

New York State Department of Environmental Conservation

Division of Environmental Permits, Region 8

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Joe Martens
Commissioner

June 9, 2014

Marke Masse, CPA, Senior Vice President of Operations
Genesee County Economic Development Center
99 MedTech Drive, Suite 106
Batavia, New York 14020

Re: Western NY STAMP – Water and Wastewater
Town of Alabama, Genesee County
DEC No. 8-1820-00020

Dear Mr. Masse:

The New York State Department of Environmental Conservation (DEC) has reviewed the conceptual water and wastewater alternatives report (August, 2013) for the proposed Western New York Science, Technology, and Advanced Manufacturing Park (STAMP).

Based on our review, the Department is providing preliminary comments noted below. These preliminary comments are intended to assist you in the continued planning and evaluation of water supply and wastewater treatment alternatives, and related DEC permitting considerations. As additional project information or actual plans are developed, the DEC may provide additional guidance or require additional information related to our regulatory jurisdiction.

Water Supply

As described in the report, the preferred water supply source for the first 8 million gallons of water per day (MGD) for the STAMP site (phases 1 & 2) is the Niagara County Water District (NCWD). The source for the remaining 4 MGD (phase 3) would either be the NCWD or sources from new connections within Genesee County. As part of phase 1, the pipeline connection from the NCWD to the STAMP site would have a 12 MGD capacity to allow for the full build out volume to be provided by NCWD if the district improvements discussed in the report can be undertaken.

The NCWD will need to apply to the Department for a modification to its existing water withdrawal permit to extend water service to the STAMP site, and to increase its approved withdrawal amount from the Niagara River to accommodate the project. There are also interbasin diversion provisions within 6 NYCRR Part 601, which we anticipate would be incorporated into the NCWD permit. A Great Lakes-St. Lawrence River Basin Water Resources Compact intra-basin transfer approval would not be required for a purchase of water from NCWD since the Niagara River is considered a connecting channel of Lake Ontario. However, if purchase of water is proposed from the Erie County Water Authority, such approval would be required.

In addition, the extension of water mains would be subject to applicable DEC permitting related to streams, wetlands, and potential Section 401 Water Quality Certification requirements. As additional details about potential water main routes are developed the Department can assist in reviewing that information for potential DEC permitting.

Wastewater

As described in the report, the preferred wastewater treatment/disposal alternative is to send up to 1 MGD of sanitary wastewater to the Village of Medina wastewater treatment plant (WWTP), and to send up to 11 MGD of pre-treated industrial wastewater to Lake Ontario for direct discharge. Like the water supply, the wastewater capacity is expected to be developed in three phases in increments of 4 MGD. According to the report, a developer or Genesee County would have the option of creating an entity to convey the sanitary sewer and pre-treated industrial effluent wastewater from the STAMP site to either a WWTP or Lake Ontario.

Information was also provided in the report showing the typical wastewater quality for industrial effluent associated with semiconductor manufacturing (Table 1-1 of the report). This table was based on the assumptions “. . . that any semiconductor manufacturer operating at the STAMP site will segregate and dispose of high strength organic solvents and concentrated or toxic metals, and provide for fluoride, ammonia, copper, and TSS removal.”

Staff have reviewed the information contained in the report and can provide the preliminary comments regarding potential effluent limits for industrial discharge to Lake Ontario, and can identify certain issues that will have to be addressed with respect to the State Pollutant Discharge Elimination System (SPDES) permitting, both for the Village of Medina WWTP and industrial facilities at the STAMP site. Like the water mains, the extension of sewer mains would also be subject to applicable DEC permitting related to streams, wetlands, and potential Section 401 Water Quality Certification requirements. As additional details about potential sewer main routes are developed the Department can assist in reviewing that information for potential DEC permitting.

Preliminary Effluent Limits

Based on our review of the information provided, preliminary effluent limits would apply to the discharge of industrial wastewater as indicated in the attached Table 1. These limits are provided based on the same assumptions provided in the report with respect to the segregation and disposal of high strength organic solvents and concentrated or toxic metals, and the removal of fluoride, ammonia, copper, and total suspended solids (TSS). These limits are subject to change as additional project information becomes available, applicable regulatory requirements or guidance documents change, or other yet unforeseen circumstances warrant.

SPDES Permitting

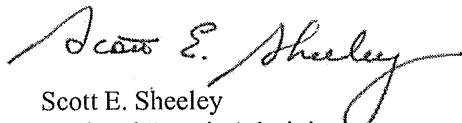
Village of Medina WWTP: Based on the current SPDES permit in effect for the Village of Medina WWTP (DEC No. 8-3434-00012/00001; SPDES NY-0021873), the permitted flow limit is 4.5 MGD. The discharge of up to 1.0 MGD of sanitary wastewater to the Medina WWTP will require a more detailed engineering evaluation to determine whether there is existing capacity to receive the STAMP effluent. If not, a SPDES permit modification would be needed to accommodate the projected flow increases. Such a modification would be subject to the Department's full technical review and may include adjustments to effluent limits contained in the permit. Regardless of the potential SPDES permit modification requirements, there is also currently no approval in place to serve the STAMP site with sanitary sewers. DEC approval would have to be obtained to extend sewer mains to the STAMP site.

