

**Intermunicipal Wastewater Agreement Partners
c/o Rod Howe, Supervisor
Town of Ithaca
215 North Tioga Street
Ithaca, NY 14850**

DATE

Via US Mail, and Email as available

Carol Lamb-Lafay
Acting Deputy Commissioner
Water Resources
NYSDEC
625 Broadway, 4th Floor
Albany, NY 12233

DRAFT

Dear Acting Deputy Commissioner Lamb-Lafay,

We write collectively as the elected leadership of the six municipal signatories to the 2003 Intermunicipal Wastewater Agreement, who are either owners of, or wastewater contributors to, the Ithaca Area Wastewater Treatment Facility (IAWWTF). Having been authorized by our respective legislative bodies to do so, we hereunder state our strong opposition to the SPDES permit modifications proposed by NYSDEC on the grounds that the assumed violations they are designed to mitigate have not been proven to exist, as required by the TMDL process outlined in NYSDEC technical guidance, and that the unprecedented costs associated with compliance would be financially burdensome to our ratepayers while yielding little to no environmental benefit. We encourage the Department to focus the State's limited resources on mitigating the proven phosphorus and sediment-related impairments that have been apparent for decades but that continue to persist.

Background

The Ithaca Area Wastewater Treatment Facility (IAWWTF) located at the south end of Cayuga Lake is a 13.1 million gallons-per-day (MGD) capacity treatment plant owned and operated by the City of Ithaca, the Town of Ithaca and the Town of Dryden. The facility also receives sewer flow indirectly from the Village of Cayuga Heights, the Village of Lansing, and the Town of Lansing.

IAWWTF owners are currently developing a long-term capital improvement project (CIP). As originally envisioned, owners expected to retain conventional biological

treatment, while focusing on modernization and replacement of aged and failing infrastructure. The preliminary estimate of costs related to capital improvements ranged from 60 and 100 million dollars, depending on the chosen design. Costs will be divided among owners, based on predetermined share, with a portion offset by anticipated water quality improvement grants. Some of the costs will eventually be proportionally passed through to non-owner users via independently negotiated agreements.

Proposed Permit Modifications and Costs

Without any corroborative ambient water quality sampling, biological sampling, evaluation of point and non-point sources, or scientific analysis of the assimilative capacity of the receiving water, NYSDEC is now proposing to add SPDES permit limitations for ammonia and nitrite, based on limited effluent data and devised using numerical standards that are designed to ensure the “protection of aquatic life.” However, the membrane bioreactor technology required to meet the proposed permit limits would add 100 million dollars to the project cost, which would have an enormous, unsustainable, and unjustifiable impact on ratepayers in the stakeholder municipalities for decades to come.

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NYSDEC Technical Guidance Requires a Wholistic Pollution Control Approach

The technical guidance document cited by permit writers to underpin the Water Quality Based Effluent Limitations (WQBEL) for nitrite and ammonia (“TOGS 1.3.1”) specifies that WQBEL permit limits must be devised in conjunction with a TMDL process similar to the one that was recently completed for phosphorous. By any plain reading, that process must quantify the sources of ammonia and nitrite in the south segment of the lake (an approximately 1.4 square-mile area south of McKinney’s Point) and determine the segment’s ability to assimilate the substances proposed for limitation. Only then could an alleged violation be confirmed or disproven, sources identified, and mitigation strategies appropriately weighted.

The aforementioned TMDL for ammonia and nitrite has not been undertaken, nor contemplated, by NYSDEC, and any analysis that relies on additional segmentation of the lake runs counter to the Department’s own guidance for waterbody segmentation. The “Consolidated Assessment and Listing Methodology,” published in 2023, provides a regulatory framework for waterbody segmentation. It specifically states that “*Some very large lakes, like Lake Champlain and the Finger Lakes are segmented in multiple assessment units based on classification.*”

NYSDEC does not propose a change in “classification” in the waters surrounding the mixing zone. Instead it proposes a tiny new waterbody segment immediately surrounding the zone, and appears to be contending that the TMDL process was followed for the newly created zone. Similarly, the “reasonable potential analysis” relied upon by NYSDEC in its SPDES Permit Fact Sheet to indicate that statistical modeling is potentially *predictive* of a violation, is itself part of the TMDL process, not a substitute for

one. TOGS 1.3.1 plainly states that “*The TMDL process... **provides the basis for a "reasonable potential" analysis**; that is, does the proposed discharge of a pollutant have the reasonable potential to cause or contribute to an excursion of water quality standards. ***If the answer is "yes", the TMDL process is then used to determine the WQBELs for all sources of that pollutant to assure compliance with water quality standards.***”*

On a macro level, NYSDEC specifically dismissed nitrogen (nitrate) as a primary cause of impairment in Cayuga Lake as recently as 2024 in its TMDL for phosphorus, and did not make any recommendations regarding ammonia or nitrite. Coming to a statistically-based conclusion that anything short of complete nitrification at a wastewater treatment plant equals a water quality standards violation does not demonstrate that an applicable narrative best-use-based standards violation exists.

