Oak Orchard Wastewater Treatment Plant – Justification Statement for Inconsistency with Section 7(2) of the Climate Leadership and Community Protection Act
April 10, 2026

Oak Orchard Wastewater Treatment Plant Project Description and Background

Onondaga County (the Applicant) applied for renewal and modification to the Oak Orchard Wastewater Treatment Plant (OOWWTP) State Pollutant Discharge Elimination System (SPDES) permit (NY0030317) and new associated Air Facility Registration, Article 24 Freshwater Wetlands, and 401 Water Quality Certification applications (all together, the Oak Orchard Project or Project). Analysis of the Micron Semiconductor Manufacturing Project (Micron Project), which the Oak Orchard Project will service, is subject to a separate Climate Leadership and Community Protection Act Section 7(2) analysis. Separate justification statements were prepared for the Micron Project.

Permits Before NYSDEC

NYSDEC ID	Description of NYSDEC Permits	Statutory and Regulatory Authority
NY0030317	State Pollutant Discharge Elimination System	ECL article 17, 6 NYCRR Part 750
7-3124-00018/02005	Freshwater Wetlands	ECL article 24, 6 NYCRR Part 663
7-3124-00615/00001	Freshwater Wetlands	ECL article 24, 6 NYCRR Part 663
7-3124-00615/00001	Water Quality Certification	Section 401, Clean Water Act
7-3554-00280/00001	Freshwater Wetlands	ECL article 24, 6 NYCRR Part 663
7-3554-00618/00001	Freshwater Wetlands	ECL article 24, 6 NYCRR Part 663
7-3124-00018/02000	Air Facility Registration	ECL article 19, 6 NYCRR Subpart 201-4

OOWWTP discharges treated municipal wastewater to the Oneida River, a class B water. The proposed permit modification includes upgrades of the existing municipal treatment train (MTT) and construction of an industrial treatment train (ITT) to service the Micron Project. Proposed upgrades to the MTT include replacement of the high purity oxygen activated sludge system with a membrane bioreactor (MBR) system, replacement of chlorine disinfection with closed-vessel ultraviolet (UV) disinfection, and construction of a new biosolids handling facility. The proposed construction of the ITT includes creation of a new MBR system with UV disinfection. The Oak Orchard Project also includes construction of separate effluent reuse systems with reverse osmosis (RO) for both the MTT and ITT. Recycled effluent from the MTT will be sent to Micron as source water for Micron's ultrapure water (UPW) system, and recycled effluent from the ITT will be sent to Micron for cooling water uses.

Upgrades to the MTT and construction of the ITT result in an increased surface discharge from 10 MGD to 30.8 MGD average design flow at full build-out, as well as 0.79-acres of permanent impacts to wetlands and 3.29-acres of permanent impacts to the associated 100-foot adjacent area.

The Applicant also proposes the construction of a new wastewater/reclaimed water conveyance corridor for the purposes of providing Micron with industrial wastewater treatment and reclaimed water for cooling and ultrapure water for production and sanitary uses. This corridor will be located within a new, 99-foot-wide easement and collocated within the right-of-way of Verplank Rank extending between OOWWTP and the Micron facility. The construction of the corridor will result in 3.7-acres of permanent impacts to wetlands.

The New York State Department of Environmental Conservation (NYSDEC) prepared a SPDES permit, published drafts for public notice and received public comment, and made a tentative determination to issue a renewal and modification to the OOWWTP SPDES permit.

Stationary sources of greenhouse gas (GHG) emissions from the Oak Orchard Project include upstream and direct emissions from operation of the MTT and ITT, with anaerobic digester gas produced on site being beneficially used or flared. In addition, GHG emissions will be generated by mobile sources and removal of solar panels.

Climate Leadership and Community Protection Act (Climate Act or CLCPA)

Section 7(2) of the Climate Act (Chapter 106 of the Laws of 2019) requires State agencies, including NYSDEC, issuing permits, licenses, and other administrative approvals and decisions, to determine whether such actions would be inconsistent, or interfere, with the attainment of the statewide greenhouse gas (GHG) emission reductions

pursuant to Article 75 of the Environmental Conservation Law (ECL). The Climate Act sets forth certain statewide GHG emissions milestones for years 2030 and

2050. DEC has promulgated the corresponding regulations for those emissions reductions in 6 NYCRR Part 496.

Review of the Project under the Climate Act

Pursuant to Section 7(2) of the Climate Act, if DEC determines that issuance of a permit, license, or other administrative approval or decision would be inconsistent with or will interfere with the Climate Act, DEC must provide a detailed statement of justification and identify potential alternatives or GHG mitigation measures.[1]

The Project is Inconsistent with the Climate Act

The Oak Orchard Project will result in significant GHG emissions. In the latest version of the Oak Orchard CLCPA analysis, dated November 7, 2025, (CLCPA Analysis)[2] the Applicant indicates that the Oak Orchard Project has the potential to emit (PTE) direct and upstream emissions of 128,027 tons[3] and actual emissions of 28,575 tons of carbon dioxide equivalents per year, on a 20-year global warming potential basis, and actual emissions of 28,575 tons of carbon dioxide equivalents per year. With use of the proposed anaerobic digester, actual emissions in 2030 are estimated to be 48,004 tons of carbon dioxide equivalents, and actual emissions in 2050 are estimated to be 67,662 tons of carbon dioxide equivalents.

Accordingly, NYSDEC finds that issuing permits for the Oak Orchard Project would be inconsistent with the attainment of the statewide GHG emission levels under the Climate Act because of the projected increase in GHG emissions associated with the Oak Orchard Project.

