.4: What design average flow is being used to calculate the surface overflow rate?
37. Section 2.2.2 & Section 4.2: The proposed weir loading rate under peak hour flows of 40,400 gpd/lf exceeds Ten State Standards (TSS) recommended maximum loading of 30,000 gpd/lf. The DEC recognizes other design references (Metcalf & Eddy and WEF/ASCE) include maximum loading rates up to 40,000 gpd/lf. As stated in Section 4.2, DEC agrees with the approach for the BODR to include provisions to modify the weirs to increase weir length to meet TSS. Further evaluation should include examining whether the new clarifiers will have increased sidewall depth greater than existing, proposed baffle configuration, and consideration for adding additional weirs channels to increase length of weirs (i.e. two weir channels at end of clarifier).
38. Section 2.3: Provide a copy of the GHD 2021 Facility Plan and Feasibility Analysis (FPFS) and Oak Orchard WWTP Facility Plan and Feasibility Study Site Selection Conceptual Treatment Approach Memorandum (GHD, 2021).
39. Section 2.3: With regard to the planned temporary delivery of additional solids to the Syracuse Metro WWTP as a result of on-going construction at Oak Orchard and additional volumes of sludge generated during the bridging project phase, what consideration has been given to the operational impacts on biosolids handling and disposal practices at the Metro WWTP? By what percentage will these additional solids deliveries increase solids handling loads, and disposal as currently experienced at Metro? Additionally, please discuss the adequacy of the existing containment structures for the gravity thickener's loading pad as it relates to the facility's upgrade.
40. Section 2.3.3: Figures 2.1, 2.2, and 2.3 indicate that alum is applied prior to screening and grit removal. Application at the initial entry to the OOWWTP will increase chemical demand for Alum and its subsequent usage if dosed as the proposed location as shown. Justify the application as indicated in these three figures, as opposed to the current application within the primary clarification influent channel.
41. Section 2.3: This section references "TM7" more than once. If the reader assumes that this stands for Technical Memo #7, where can this document be found within the report or has it been renamed and included in an Appendices? Please clarify.
42. Section 2.8: Confirm the estimated flows and loads for the Micron Ready for Equipment (RFE) wastewater. Has Micron provided a description of the process that generates the RFE, characterization and list of chemicals used in the generation of this wastewater?
43. Section 4.1.1, Table 4.2: Proposes 2 screens +1 unit as standby. Currently, there are 2 climber screens at OOWWTP. However, this design is assuming peak hourly flows up to 38.4 MGD with no proposed changes to the dimensions of the screening channels' widths or depths. Provide calculations showing that 2 climber screens (with one of the 3 out of service) can adequately supply the necessary flow-through capacity for the PHF conditions without significant headloss due to accumulated screenings and submergence.

44. Section 4.12: The proposed design requirements stated for the new receiving substation appear to meet the intent of ten state standards dual power requirement, however, DEC will require submission of the proposed substation design to make a final determination.
45. Section 4.1.3: Justify the assumption that H<sub>2</sub>S concentrations within the headworks is expected to be "low." The headworks area receives the majority of its influent wastewater from the Davis Road PS. This wastewater travels through twin force mains at a distance of over 5 miles and provides ample opportunity for hydrogen sulfide to generate within the force mains for ultimate delivery to the headworks of OOWWTP. H<sub>2</sub>S is a toxic gas for humans. It is also highly corrosive to exposed equipment. A more robust HVAC and odor control system should be given careful consideration to protect both people and the newly installed treatment units.
46. Section 4.1: Discuss any air monitoring equipment currently installed or proposed to be installed within the headworks building.
47. Section 4.14: DEC will need additional detail on the bridging project and outfall modifications prior to finalizing the SPDES Permit and approving the BODR. It is also noted that Appendix F mentions a future technical memorandum will be submitted for the projected flows and loads for Micron construction and validation wastewater discharges. Please confirm if the terminology ready for equipment (RFE) discharge is considered the same as validation wastewater discharge.
48. Section 4.14: As indicated in DEC June 26, 2025, email, DEC and EFC have requested the County/Consultant to send us additional detail on the Design Build (DB) approach being considered for aspects of the project. We'd like details on process/approach, how the DB will be implemented, how it ties to the recent County Bill passed for DB, there are different DB approaches and we'd like detail on which one will be pursued, what's anticipated for design level submissions/schedule, what's the RFQ process for selecting a DB firm/owners representative and schedule, design criteria provided to DB firm, etc. We recognize some of the above information may not be known at this time, but the intent is for County/Consultant to provide us a better understating of what the DB process/approach for our review and consideration. Once we have this detail, we can work on scheduling a meeting to discuss further.
49. Section 4.4.1, Table 4-10: Provide the total HRT and HRT for both the anoxic and aerobic zones.
50. Section 4.4.1: Confirm whether DO meters will be installed to monitor the oxygen levels in the anoxic and aerobic. The system must also include an alarm to notify the operator of any potential or actual oxygen deprivation.
51. Section 4.4.1, Table 4-10: Provide the design SRT.
52. Section 4.4.1, Table 4-10: Include the expected MLSS concentration.
53. Section 4.4.1, Table 4-10: What is the expected F/M ratio?
54. Section 4.4.1, Table 4-10: Include the expected alkalinity range.
55. Section 4.5.1, Table 4-11: Include the expected MLSS concentration.
56. Section 4.5.1, Table 4-11: The membrane flux rate is a critical design parameter which is a function of the MLSS concentration, temperature, TMP and membrane fouling. At a given TMP, the lux is inversely related to viscosity, which increases

