DOCKET NO. D-1991-063 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

Village of Hobart Wastewater Treatment Plant Expansion Town of Stamford, Delaware County, New York

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Lamont Engineers on behalf of the Village of Hobart (docket holder) on March 4, 2014 (Application), for review of modifications to the docket holder's existing wastewater treatment plant (WWTP). State Pollutant Discharge Elimination System (SPDES) Permit No. NY0029254 for the project discharge was issued by the New York State Department of Environmental Conservation (NYSDEC) on March 25, 2005.

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 Delaware County Planning Department has been notified of pending action. A public hearing on this project was held by the DRBC on June 10, 2014.

A. <u>DESCRIPTION</u>

1. <u>Purpose</u>. The purpose of this docket is to approve an upgrade and expansion of the docket holder's existing WWTP. The proposed project also includes an expansion of the service area of the WWTP, including associated sewer collection system and pump station improvements. The upgrade to the WWTP consists of replacing the jet aeration system with fine bubble diffusion, replacing blowers, replacing pumps, upgrading appurtenant equipment and increasing the hydraulic capacity from 0.18 million gallons per day (mgd) to 0.20 mgd. However, the NYSDEC has not issued SPDES permit approval for a flow up to 0.20 mgd, and therefore this docket approval restricts the WWTP to a discharge of 0.18 mgd until the docket holder obtains NYSDEC approval to discharge up to 0.20 mgd.

2. <u>Location</u>. The project WWTP is located off of Route 10, just west of the Village of Hobart, Delaware County, New York. The project WWTP will continue to discharge to the West Branch Delaware River upstream of the Cannonsville Reservoir, at River Mile 330.71 - 76.7 (Delaware River - West Branch Delaware River) and is a discharge to Zone W1, which is located in the drainage area to the Upper Delaware Special Protection Waters (SPW).

The WWTP and its related discharge are located in the West Branch Delaware River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	42° 22' 22''	74° 41' 5"

3. <u>Area Served</u>. The docket holder's WWTP currently serves the Village of Hobart, Delaware County, New York, and the Allen Residential Center, located in the Town of Kortright, Delaware County, New York. The proposed project includes expanding the service area of the WWTP to include the Hamlet of South Kortright, located in the Town of Stamford, Delaware County, New York.

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. <u>Physical Features</u>.

a. <u>Design Criteria</u>. The existing WWTP consists of an extended aeration / activated sludge treatment system with sand filtration, microfiltration, and ultraviolet light (UV) disinfection, and is hydraulically designed to treat up to 0.18 mgd. The proposed project includes improvements to the existing treatment system in order to increase the WWTP's hydraulic treatment capacity from 0.18 mgd to 0.20 mgd. The current SPDES approval is for a flow up to 0.18 mgd, and therefore this docket restricts the discharge to 0.18 mgd until the docket obtains NYSDEC approval for the expanded flow.

b. <u>Facilities</u>. The existing WWTP features an influent pump station, two (2) flow equalization tanks, a grit chamber, two (2) aeration chambers with jet aeration, two (2) secondary clarifiers, three (3) sand filters, three (3) microfiltration units, and two (2) UV disinfection units. The WWTP also features sludge dewatering in the form of a plate and frame filter press.

The proposed upgrade consists of: modifying and expanding one of the existing flow equalization tanks and equipment; modifying the aeration system including the installation of three (3) new blowers and replacing the existing jet aeration system with new fine bubble diffuser aeration, including appurtenant aeration system improvements; replacing diurnal equalization pumps; and replacing the master membrane (microfiltration unit) feed pumps and appurtenant equipment; and providing piping to support the proposed improvements. The facility upgrades are hydraulically designed to treat a flow up to 0.20 mgd.

The project also includes constructing the new South Kortright Pump Station and Collection System and upgrading the existing Allen Residential Center Pump Station in order to collect and convey wastewater from the expanded service area.

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 a remote alarm system and an automatic dialer at the WWTP. (SPW)

The docket holder's expanding wastewater treatment facility has not prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements. The docket holder is required as part of this docket approval to prepare and implement an EMP within six (6) months of approval of this docket (See DECISION Condition II.r.). (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. <u>Water withdrawals</u>. The potable water supply in the project service area is supplied by groundwater wells owned and operated by the docket holder. The groundwater withdrawal was approved by the Commission via Docket No. D-1976-094 CP-1 on August 24, 1977.

d. <u>SPDES Permit / DRBC Docket</u>. SPDES Permit No. NY0029254 was approved by the NYSDEC on March 25, 2005 and includes effluent limitations for the project discharge to surface waters classified by the NYSDEC as Class C (T) stream, designated for trout fishing uses. The current active SPDES permit is for a discharge up to 0.18 mgd, and therefore this docket restricts the discharge to 0.18 mgd until the docket holder obtains approval for the expanded flow (See FINDINGS section of this docket). The following monthly average effluent

limits are among those listed in the current active SPDES permit and meet or are more stringent than the effluent requirements of the DRBC.