The Project is Justified

NYSDEC finds that permit issuance is justified, notwithstanding this inconsistency determination. Consistent with CP-49, DEC must explain why issuance is justified by other relevant considerations. Here, DEC determined that permitting the Oak Orchard Project is justified because it serves the Micron Semiconductor Manufacturing Project, which directly and materially serves national security interests. Justification for the Micron Semiconductor Manufacturing Project is discussed in DEC's Micron New York

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[1] *Commissioner's Policy 49: Climate Change and DEC Action*. (Last Revised Dec. 14, 2022) (CP-49).
[2] Onondaga County Department of Water Environment Protection, *Oak Orchard Wastewater Treatment Plant Climate Leadership and Community Protection Act Analysis* (November 2025), https://onondaga.gov/wep/public-review-documents/ (last accessed Mar. 18, 2026) [hereinafter "CLCPA Analysis"].
[3] The CLCPA Analysis presents emissions in units of short tons. The total emissions shown in that document have been converted to metric tons to provide a consistent basis for comparison.

Semiconductor Manufacturing LLC Project – Justification Statement for Inconsistency with Section 7(2) of the Climate Leadership and Community Protection Act 12/12/2025.[4]

Furthermore, due to expected residential, commercial, and industrial growth in the sewershed, Onondaga County is progressing with the Oak Orchard Project to increase plant capacity and provide a more reliable process to meet SPDES permit requirements. The upgrade is needed to meet future flow and water quality effluent requirements. In addition to upgrading OOWWTP's liquids treatment process and expanding plant capacity, the facility upgrade will also provide treatment for solids generated on site, as well as regional biosolids. Onondaga County currently treats all biosolids within their service areas at Metro Syracuse Wastewater Treatment Plant ("Metro"), which could be a single point of failure for Onondaga County's solids operations. The new OOWWTP regional biosolids facility provides added flexibility and redundancy for Onondaga County's biosolids treatment options. The OOWWTP biosolids facility is sized to treat solids generated at OOWWTP, trucked-in municipal sludge from the nearby Brewerton Water Pollution Control Plant, and some delivered high-strength waste (HSW), assumed to be pumpable fats, oil, and grease from local grease traps or other similar liquid organic waste. All three of these sludge streams are currently trucked to Metro, so the new OOWWTP regional biosolids facility will allow for reduced truck traffic at Metro. Some additional digestion and post-digestion treatment capacity resulting from the improvement project will also be able to handle a portion of Metro's solids or solids from other municipal facilities if temporary solids diversion is required.

Lastly, the Oak Orchard Project includes decommissioning an existing solar array that the CLCPA Analysis estimates generated 2,500 MWh per year and was approximately 10 years into a 20-year lifespan. The removal is justified because it allows the industrial treatment train to be located closer to the Micron facility, thereby reducing energy needs, and allowing the potential for future reclaim of water recovered from the ITT treatment process.

Therefore, because the Oak Orchard Project serves the Micron Semiconductor Manufacturing Project, which directly and materially serves national security interests, and is needed due to overall induced growth in the area, NYSDEC finds that there is an acceptable justification for this Project notwithstanding a finding of inconsistency under the Climate Act.

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[4] The CHIPS Incentives Program is authorized by Title XCIX, CHIPS for America, of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116-283), as amended by the CHIPS Act of 2022 (Division A of Pub. L. 117-167) (together, the CHIPS Act). CPO is responsible for implementing the CHIPS Act. *See also*, Onondaga County Industrial Development Agency and CPO, Micron Semiconductor Manufacturing Project, Clay, NY, Final Environmental Impact Statement (FEIS), p. 0-20; *see also* NYSDEC, *Micron New York Semiconductor Manufacturing LLC Project – Justification Statement for Inconsistency with Section 7(2) of the Climate Leadership and Community Protection Act 12/12/2025*, available at https://dec.ny.gov/sites/default/files/2026-02/justificationstatementmicron.pdf (last visited Mar. 13, 2026).

Project Alternatives and Mitigation Measures

With respect to alternatives, NYSDEC reviewed and relied upon the discussion of proposed CLCPA alternatives set forth in Section 2 of the CLCPA Analysis. The alternatives included: a No-Project alternative in which the capacity of the existing OOWWTP would not be increased and sludge produced at the facility would continue to be hauled to Metro; OOWWTP expansion without on-site digestion (continue to haul sludge to Metro); OOWWTP expansion with aerobic digestion on-site; and OOWWTP expansion with anaerobic digestion on-site. Because Metro is currently near capacity for sludge processing and, thus, will not be able to accommodate the projected increased sludge, the No-Project alternative, and OOWWTP expansion without on-site digestion, are not viable alternatives. Aerobic digestion is not a viable alternative due to the scale proposed for the MTT expansion. The energy required to provide aeration, maintaining oxygen required to support microbial activity required for aerobic digestion, would become economically infeasible. The proposed anaerobic digesters do not require aeration for treatment and, therefore, use less energy than aerobic digestion. In addition, the solids handling system for the MTT will recover methane generated from anaerobic digestion, which will be used to fuel the boilers required to heat the digesters.

With respect to mitigation, the Applicant proposed several mitigation measures to further reduce GHG emissions impacts from the Oak Orchard Project as part of its CLCPA Analysis in order to obtain the above-referenced permits. The Oak Orchard SPDES permit includes a condition requiring development of, and compliance with, an approvable CLCPA Mitigation Plan, including establishing an ongoing emissions leak detection and repair program.

In addition to the alternatives and mitigation measures discussed above, the Applicant designed the Oak Orchard Project in ways to reduce emissions.

In sum, the proposed alternatives, mitigation measures, and the operational design will result in emissions reductions.