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DOCKET NO. D-2005-016-3

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Bear Creek Mountain Resort and Conference Center
Wastewater Treatment Plant
Longswamp Township, Berks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Keystone Engineering Group on behalf of Bear Creek Mountain Resort and Conference Center (Bear Creek or docket holder) on July 17, 2017 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. Water Quality Management (WQM) Permit No. 0605408 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on August 1, 2013.

The Application was reviewed for renewed approval under Section 3.8 of the *Delaware River Basin Compact*. The Berks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on May 16, 2018.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew the approval of the docket holder's existing WWTP and its discharge to land via spray irrigation. The WWTP is designed for a hydraulic capacity of 0.045 million gallons per day (mgd), however, the WWTP is permitted for a maximum daily flow rate of 0.0350 mgd.
- 2. Location.** The WWTP discharge will continue to discharge treated effluent to land via spray irrigation fields, and has the capability to reuse the effluent for snowmaking. The WWTP currently conducts in-stream monitoring of the adjacent Swabia Creek at River Mile 183.66 – 17.0 – 11.4 – 7.2 (Delaware River – Lehigh River – Little Lehigh River – Swabia Creek) via

designated monitoring points, within the drainage area to the Lower Delaware Special Protection Waters (SPW). The WWTP and its discharge to land are located in Longswamp Township, Berks County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
Bear Creek WWTP	40° 28' 40"	75° 37' 32"

3. **Area Served.** The docket holder's WWTP will continue to serve the Bear Creek Mountain Resort and Conference Center located in Longswamp Township, Berks 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. **Physical Features.**

a. **Design Criteria.** The docket holder's 0.045 mgd WWTP utilizes an activated sludge treatment process with ultraviolet (UV) disinfection. The WWTP is permitted to discharge a maximum daily flow rate of 0.0350 mgd.

b. **Facilities.** The WWTP facilities consist of two equalization tanks, eight aeration tanks, two anoxic tanks, two clarifiers, tertiary filters, a sludge holding tank, a UV disinfection unit post-treatment tank, and a storage lagoon. Treated effluent is spray irrigated to 7.57 acres of designated land, or is capable of being reused for snowmaking. Any treated effluent reused for snowmaking is to be mixed at a ten percent ratio with water from an on-site freshwater pond, prior to being spray-applied as snow to a designated 5 acres of land. PADEP's WQM permit includes a condition that the treated effluent to be reused for snowmaking must be pumped in a manner such that it will not be introduced into the freshwater pond (not including snowmelt/surface runoff).

Around the docket holder's land application, the docket holder currently operates four groundwater monitoring sites, a spring monitoring location, and five nearby in-stream monitoring sites for Swabia Creek. The docket holder is required to submit all data to PADEP.

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

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

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. **Water withdrawals.** The potable water supply in the project service area and snow making water is provided by the docket holder's water supply distribution system. The docket holder's water supply withdrawal was approved by the DRBC on December 10, 2014 via Docket No. D-2004-035-2.

d. **Effluent Requirements.** EFFLUENT TABLES A-1 and A-2 below contain effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.I.d.). WQM Permit No. 0605408 was issued by PADEP on August 1, 2013 and includes final effluent limitations based on a discharge to land of 0.035 mgd to three spray irrigation zones. Additionally, limitations are based on a discharge rate of 0.035 mgd when treated effluent is utilized for snow making at a mixture ratio of 1 to 10 with the docket holder's water supply at a 1 to 10 ratio. The following average monthly effluent limits are among those listed in the WQM Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in WQM Permit

Treated Effluent Discharging to Spray Irrigation		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by WQM Permit
Total Suspended Solids	30 mg/l	As required by WQM Permit
BOD ₅ (at 20° C)	30 mg/l	As required by WQM Permit
Ammonia Nitrogen	20 mg/l	As required by WQM Permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by WQM Permit
Total Nitrogen	Monitor & Report	As required by WQM Permit
Nitrate + Nitrite as N	Monitor & Report	As required by WQM Permit
Total Dissolved Solids*	Monitor & Report*	As required by WQM Permit
Phosphorus	Monitor & Report	As required by WQM Permit

*See DECISION Condition C.II.s

EFFLUENT TABLE A-2: DRBC Parameters Included in WQM Permit

Treated Effluent Reused for Snow Making		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by WQM Permit
Total Suspended Solids	30 mg/l	As required by WQM Permit
BOD ₅ (at 20° C)	10 mg/l	As required by WQM Permit
Ammonia Nitrogen	20 mg/l	As required by WQM Permit
Fecal Coliform	2.2 colonies per 100 ml as a geo. avg.	As required by WQM Permit
Total Nitrogen	Monitor & Report	As required by WQM Permit
Nitrate + Nitrite as N	Monitor & Report	As required by WQM Permit
Total Dissolved Solids*	Monitor & Report*	As required by WQM Permit
Phosphorus	Monitor & Report	As required by WQM Permit

*See DECISION Condition C.II.s

B. FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing Bear Creek WWTP, its discharge to land via spray irrigation, and reuse for snowmaking. No modifications to the WWTP are proposed.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations (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.

The docket holder's WWTP discharges to the Lower Delaware River SPW area. The docket holder's WWTP discharge to land is required to comply with the SPW requirements for monitoring, as outlined in Article 3.10.3A.2. of the *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 in the drainage area to the SPW. Since this project does not entail additional construction and expansion of facilities or service area and there are no new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, DECISION Conditions C.II.1. has been included in this docket.

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 WQM 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 *Water Quality Regulations (WQR)*.

C. DECISION

I. Effective on the approval date for Docket No. D-2005-016-3 below, Docket No. D-2005-016-2 is terminated and replaced by Docket No. D-2005-016-3; and

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 PADEP in its WQM Permit.
- 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* and Flood Plain Regulations (*FPR*).
- 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 the required monitoring results electronically to the DRBC Project Review Section via email **aemr@drbc.state.nj.us** on the **Annual Effluent Monitoring Report Form** located at this web address: <http://www.state.nj.us/drbc/programs/project/pr/info.html>. 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. 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.

l. 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.

m. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges 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, 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.

n. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations (see 18 CFR 401.43).

o. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

p. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

q. 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.

r. 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.

s. 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.

t. 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.

u. 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.

v. Prior to the docket holder initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Commission’s *WQR*, an application must be submitted and approved by the Commission. Such an application shall be submitted prior to final design to ensure that the Commission can provide the docket holder with draft effluent limitations for SPW specific parameters as guidance for design as to not require duplication of work or cause a substantial expenditure of public funds without Commission approval. The docket holder is encouraged to contact the Commission staff during the planning stages to identify the potential effluent limitations required to meet the no measurable change parameters under SPW.

BY THE COMMISSION

APPROVAL DATE:

EXPIRATION DATE: June 30, 2023