OUTFALL 001 (West Branch Delaware River)				
PARAMETER	LIMIT	MONITORING		
pH (Standard Units)	6.0* to 8.5 at all times	As required by SPDES permit		
Total Suspended Solids	10.0 mg/l (85% minimum removal)	As required by SPDES permit		
CBOD (5-Day at 20° C)	25.0 mg/l (daily maximum) (85% minimum removal)	As required by SPDES permit		
Ammonia Nitrogen	8.2 mg/l	As required by SPDES permit		
Fecal Coliform	200 colonies per 100 ml	As required by SPDES permit		
Phosphorous	0.5 mg/l	As required by SPDES permit		
Temperature**	Monitor & Report	As required by SPDES permit		

EFFLUENT TABLE A-1: DRBC parameters included in SPDES permit

* DRBC Requirement. SPDES permit requires a minimum pH of 5.5

** See DECISION Condition II.h.

EFFLUENT TABLE A-2 : DR	BC parameters no	ot included in SPDE	S permit
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OUTFALL 001 (West Branch Delaware River)				
PARAMETER	LIMIT	MONITORING		
Total Dissolved Solids*	Monitor & Report	Quarterly		
Dissolved Oxygen	Monitor & Report	Monthly		

* See DECISION Condition II.v.

e. <u>Cost</u>. The overall cost of this project is estimated to be \$4,900,000

f. <u>Relationship to the Comprehensive Plan</u>. The project WWTP was included in the Comprehensive Plan on May 27, 1971 upon approval of Docket No. D-1971-068 CP-1, and was modified via Docket No. D-1991-063 CP-1 on August 12, 1992 (upgrade and expansion to 0.16 mgd). An application was submitted to the DRBC on September 22, 2003 for an upgrade and expansion from 0.16 mgd to 0.18 mgd. The expansion to 0.18 mgd was approved by the NYSDEC; however, the expansion was never approved by the DRBC. Issuance of this docket (D-1991-063 CP-2) will continue the WWTP approval and add the upgrade and expansion to 0.20 mgd 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 WWTP, as well as an expansion of the service area of the WWTP, including associated sewer collection system and pump station improvements. The project includes an expansion of the hydraulic design capacity of the WWTP from 0.18 mgd to 0.20 mgd. However, the current active SPDES permit (Permit No. NY0029254, issued on March 25, 2005) approves a discharge of up to 0.18 mgd. Therefore, this docked restricts the discharge to 0.18 mgd until the

docket holder obtains NYSDEC approval for a flow up to 0.20 mgd. Upon NYSDEC issuing a future SPDES permit approval for a flow up to 0.20 mgd, the docket holder is required to meet the effluent limits included in the future SPDES permit in addition to any DRBC docket effluent limits that are more stringent than the effluent limits included in the permit. See DECISION Condition II.a.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations* (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 the West Branch Delaware River, which is upstream of the Cannonsville Reservoir. Although the WWTP discharges to the Upper Delaware River Special Protection Waters, the Cannonsville Reservoir 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 3.10.3A.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.

At the docket holder's WWTP discharge, the West Branch Delaware River has an estimated seven-day low flow with a recurrence interval of ten years (Q7-10) of 1.7 mgd (2.6 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.20 mgd WWTP is 9 to 1.

The nearest surface water intake of record for public water supply downstream of the project discharge is the Cannonsville Reservoir, which supplies drinking water to New York City, and is located on the West Branch Delaware River approximately 40 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. <u>DECISION</u>

I. Effective on the approval date for Docket No. D-1991-063 CP-2 below:

a. The projects described in Docket Nos. D-1971-068 CP-1 and D-1991-063 CP-1 are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1991-063 CP-2; and

b. Docket Nos. D-1971-068 CP-1 and D-1991-063 CP-1 are terminated and replaced by Docket No. D-1991-063 CP-2; 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 a flow increase up to 0.20 mgd is contingent on NYSDEC's approval of the SPDES permit approving a flow up to 0.20 mgd.

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 TABLES A-1 & 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. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F. (Trout Waters only)

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

j. 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.

k. 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.

1. 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.

m. 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.

n. 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.

o. 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).

p. 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.

q. 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.

r. The docket holder shall prepare an emergency management plan (EMP) within six (6) months of docket approval. The docket holder shall submit the EMP and certify in writing to the Commission that it has complied with this condition by December 11, 2014 (SPW projects only).

s. 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.

t. 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.

u. 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.

v. 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.

w. 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: June 11, 2019