at lower temperatures and at a higher MLSS concentration. Therefore, the more conservative design will be based on the lowest ambient temperature likely to be encountered during treatment. The table indicates a design peak flux at a temperature of 10 degrees C. How was this temperature established for the design?

57. Section 4.6.1 Table 4.12: Table 4.12 does not indicate how many treatment trains are proposed for the UV system. Please provide based upon expected design PHF and AAF.
58. Section 4.6.1: For primary clarifier design, an average design flow of 11 MGD is assumed. For the design of the UV system, the ADF is 9 MGD. Please explain the discrepancy.
59. Section 4.7.1.2: Will the existing gravity thickeners be demolished or reused? Whether new or reused GTs, the design must ensure that these can be safely accessed by operators for routine O&M. The existing GTs do not have this type of functionality.
60. Section 4.7.2: The first sentence of this section ("The existing OOWWTP facility co-thickens with primary sludge in two gravity thickeners") is missing an object. It co-thickens what with primary sludge? One may assume that waste activated sludge should have been included in this sentence, however, it must be clearly stated.
61. Section 4.7.2: The second paragraph seems to be describing the GBT process at Metro. Is this same detailed process also proposed for OOWWTP? This section and the following Section 4.7.3 are written as if the proposed buildings and equipment already exist on the OOWWTP site. The general public does not know if these exist now or are proposed to be constructed in the future. This should be clear to readers who are not familiar with the OOWWTP or with those solids handling facilities which currently exist at Metro.
62. Section 4.7.4: The receiving station must be designed with a containment area for high strength waste off-loading purposes.
63. Section 4.7.4: Identify "BWWTP" correctly as Brewerton Water Pollution Control Plant (BWPCP) if that is what is meant by "BWWTP."
64. Section 4.7.4: Define "TWAS" abbreviation.
65. Section 4.7.5: Define "thickened PS" and from where in the treatment process it originates.
66. Section 4.8: The concentrate stream from the RO process is, according to this section, destined for mixing with OOWWTP effluent. What is the expected concentration of of Total Dissolved Solids (TDS) in this RO waste stream?
67. Section 4.8: Figure 1 indicates the injection of ammonia directly before the RO Membrane system. Please describe why the ammonia dosage is needed.
68. Section 4.9.1: Confirm the hydraulic analysis for sizing pumps considers both scenarios of pumping from the temporary standpipes and the eventual repurposed steel MBBR tanks that will be the final storage tanks for effluent from the reuse facility.
69. Section: 4.10: Bridging Project (aka MOPO) section is very brief. Provide a date when NYSDEC can expect to receive the technical information and design

