DOCKET NO. D-2010-032 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

Lakeview Estates Homeowner's Association Wastewater Treatment Plant Renewal Lehigh Township, Wayne County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by RKR Hess on behalf of the Lakeview Estates Homeowner's Association (Lakeview Estates or docket holder) on February 19, 2013 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its related discharge. Draft National Pollutant Discharge Elimination System (NPDES) Permit No. PA0062367 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on August 5, 2013.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact (Compact)*. The Wayne County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on March 11, 2014.

A. DESCRIPTION

1. <u>Purpose</u>. The purpose of this docket is to renew approval of the docket holder's existing 0.054 million gallon per day (mgd) WWTP and its related discharge. There are no modifications to the existing WWTP proposed.

2. <u>Location</u>. The project WWTP is located to the east of Lake Watawga on Lakeview Timbers Drive, just north of the intersection of Watawga Way West and Watawga Way East in Lenigh Township, Wayne County, Pennsylvania. The WWTP will continue to discharge to an unnamed tributary to the Lehigh River just downstream of Lake Watawga, which is tributary to the Lehigh River, at River Mile 183.7 – 101.3 – 1.2 (Delaware River – Lehigh River – UNT Lehigh River) in the drainage area to the Lower Delaware Special Protection Waters (SPW) area.

The project outfall is located in Lehigh River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 14' 28''	75° 26' 48''

3. <u>Area Served</u>. The docket holder's WWTP will continue to serve the Lakeview Estates residential development, located in Lehigh Township, Wayne County, Pennsylvania.

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 docket holder's existing 0.054 mgd WWTP will continue to utilize a sequencing batch reactor (SBR) treatment process with ultraviolet light (UV) disinfection.

b. <u>Facilities</u>. The existing WWTP facilities consist of two (2) SBR units, a decant equalization tank, a tertiary unit consisting of two (2) filters, a UV disinfection system, and a sludge digestor.

The docket holder's WWTP discharges to waters classified as SPW and is required to have available emergency standby power facilities at the existing WWTP. The docket holder is required as part of this docket approval to install a generator at the existing WWTP capable of providing emergency power within twelve (12) months of approval of this docket (by March 12, 2015). Within 90 days of the effective date of this docket, the docket holder may submit a written request to the Executive Director providing engineering and operational data and other information demonstrating that the power to the WWTF can be interrupted for an extended period with no threat to the water quality of Special Protection Waters and may request the Executive Director approve a waiver to the requirement for emergency power. See Condition II.n. in the DECISION section of this docket. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements. The docket holder is required as part of this docket approval to install a remote alarm that continuously monitors plant operations within six (6) months of approval of this docket (by September 12, 2014). See Condition II.o. in the DECISION section of this docket. (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. (SPW)

The docket holder's has not prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements for the existing WWTP. 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 (by September 12, 2014). See Condition II.o. in the DECISION section of this docket. (SPW)

The 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 provided by groundwater wells owned by individual property owners. The wells are operated at withdrawal rates below the DRBC review threshold, and as such, do not require Commission approval.

d. <u>NPDES Permit / DRBC Docket</u>. PADEP issued draft NPDES Permit No. PA0062637 for the project discharge on August 5, 2013, which includes final effluent limitations for the project discharge 0f 0.054 mgd to surface waters classified by the PADEP as High Quality – Cold Water Fishery (HQ-CWF). The following average monthly effluent limits are among those listed in the NPDES permit that meet or are more stringent than the effluent requirements of the DRBC.

OUTFALL 001 (UNT Lehigh River)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	30 mg/l	As required by NPDES permit
CBOD (5-Day at 20° C)	25 mg/l (85% minimum removal*)	As required by NPDES permit
Ammonia-Nitrogen		
(5/1 to 10/31)	3.0 mg/l	As required by NPDES permit
(11/1 to 4/30)	9.0 mg/l	
Fecal Coliform		
(5/1 to 9/30)	200 colonies per 100 ml as a geo. avg.	As required by NPDES permit
(10/1 to 4/30)	2000 colonies per 100 ml as a geo. avg.	
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES permit
Total Phosphorous	1.0 mg/l	As required by NPDES permit
Nitrite+Nitrate-Nitrogen	Monitor & Report	As required by NPDES permit
Total Kjeldahl Nitrogen	Monitor & Report	As required by NPDES permit
(TKN)		
Total Nitrogen	Monitor & Report	As required by NPDES permit
Total Dissolved Solids**	Monitor & Report**	As required by NPDES permit

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES permit

* DRBC Requirement

** See FINDINGS and DECISION Conditions II.p. & II.t.

e. <u>Relationship to the Comprehensive Plan</u>. The existing WWTP was included in the Comprehensive Plan by Docket No. D-2010-032 CP-1 on July 13, 2011.

