

DOCKET NO. D-1985-065 CP-3

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Town of Liberty
Loomis Wastewater Treatment Plant Expansion
Town of Liberty, Sullivan County, New York**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Kelly Engineering, P.C. on behalf of the Town of Liberty (docket holder) on February 28, 2014 (Application), for review of modifications to the docket holder's existing wastewater treatment plant (WWTP). State Pollutant Discharge Elimination System (SPDES) Permit No. NY0030261 for the project discharge was issued by the New York State Department of Environmental Conservation (NYSDEC) on January 10, 2013.

The Application was reviewed for inclusion of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Sullivan County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on June 10, 2014.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve an upgrade and expansion of the docket holder's existing Loomis WWTP. The proposed upgrade is Phase II of a two-phase upgrade and expansion project, and consists of adding a rotating biological contactor (RBC) unit, a clarifier, and a pump chamber to the existing WWTP and increasing the hydraulic capacity from 0.08 million gallons per day (mgd) to 0.10 mgd.

2. Location. The project WWTP is located off of Route 52, just east of its intersection with Lake Marie Road, in the Town of Liberty, Sullivan County, New York. The project WWTP will continue to discharge to an unnamed tributary (UNT) to Swan Lake, which is an impoundment just upstream of the West Branch Mongaup River, which is a tributary to the Mongaup River, located at River Mile 261.1 – 19.7 – 8.2 – 1.0 – 1.1 (Delaware River – Mongaup River – West Branch Mongaup River – Swan Lake – UNT to Swan Lake), within the drainage area to the Upper Delaware Special Protection Waters (SPW).

The WWTP and its related discharge are located in the Mongaup River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 47' 12"	74° 47' 9"

3. **Area Served.** The Loomis WWTP will continue to serve portions of the Town of Liberty. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The existing WWTP consists of an RBC, sand filter, and polishing lagoon treatment system designed to treat an average annual flow of 0.08 mgd. The project proposes to add an RBC unit, pump chamber, and clarifier to the existing treatment system in order to increase the WWTP's hydraulic treatment capacity from 0.08 mgd to 0.10 mgd.

b. **Facilities.** The existing WWTP features a metering and flow splitting chamber, an RBC unit, a clarifier, a pump chamber, a dosing chamber, two (2) open sand filters, four (4) overland flow cells, a recirculating pump station, a polishing lagoon, two (2) digestors, and ultraviolet light (UV) disinfection.

The existing metering and flow chamber, RBC unit, clarifier, pump chamber, and digestors were constructed as Phase I of a two-phase upgrade project to the WWTP. The existing RBC unit is sized to treat up to 50,000 gallons per day (gpd). The proposed upgrade is Phase II of the two-phase upgrade project, and consists of constructing an additional 50,000 gpd RBC unit, clarifier, and pump chamber, to be located prior to the existing dosing chamber, in parallel with the existing RBC unit, clarifier, and pump chamber. The Phase II construction will increase the overall treatment capacity of the WWTP to 100,000 gpd.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The existing WWTP has a permanent generator installed capable of providing emergency power. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and is required to have a remote alarm system that continuously monitors plant operations. The docket holder provided information that the existing facility has an automatic dialer at the WWTP that contacts an on-call plant operator in case of emergency. (SPW)

The docket holder has prepared and implemented an emergency management plan (EMP) in accordance with Commission requirements for the existing and upgraded WWTP. (SPW).

The docket holder's existing wastewater treatment facility does not discharge to Outstanding Basin Waters (OBW), and is not required to have a nonvisible discharge plume in accordance with the Commission's SPW requirements. (SPW)

The docket holder is performing substantial alterations or additions to an existing WWTP located in SPW, as defined in Section 3.10.3A.2.a.16) of the Commission's *Water Quality Regulations* (WQR). However, the project is located above a major surface water impoundment listed in Section 3.10.3.A.2.g.5) where time of travel and relevant hydraulic and limnological factors precludes a direct impact on Special Protection Waters. Therefore, in accordance with Section 3.10.3.A.2.f.1) of the WQR, the SPW requirements contained in Sections 3.10.3.A.2.c.2) (natural treatment alternatives analysis) & 3.10.3.A.2.d.8) & 9) (no measurable change to existing water quality analysis) are not necessary for the protection of existing water quality in SPW. See FINDINGS section of this docket.