- concepts for this critical period between current and the supplemental temporary treatment.
70. Section 4.11: Provide a technical memo from an electrical engineer licensed to practice in New York State that the redundant power scheme described in this section will provide electrical power for all essential treatment units under adverse loss-of-power conditions similar to those that occurred at OOWWTP on May 12, 2025. Additionally, the Tech Memo must also provide an explanation on maintenance and access to the proposed receiving substation since an outage to one side of the substation will necessitate that the other redundant side stay energized and available to support the entire load of the expanded facility.
  71. Appendix F Section 1.2: This section surmises that the connection of existing onsite systems is not anticipated. Was there an evaluation of existing failing systems in the service area and consultation with DOH?
  72. Appendix F Section 1.1.1: Expand on the sentence "The flows and loads anticipated from Micron during the validation period will be addressed in a future document." What does this "validation period" entail? When will the future document be submitted which discusses this process?
  73. Appendix F Section 1.2: This section states that the "connection of existing onsite wastewater treatment systems in OOWWTP's service area are not anticipated based on current town planning." The White Pine Basis of Design Report stated that onsite residential treatment systems will be connected to OOWWTP via delivery from the White Pine PS. Are these flows and loads included and considered in the proposed design of the OOWWTP?
  74. Appendix F Section 1.2: The Department strongly encourages the County to consider connecting any unsewered areas within the confines of the OOWWTP service area so that these may receive full treatment. This is especially important for those areas adjacent to wetlands or waterbodies.
  75. Appendix F Section 1.3: Confirm the proposed design will include addressing relocation of all discharges (influent, process returns, etc.) upstream of the influent sampling location, including the Horseshoe Island FM and plant waste pump station discharges.
  76. Appendix F Section 1.3: Below Table 1.1, item #2 assumes that the Gaskin Rd. PS flows will continue to be directed to the Wetzel Rd. WWTP for treatment. If excess flow from this pump station --- which cannot be delivered to Wetzel Rd. WWTP --- are still planned to be redirected to OOWWTP from Wetzel Rd. WWTP during significant wet weather events, please indicate whether these flows and loads have also been included in the peak hourly flow analysis.
  77. Appendix F Section 1.3: Below Table 1.1, item #3 is confusing and will benefit from clarification. Why does the analysis not assume a "...co-occurrence of peak flows within the OOWWTP service area? In other words, are flowrates (average and peak) not considered in the analysis based on the presumption of continued flow to the Wetzel Rd. WWTP?
  78. Appendix F Section 1.3: Since OOWWTP will be expanding, is the County considering directing all flow from the Gaskin Rd. PS to OOWWTP to preclude and reduce the likelihood of a bypass situation at the Wetzel Rd. WWTP during very significant wet weather events?

79. Appendix F Section 1.3: FN #5 associated with Table 1.1 references a “letter from NYSDEC dated March 25, 2024. This is not a letter from NYSDEC to OCDWEP. Rather, it is the 2023 Annual Flow Certification form submitted **by** OCDWEP **to** NYSDEC. Please correct.
80. Appendix F Table 1.4: Since Davis Road PS flows and organic loadings comprise 82% of the OOWWTP influent, explain how the percentage of TSS from the Davis Road PS is 112.5% of the OOWWTP influent. Is this high TSS loading value due to contributions from Clinton’s Ditch?
81. Appendix F Table 1.5: Expand on how it was determined that these measurements are “generally consistent” with expected measurements given the very significant variation in differences between the OOWWTP influent organic loadings and those from the influent bunker.
82. Appendix F Table 1.6: FN #5 states “Buildout growth from current assumes 8/7 [1.14] of current loads assuming the addition of 1 new processing train.” How was the value of 8/7 derived? How was the value of 0.04 MGD for additional flow from buildout growth at Clinton’s Ditch calculated?
83. Appendix F Table 1.6: FN #6 notes that flow rate was calculated based on the lower end of the recommended range from Metcalf and Eddy. Why was a less conservative value used in the assumption?
84. Appendix F Table 1.7: Define “OP Load” category for the general, non-technical reader.
85. Appendix F Table 1.7: FN# 5 is not associated with any category in this table. Either indicate where it belongs or delete.
86. Attachment B Table 1: Explain how the peaking factors were derived and calculated for each constituent, as well as each’s associated max/min/avg values.
87. Attachment B Table 2: Explain the efficacy of including the ‘Maximum Two Week’ and ‘Maximum Two Week Peak’ categories used in this analysis. What technical benefits do these bring?
88. Attachment B Table 2: It is not clear why the Clinton’s Ditch Minimum month peaking factor; Maximum Two week; Maximum week, and Maximum Day are calculated differently (i.e. not simply subtracting column 2 from column 1 to derive the adjusted OOWWTP influent values in column 3). Explain how these were calculated to determine the adjusted values.
89. Attachment B Sec. 3.1.4: Define the characteristics of the “validation wastewater” proposed for discharge to OOWWTP prior to the commencement of treatment from the planned IWWTP. This section also states that the flows and loads for this discharge period will be addressed as part of a separate memo. Will this be submitted in the future? If so, when? If this Memo is included in the existing report, reference it here.
90. Attachment B Sec. 3.3: This section incorrectly states that current permit loading limits were based on a max month condition. The limits in the 2012 permit are based on average design flows and loadings. Please correct.
91. Appendix A (of Attachment B) Table 4: Explain the differences of this table from the values within Table 3. They both pertain to full buildout.