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder's existing 0.054 mgd WWTP. There are no modifications to the existing WWTP proposed.

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. (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. (SPW)

The docket holder's WWTP discharges to the drainage area to the Lower Delaware River and is designated as Special SPW. Therefore, the docket holder's WWTP discharge is required to comply with the SPW requirements, as outlined in Article 3.10.3A.2. of the WQR.

Total Dissolved Solids (TDS)

The docket holder was required by Docket No. D-2010-032 CP-01 to perform quarterly total dissolved solids (TDS) monitoring and meet an effluent concentration limit of 1,000 mg/l. Condition II.d. of Docket No. D-2010-032 CP-01 states:

"d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit DRBC required monitoring results directly to 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 results and provide a written explanation within 30 days of the violation the action(s) the docket holder has taken to correct the violation and protect against a future violation."

The docket holder submitted effluent monitoring for 2011 and 2012. The monitoring indicated three (3) exceedences of the 1,000 mg/l effluent limit in 2012. In order to comply with Condition II.d. above, the docket holder's representative submitted an email dated November 7, 2013, which stated that the docket holder proposed to perform a study in order to obtain the data required to understand and resolve the TDS challenges at the WWTP. DRBC staff met with representatives of the docket holder's on January 16, 2014, to discuss the next steps for performing such study and a schedule for putting the study into effect.

Condition II.p. in the DECISION section of this docket requires the docket holder to submit a work plan for a TDS study within 30 days of the docket approval, for approval by the Executive Director.

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 in the drainage area to the SPW. Since this project does not entail additional construction and/or expansion of service area (i.e., there are new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, Special Condition II.m. has been included in the DECISION section of this docket.

At the project site, unnamed tributary to the Lehigh River has an estimated seven-day low flow with a recurrence interval of ten years of 0.14 mgd (0.22 cfs). The ratio of this low flow to the monthly maximum design wastewater flow (0.054 mgd) from the project WWTP is approximately 2.6 to 1.

The nearest surface water intake of record for public water supply downstream of the project discharge is owned and operated by the Hazleton City Authority, which is located approximately 40 miles downstream from the docket holder's WWTP discharge on the Lehigh River.

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 effluent limits in the NPDES 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 Commission's WQR.

C. <u>DECISION</u>

I. Effective on the approval date for Docket No. D-2010-032 CP-2 below:

a. The project described in Docket No. D-2010-032 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2010-032 CP-2; and

b. Docket No. D-2010-032 CP-1 is terminated and replaced by Docket No. D-2010-032 CP-2.

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

II. The project and appurtenant facilities as described in the 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 PADEP in its NPDES permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

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. 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 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.

i. 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.

j. 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).

k. 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.

1. 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.

m. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

n. The docket holder shall provide for emergency standby power at the WWTP within twelve (12) months of the effective date of this docket (by March 12, 2015). Within 90 days of the effective date of this docket, the docket holder may submit a written request to the Executive Director providing engineering and operational data and other information demonstrating that the power to the WWTF can be interrupted for an extended period with no threat to the water quality of Special Protection Waters and may request the Executive Director approve a waiver to the requirement for the emergency power (Section 3.10.3 A.2.d.1) of the WQR). The Executive Director will provide a written determination for any such request.

o. The docket holder shall install a remote alarm that continuously monitors plant operations and prepare and implement 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 September 12, 2014.

p. The docket holder is required to submit a work plan for a TDS study within 30 days of this docket approval, for approval by the Executive Director. The work plan shall be submitted by April 11, 2014, in accordance with the FINDINGS section of this docket.

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.

w. The docket holder owes a remaining balance of \$2,000 for this docket renewal. The balance shall be paid within sixty (60) days of issuance of this docket (by May 12, 2014) or fees may be assessed in accordance with the Commission's Penalty Matrix.

BY THE COMMISSION

DATE APPROVED: March 12, 2014

EXPIRATION DATE: March 12, 2019