The docket holder's expanding wastewater treatment facility is not required to provide "Best Demonstrable Technology" (BDT) as a minimum level of treatment in accordance with the Commission's SPW requirements, because it does not discharge directly to SPW.

The existing and proposed project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a State-approved facility.

c. Water withdrawals. The potable water supply in the project service area is supplied by groundwater wells owned and operated by the Stevensville Water District. The groundwater withdrawal was approved by the Commission via Docket No. D-1967-121 CP-1 on December 13, 1967.

d. SPDES Permit / DRBC Docket. SPDES Permit No. NY0030261 was approved by the NYSDEC on January 10, 2013 and includes effluent limitations for the project discharge to surface waters classified by the NYSDEC as Class B (T) stream, designated for swimming, recreational and trout fishing uses. The following INTERIM monthly average effluent limits are among those listed in the SPDES permit and meet or are more stringent than the effluent requirements of the DRBC. The effluent limits apply to the existing 0.08 mgd WWTP and are in effect until the Phase II expansion construction is complete.

EFFLUENT TABLE A-1: DRBC parameters included in SPDES permit for a project flow up to 0.08 mgd, in effect until Phase II construction is complete

OUTFALL 001 (INTERIM LIMITS)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6.5 to 8.5 at all times	As required by SPDES permit
Total Suspended Solids	10.0 mg/l; 6.7 lbs/day (85% minimum removal)	As required by SPDES permit
BOD (5-Day at 20° C)	5.0 mg/l (daily maximum)	As required by SPDES permit

OUTFALL 001 (INTERIM LIMITS)		
PARAMETER	LIMIT	MONITORING
	3.3 lbs/day (daily maximum) (85% minimum removal)	
Ammonia Nitrogen	2.0 mg/l (daily maximum)	As required by SPDES permit
Fecal Coliform	200 colonies per 100 ml (30-day geometric mean)	As required by SPDES permit
Dissolved Oxygen	7.0 mg/l (daily minimum)	As required by SPDES permit
Phosphorous	Monitor & Report	As required by SPDES permit
Total Dissolved Solids*	1,000 mg/l (daily maximum)	As required by SPDES permit

* See DECISION Condition II.t.

The following FINAL monthly average effluent limits are among those listed in the SPDES permit and meet or are more stringent than the effluent requirements of the DRBC. These effluent limits, for a flow up to 0.10 mgd, go into effect upon completion of construction of the Phase II expansion.

EFFLUENT TABLE A-2: DRBC parameters included in SPDES permit for a project flow up to 0.10 mgd, to go into effect after Phase II construction is complete

OUTFALL 001 (FINAL LIMITS)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6.5 to 8.5 at all times	As required by SPDES permit
Total Suspended Solids	10.0 mg/l (daily maximum) 8.3 lbs/day (daily maximum) 85% minimum removal	As required by SPDES permit
BOD (5-Day at 20° C)	5.0 mg/l (daily maximum) 4.2 lbs/day (daily maximum) 85% minimum removal	As required by SPDES permit
Ammonia Nitrogen (6/1 - 10/31)	1.1 mg/l	As required by SPDES permit
Ammonia Nitrogen (11/1 - 5/31)	2.2 mg/l	As required by SPDES permit
Fecal Coliform	200 colonies per 100 ml (30- day geometric mean)	As required by SPDES permit
Dissolved Oxygen	7.0 mg/l (daily minimum)	As required by SPDES permit
Phosphorous	0.5 mg/l; 0.4 lbs/day	As required by SPDES permit
Total Dissolved Solids*	1,000 mg/l (daily maximum)	As required by SPDES permit

* See DECISION Condition II.t.

e. **Cost.** The overall cost of this project is estimated to be \$890,089.

f. **Relationship to the Comprehensive Plan.** The project WWTP was included in the Comprehensive Plan on October 28, 1986 upon approval of Docket No. D-1985-065 CP-1, and was modified via Docket No. D-1985-065 CP-2 on December 5, 2012 (Phase I Upgrade). Issuance of this docket will continue the WWTP approval and add the Phase II expansion to the Comprehensive Plan (See DECISION Condition I.c.).

