DOCKET NO. D-2003-014 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

Bedminster Municipal Authority Bedminster Wastewater Treatment Plant Bedminster Township, Bucks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Entech Engineering Inc. on behalf of the Bedminster Municipal Authority (BMA or docket holder) on July 8, 2013 (Application), for renewal of the docket holder's existing Bedminster wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0058343 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on September 1, 2009, effective October 1, 2009. The PADEP is expected to renew the NPDES Permit shortly.

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*. The Bucks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 9, 2014.

A. <u>DESCRIPTION</u>

- 1. <u>Purpose</u>. The purpose of this docket is to renew approval of the docket holder's existing 0.436 million gallons per day (mgd) WWTP and its discharge. The project includes an increase in average monthly flow from 0.26 mgd to 0.303 mgd from within the existing service area.
- **Location**. The WWTP will continue to discharge treated effluent to an unnamed tributary (UNT) of Deep Run at River Mile 157.0 6.1 3.8 1.1 (Delaware River Tohickon Creek Deep Run UNT) via Outfall No. 001, within the drainage area to the Lower Delaware Special Protection Waters (SPW), in Bedminster Township, Bucks County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 23' 39"	75° 12' 28"

Area Served. The docket holder's WWTP will continue to serve portions of Bedminster Township, Bucks County, Pennsylvania as delineated on Drawing No. EXH-1 from Section 6 of the Application. 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. <u>Design Criteria</u>. The docket holder will continue to operate its existing 0.436 mgd WWTP. The DRBC has based effluent limitations on a monthly average flow of 0.303 mgd. The PADEP and DRBC previously based effluent limitations on a monthly average flow of 0.26 mgd. Due to an increase in flow within the approved service area the PADEP is expected to base effluent limitations on a monthly average flow of 0.303 mgd in the renewed Permit.
- **b.** <u>Facilities</u>. The WWTP consists of an influent pump station, a bar screen, an influent equalization tank, two (2) sequencing batch reactor (SBR) tanks, an aerated sludge digester, an effluent equalization tank, a traveling bridge filter, and an ultraviolet (UV) disinfection unit.

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 generator installed capable of providing emergency power.

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. The existing WWTP has a remote alarm system installed that continuously monitors plant operations.

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission 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.** <u>Water withdrawals</u>. The potable water supply in the project service area is supplied by the docket holder and was last approved by the Commission via Docket No. D-2004-002 CP-2 on December 4, 2013.
- **d.** NPDES Permit / DRBC Docket. NPDES Permit No. PA0058343 was issued by the PADEP on September 1, 2009 (effective October 1, 2009) and includes final effluent limitations for the project discharge of 0.26 mgd to surface waters classified by the PADEP as a

warm water fishery (WWF). The PADEP is expected to renew the NPDES Permit shortly and amend the average monthly discharge flow to 0.303 mgd due to an increase in flow within the existing service area. The following average monthly effluent limits are among those listed in the current NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1	DRBC Parameters	Included in NPDES Permit
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OUTFALL 001 (WWTP)			
PARAMETER	LIMIT	MONITORING	
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit	
Total Suspended Solids	10 mg/l	As required by NPDES Permit	
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES Permit	
CBOD ₅ (at 20° C) (5-1 to 10-31)	10 mg/l	As required by NPDES Permit	
(11-1 to 4-30)	20 mg/l	-	
Ammonia Nitrogen (5-1 to 10-31)	1.0 mg/l	As required by NPDES Permit	
(11-1 to 4-30)	2.0 mg/l		
Fecal Coliform	200 colonies per 100 ml as a geo.	As required by NPDES Permit	
	avg.		
Phosphorus (4-1 to 10-31)	0.8 mg/l	As required by NPDES Permit	
(11-1 to 3-31)	Monitor & Report		
Nitrate + Nitrite as N	10 mg/l	As required by NPDES Permit	

The following average monthly effluent limits are among those not listed in the current NPDES Permit, but are Commission basin-wide and/or SPW specific parameters that must be met as a condition of this docket. Commission staff have requested PADEP include these parameters in their renewed Permit. Monitoring shall begin October 1, 2014 for each parameter (See DECISION Condition II.d.).

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

	OUTFALL 001 (WWTP)	
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids *	Monitor & Report	Quarterly
CBOD ₅ (at 20° C) Influent	Monitor & Report	2/month (concurrent with effluent
		samples being taken)
Total Nitrogen	Monitor & Report	Monthly

^{*} See DECISION Condition II.q.

- **e. Cost**. There are no construction costs associated with this WWTP renewal.
- **Relationship to the Comprehensive Plan**. The 0.1 mgd Bedminster WWTP was included in the Comprehensive Plan upon approval of Docket No. D-88-37 CP on August 3, 1988. The WWTP was expanded to 0.436 mgd and included in the Comprehensive Plan upon approval of Docket No. D-2003-14 CP on September 3, 2003. Effluent limitations were established on a monthly average discharge flow of 0.26 mgd. Issuance of this docket will continue approval of the 0.436 mgd WWTP and amend the average monthly discharge flow to 0.303 mgd in the Comprehensive Plan (See DECISION Condition I.c.).

B. FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing 0.436 mgd WWTP and its discharge. The DRBC has based effluent limitations on a monthly average flow of 0.303 mgd. The PADEP and DRBC previously based effluent limitations on a monthly average flow of 0.26 mgd. Due to an increase in flow within the approved service area the PADEP is expected to base effluent limitations on an average monthly flow of 0.303 mgd in the renewed Permit.

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.

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 not entail additional construction and expansion of facilities/service area (i.e., there are not any new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, DECISION Conditions II.m. and II.s. have been included in this docket.

According to the United States Geological Survey (USGS) Streamstats program the UNT of Deep Run at the docket holder's WWTP discharge has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of less than 0.1 cubic feet per second (cfs) and therefore is classified by the Commission as an intermittent stream.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 11.1 River Miles downstream of the docket holder's WWTP, and is operated by North Penn Water Authority.

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. DECISION

- I. Effective on the approval date for Docket No. D-2003-014 CP-2 below:
- a. The projects described in Docket Nos. D-88-37 CP and D-2003-14 CP are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2003-014 CP-2; and
- b. Docket Nos. D-88-37 CP and D-2003-14 CP are terminated and replaced by Docket No. D-2003-014 CP-2; and
- c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be continued in 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 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 the EFFLUENT TABLES in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results <u>electronically</u> to the DRBC Project Review Section via email <u>aemr@drbc.state.nj.us</u> on the Annual Effluent Monitoring Report Form located at this web address: http://www.state.nj.us/drbc/programs/project/application/index.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. 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. 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.
- o. 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.

- p. 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.
- q. 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.
- r. 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.
- s. 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

DATE APPROVED: September 10, 2014

EXPIRATION DATE: September 30, 2019