As mentioned, the proposed permit limits are being devised with the objective of “the protection of aquatic life.” However, there has been no corroborative biological monitoring nor anecdotal evidence to suggest that organisms are under stress outside the mixing zone (which, itself, has not been delineated). To the contrary, available data indicates that annual inventories at the Cayuga Inlet fish ladder have not decreased in population or size, and angler surveys show extremely high satisfaction with fishing in the lake. In addition, synoptic dissolved oxygen sampling at four south-segment locations analyzed over the past 15 years by Community Science Institute reveals that levels in the south lake are quite high (approaching 9 mg/l) and consistent throughout the segment, displaying no localized variation or decline at the point-source discharge monitoring locations, generally indicating an overall healthy environment for aquatic life.

The assumptions underpinning the Department’s proposed modifications are particularly concerning because they are purely theoretical and based on hypothetical variables such as a dilution ratio and mixing zone dimensions that not only cannot be traced to their mathematical origins, but have likely not been revisited since IAWWTF was rerated from 10 MGD to 13.1 MGD. It is not clear how NYSDEC would spatialize a new waterbody segment surrounding a mixing zone without first delineating the shape or boundaries of the zone through any quantifiable scientific processes.

Past Research Supports Retaining Conventional Treatment Technology

IAWWTF owners commissioned a comprehensive study in the mid-80’s to determine whether its then-redesigned discharge would result in harmful levels of ammonia outside the mixing zone. The study, conducted by Environmental Scientist, Liz Moran, concluded that, “*The analysis demonstrates that even under ‘worst case’ conditions, the concentrations of un-ionized ammonia in the south end of the lake will not create toxic conditions for fish outside of an acceptable mixing zone. Therefore, the new lake outfall*

of the upgraded and rebuilt Ithaca Area Wastewater Treatment Facility is not creating unacceptable water quality conditions."

Subsequent to the study, the plant was rerated from 10 MGD to 13.1 MGD. It is likely that current mixing zone and dilution assumptions have not been adjusted to account for the increase in maximum allowable flow. However, with the exception of phosphorus (which has been greatly reduced), IAWWTF effluent parameters are similar to those that existed during Ms. Moran's study period. Therefore, it is reasonable to conclude that her general findings are worth investigating today.

Conclusion

IAWWTF owners and users wholly support efforts to maintain and improve water quality in Cayuga Lake. To that end, IAWWTF owners voluntarily invested in tertiary phosphorus treatment in 2003, long before the TMDL for phosphorus was developed, and area municipalities continue to collaborate to utilize vital wastewater infrastructure in an efficient, regional approach. We urge the Department to avoid high cost-benefit-ratio regulatory practices that would inadvertently disincentivize regional wastewater management and encourage the proliferation of septic systems and sprawl development.

Municipalities and ratepayers encourage the efficient use of resources to advance the goals of the TMDL for Phosphorus in Cayuga Lake, including the establishment of riparian buffers, streambank stabilization, and greater investment in agricultural best management practices. Given the enormous cost and questionable environmental benefit of the potential permit modification, stakeholders will continue to advocate for the prioritization of solving the problems that were quantified and published by NYSDEC following decades of research, and oppose the diversion of finite assets to address issues that have either not been identified, not been confirmed, or were dismissed outright as non-problematic during the development of the phosphorus TMDL. We urge NYSDEC to abide by its most comprehensive regulatory procedures, which were created to ensure implementation of, and compliance with, state and federal environmental law.

NYSDEC must determine whether the IAWWTF discharge is causing or contributing to water-quality standards violations related to ammonia and nitrite by following its own TMDL process. A permit modification with a price tag of 100 million dollars, based solely on theoretical modeling in the absence of field corroboration, mandated while known impairments continue to go unaddressed, is environmentally questionable and financially prejudicial, particularly to the many disadvantaged and underserved communities reliant on IAWWTF.

We look forward to collaborating on thorough, sensible solutions that balance evidence-based regulatory practices with real-world financial realities and implementation constraints.

Respectfully,

Date:_____

Robert Cantelmo, Mayor
City of Ithaca

Date:_____

Linda Woodard, Mayor
Village of Cayuga Heights

Date:_____

Rod Howe, Supervisor
Town of Ithaca

Date:_____

Ronny Hardaway, Mayor
Village of Lansing

Date:_____

Jason Leifer, Supervisor
Town of Dryden

Date:_____

Ruth Groff, Supervisor
Town of Lansing

Cc;

Amanda Lefton, Commissioner, NYSDEC

Anthony Luisi, Deputy Commissioner and General Counsel, NYSDEC

Dereth Glance, Director, NYSDEC Region 7

Monica Moss, Section Chief, North Section, NYSDEC

Thomas Vigneault, Water Resources Specialist, NYSDEC Region 7

The Honorable Anna Kelles, Assemblymember, 125th Assembly District

The Honorable Lea Web, New York State Senator, 52nd Senate District

The Honorable Kathy Hochul, Governor of New York State