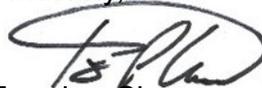
**Basis of Design Report - Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report (June 18, 2025)**

92. Section 1: Please provide additional information on the RFE and RFM processes. Describe what these each entail.
93. Section 1, Table 1-2: FN #2 states that flows and loads for FAB2 are double those of FAB1. Is it correct to state that this indicates that FAB2 will have double the production capacity from that of FAB1 or is maximum design meant to be a summation of both FAB1 and FAB2? If the latter (as Sec. 3.2 indicates), consider a FN to the column to clarify this for the general reader.
94. Section 1, p 10: Please identify the constituents composing the micronutrients that are under consideration for addition to the wastewater sludge to improve dewaterability.
95. Section 1.4.2.2: A SPDES permit life cycle for surface water discharges is 5 years, not 10 years as stated. Please correct.
96. Section 2.1: Item #2 states that progressive design/build will be implemented. Please provide additional detail on the D/B approach being considered for the aspects of the IWWTP project. This should include details on the process/approach, how the D/B will be implemented, the anticipated timeline for design level submissions/schedule, and the design criteria provided to the D/B contractor, etc. We recognize that some of the above information may not be known at this time, but the intent is for the County and its consultant to provide DEC with a better understanding of what the D/B process/approach may be for our review and consideration.
97. Section 2.1: Confirm that the standards criteria in Item #11 are referencing engineering design standards. If not, which standards is this item referring to?
98. Section 3.1.3: Wastewater from FAB1 is expected to undergo UV disinfection. What types of pathogens are within the industrial wastewater that require this process?
99. Section 3.1.3: The line drawing for the Alternative #10 process indicates that chemical addition for anti-fouling and cleaning purposes. The narrative does not say, but the drawing indicates that this occurs in the Biox effluent tank. Please confirm.
100. Section 3.1.4: If, as indicated in the earlier introductory narrative (Section 3.1), Alternative 10 provides biological treatment for the wastewater generated during the operation of FAB1 (with the option to upgrade for FAB2), please clarify why "...only biological solids are produced in Alternative 10". From review of this report, it certainly appears that the influent wastewater from FAB1 include industrial wastewater. Won't this wastewater also contain concentrations (or trace concentration) of metals, ammonia, and other inorganic wastes that will be settled in the sludge generated during Alternative 10 treatment? How will the wastewater sludge generated from FAB1 vary from the wastewater sludge expected in FAB2?

101. Section 3.2.1: The third paragraph in this section states: "The equalization and diversion tank described in Section 3.1 was sized to be able to accommodate the peak FAB2 design flow of 16.5 MGD." As asked above regarding Table 1-2, does this mean that FAB2 will have double the production capacity from that of FAB1? If so, confirm that the EQ and DIV tanks are sized to accommodate the combination of peak flows from both FAB1 (8.25 MGD) and FAB2 (16.5 MGD).
102. Section 3.2.2.2: Ten States Standards and TR-16 define redundancy as the available capacity of equipment or a treatment train to process 100% of the design flow should its mirror counterpart be taken out of service. This section states that each treatment train will be sized to handle 50% of the flows and loads of the total influent stream. Unless more than two treatment trains are planned, this does not meet the definition of redundancy as understood in standard wastewater engineering practices.
103. Section 3.3: Please reference the map plan view of the proposed conveyance corridor described in this section as located in Appendix A.
104. Section 3.3: Provide an estimated timeframe for submittal of the BODr for the proposed conveyance corridor system for the DEC's review and approval.

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 and DEC receives all the requested information. Thank you.

Sincerely,



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

CC: D. Glance – DEC R7 Director  
T. Vigneault – Regional Engineer  
E. Kosinski, C. Lamb-Lafay, P. Maier, M. Moss, M. Streeter, E. Walters-DOWCO  
V. Ellis, M. Kazmierski – DOW R7  
K. Balduzzi – R7 RPA  
O. Dyer, C. Johnson, E. Schuler, D. Snyder – OC WEP  
M. Tamblin – EDR  
M. Marko – Brown & Caldwell  
S. Martin – Critical Path Engineering Solutions  
M. Capuco, S. Davis, D. Sachs, B. Taylor – Carollo Engineers