B. FINDINGS

The purpose of this docket is to approve the upgrade and expansion of the docket holder's existing Loomis WWTP. The upgrade consists of adding an RBC unit, a pump chamber, and a clarifier to the existing WWTP. The proposed modifications are the second phase (Phase II) of a planned phased upgrade to the facility and will increase the hydraulic design capacity of the WWTP from 0.08 mgd to 0.10 mgd.

In 1992, the DRBC adopted SPW requirements, as part of the WQR designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area. (Upper SPW)

On July 16, 2008, the DRBC approved amendments to its WQR that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program. The docket holder is performing substantial alterations or additions as defined in Section 3.10.3A.2.a.16) of the Commission's WQR.

Article 3.10.3A.2.e.1). and 2). of the Commission's WQR states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project does entail additional construction and expansion of facilities (i.e., there are new or increased non-point source loads associated with this approval), the NPSPCP requirement is applicable at this time. However, projects above the major surface water impoundments listed in Section 3.10.3.A.2.g.5) where time of travel and relevant hydraulic and limnological factors preclude a direct impact on Special Protection Waters.

The docket holder's WWTP discharges to an unnamed tributary to the Swan Lake, which is a tributary to the Mongaup River upstream of a group of water impoundments referred to as the Mongaup System. Although the WWTP is located in the tributary area to the Upper Delaware River Special Protection Waters, the Mongaup System is one of the major surface water impoundments that are listed in Section 3.10.3A.2.g.5., and therefore the docket holder is exempted from performing the SPW NPSPCP requirement at this time.

The docket holder is performing substantial alterations or additions as defined in Section 3.10.3A.2.a.16) of the Commission's WQR. As a result, a no measurable change (NMC) to

existing water quality (EWQ) analysis and a natural treatment alternatives (NTA) analysis is required to be submitted prior to approval of the modifications in accordance with the Commission's *WQR*. However, in accordance with Section 3.10.3.A.2.f.1) of the *WQR*, factoring in the existence of a water storage impoundment downstream of the discharge and the time of travel and relevant hydraulic and limnological factors that exempt the facility from submitting a NPSPCP, as well as distance from SPW and the waste assimilation characteristics of the receiving stream, the Commission has determined that these requirements are not necessary for the protection of EWQ in the SPW.

The nearest surface water intake of record for public water supply downstream of the project discharge is the City of Easton intake on the Delaware River, located approximately 106 miles downstream.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the SPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *WQR* of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-1985-065 CP-3 below:

a. The project described in Docket No. D-1985-065 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1985-065 CP-3; and

b. Docket No. D-1985-065 CP-2 is terminated and replaced by Docket No. D-1985-065 CP-3; and

c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC in its SPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. Commission approval of this docket is contingent on NYSDEC's construction plan approval.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

d. The docket holder shall comply with the requirements contained in EFFLUENT TABLE A-1 in Section A.4.d. of this docket prior to completion of the Phase II expansion. Upon completion of the Phase II expansion, the docket holder shall comply with the requirements contained in EFFLUENT TABLE A-2 in Section A.4.d. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

i. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

j. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement ("Statement") signed by the docket holder's professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (2) report the project's final construction cost as such cost is defined by the project review fee schedule in effect at the time the application was made; and (3) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the docket holder to calculate the DRBC project review fee, the statement must also include (4) the amount of any outstanding balance owed for DRBC review. The outstanding balance will equal the difference between the fee paid to the

Commission and the fee calculated on the basis of the project's final cost, using the formula and definition of "project cost" set forth in the DRBC's project review fee schedule in effect at the time application was made.

k. The WWTP modifications shall be completed within three years of approval of this docket or the docket holder shall demonstrate to the Executive Director that it has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval. If the modifications have not been completed within three years of Docket Approval and the docket holder does not submit a cost analysis demonstrating substantial funds have been expended, Commission approval of the modifications to the existing WWTP shall expire. If the docket expires under this condition, the docket holder shall file a new application with the Commission and receive Commission approval prior to initiating construction of any modifications.

l. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

m. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

n. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

o. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

p. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

q. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

r. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

s. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

t. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

u. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin Compact (“Compact”) or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

v. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

BY THE COMMISSION

DATE APPROVED: June 11, 2014

EXPIRATION DATE: November 30, 2021