Industrial Discharges: There are several potential SPDES permitting scenarios that could occur for the STAMP site. There is insufficient information in the August, 2013 to provide definitive guidance on the structure and content of a potential SPDES permitting. The following factors would be important for the Department to determine how the discharges would be permitted, most of which involve information regarding the ownership or control of site infrastructure:

- Individual facility treatment/pre-treatment with direct discharge to Lake Ontario via a common sewer would require each facility to obtain its own SPDES permit. Such permits would require effluent monitoring a point upstream of the common sewer main. Under this scenario there would be multiple SPDES permits for the site, each of which would identify a separate legally responsible party. To the extent that any effluent limits are established that would involve an overall loading limit, the loading limit would have to be apportioned among each of the SPDES permittees. Ownership and maintenance of the collection system and sewer mains would have to be clearly identified, and measures may be required to ensure that the entity would be fully-responsible for the system.
- Treatment of wastewater by a single entity for all individual facilities within the development would require that entity to obtain a single SPDES permit for the entire development. This approach would require consideration of pre-treatment-like program for individual manufacturing facilities within the development, and incorporation of the program into the SPDES permit. In this scenario, it is assumed that the entity owning and maintaining the collection system and sewer mains would be the same entity providing wastewater treatment, and would be fully-responsible for the system.
- SPDES Stormwater: For stormwater, there is a need to obtain coverage during construction activity either under a general permit or as part of a site-specific individual permit. There is also the potential for the need for coverage under the multisector general permit or site specific permits depending upon the industrial categories of the manufacturing facilities. More information on the planned development is needed to determine the most effective and efficient manner of permitting. In any case, the conditions in the general permit for construction activity and the multisector general permit for industrial activity can be considered for likely technical requirements that would be applied. More information on the current SPDES stormwater general permits is available on the DEC website at: <http://www.dec.ny.gov/chemical/8468.html>.

We are available to meet and discuss any of the above items, should you or the project design team feel that it would be helpful. If you have any questions about this notice, or would like to schedule a meeting to discuss this application, please call me at (585) 226-5382. Thank you.

Sincerely,


Scott E. Sheeley
Regional Permit Administrator

Attachment – Table 1

Ecc: Paul D'Amato, Regional Director, DEC Region 8
Frank Ricotta, Regional Engineer, DEC Region 8
Scott Rodabaugh, Regional Water Engineer, DEC Region 8
Web Pearsall, Regional Fisheries Manager, DEC Region 8
Jeffrey Konsella, Regional Water Engineer DEC Region 9
Mike Holt, Division of Water, DEC Albany
Sheila Hess, Conservation Connects
Tim Carpenter, CH2M Hill
Steve Metivier/Kathleen Buckler, U.S. Army Corps of Engineers (App. No. 2010-00964)

Table 1. Preliminary effluent limits for industrial wastewater from the Western NY STAMP project based on August, 2013 Conceptual Water and Wastewater Alternatives Analysis and Recommendation Report, including assumptions contained therein regarding the segregation and disposal of high strength organic solvents and concentrated or toxic metals, and the removal of fluoride, ammonia, copper, and total suspended solids.

Parameter	Type	Limit	Units	Notes
Solids, Total Dissolved	Daily Maximum	2000	mg/l	3
Solids, Total Suspended	---	Narrative Standard	mg/l	1
BOD ₅	Monthly Average	30	mg/l	
COD	---	monitor	mg/l	2
Ammonia, Total	Monthly Average	15.0	mg/l	3, 4
Ammonia, Total	Monthly Average	22.0	mg/l	3, 5
Nitrate	Monthly Average	100	mg/l	3
Phosphorous	Monthly Average	1.0	mg/l	6
Fluoride	Daily maximum	2-10	mg/l	

Notes:

1. Please contact Mr. Brian Baker of DEC Bureau of Water Permits, Albany.
2. Pending any sampling results or projected effluent quality, a COD limit may be imposed. Such a limit would depend on the treatment technology.
3. Assuming a dilution of 10:1 per TOGS 1.3.1
4. Assumes pH = 7.5, and temperature = 25°C, summer.
5. Assumes pH = 7.5, and temperature = 10°C, fall-winter-spring.
6. Currently we do not have standard/guidance value for the dischargers to Lake Ontario. However, TOGS 1.3.3 contains an effluent limit of 1.0 mg/l for publicly owned treatment works dischargers over 1,000,000 gallons per day.