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DOCKET NO. D-2009-041 CP-4

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Tobyhanna Army Depot
Wastewater Treatment Plant
Coolbaugh Township, Monroe County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Tobyhanna Army Depot (TYAD or docket holder) on February 6, 2017 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0010987 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on April 17, 2014, effective May 1, 2014.

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 Monroe 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 approval of the docket holder's existing 0.802 million gallons per day (mgd) WWTP and its discharge.
- 2. Location.** The WWTP will continue to discharge treated effluent to Hummler Run at River Mile 183.7 – 83.5 – 26.4 – 1.8 (Delaware River – Lehigh River – Tobyhanna Creek – Hummler Run) via Outfall No. 001, within the drainage area to the Lower Delaware Special Protection Waters (SPW), in the Coolbaugh Township, Monroe County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 11' 5"	75° 25' 42"

3. **Area Served.** The docket holder's WWTP will continue to serve the TYAD located in Monroe 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 0.802 mgd WWTP utilizes a sequencing batch reactor (SBR) treatment process with ultraviolet (UV) disinfection.

b. **Facilities.** The WWTP facilities consist of a fine screen, two sequential batch reactor tanks, two sludge holding tanks, two post equalization tanks, a sludge thickener and press, drum filters, a UV disinfection unit, and an alum feed tank.

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's wastewater treatment facility is not staffed 24 hours per day, and has an alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements. The existing WWTP has a remote alarm system installed that continuously monitors plant operations.

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 is supplied by the docket holder's on-site well distribution system. The docket holder's water withdrawal is described in detail in Docket No. D-1987-057 CP-4, which was approved on September 14, 2016.

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 Condition C.I.d.). The NPDES Permit No. PA0010987 was issued by the PADEP on April 17, 2014 (effective May 1, 2014) and includes final effluent limitations for the project discharge of 0.802 mgd to surface waters classified by the PADEP as supporting high quality water (HQ) and cold water fishes (CWF). The following average monthly effluent limits are among those listed

in the 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

OUTFALL 001 (Discharging to Hummler Run)		
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
Dissolved Oxygen	7.0 mg/l (minimum at all times)	As required by NPDES Permit
CBOD ₅ (at 20° C)	25 mg/l	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31)	2.0 mg/l	As required by NPDES Permit
(11-1 to 4-30)	6.0 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.	
Nitrate-Nitrite as N	10.0 mg/l	As required by NPDES Permit
Phosphorus	1.0 mg/l	As required by NPDES Permit

The requirements in EFFLUENT TABLE A-2 are not listed in the NPDES Permit, but are Commission basin-wide parameters.

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

OUTFALL 001 (Discharging to Hummler Run)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,500 mg/l *	Monthly
CBOD ₅ (at 20° C) Influent	Monitor & Report	Same as CBOD ₅ monitoring required in existing NPDES Permit
CBOD ₅ (at 20° C)	85% Minimum Removal	Same as CBOD ₅ monitoring required in existing NPDES Permit

* See FINDINGS and DECISION Condition C.II.s

e. Relationship to the Comprehensive Plan. The docket holder's WWTP was constructed in the 1950's. The WWTP was modified in 1979, 1989, and 1998. The existing 0.802 mgd WWTP was added to the Comprehensive Plan on May 5, 2010, via Docket No. D-2009-041 CP-1. Modifications to the docket holder's WWTP were approved on March 12, 2014, via Docket No. D-2009-041 CP-2. A modification to revise the effluent requirements was approved on April 15, 2015, via the Docket Modification in Docket No. D-2009-041 CP-3. Issuance of this docket will continue approval of the existing WWTP and its discharge in the Comprehensive Plan (See DECISION Condition C.I.c.).

B. FINDINGS

The purpose of this docket this docket is to renew the approval for the docket holder's existing 0.802 mgd WWTP. No modifications to the docket holder's 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.

At the WWTP discharge location, Hummler Run 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.

Total Dissolved Solids (TDS)

The Commission's basin-wide TDS effluent limit is 1,000 mg/l (Section 3.10.4.D.2. of the Commission's *WQR*). The Commission's basin-wide in-stream TDS criteria is that 1) the receiving stream's resultant TDS concentration be less than 133% of the background (Section 3.10.3.B.1.b. of the Commission's *WQR*), and 2) the receiving stream's resultant TDS concentration be less than 500 mg/l (Section 3.10.3.B.1.c. of the Commission's *WQR*).

The 133% of the background TDS requirement is for the protection of aquatic life. The 500 mg/l TDS requirement is to protect the use of the receiving stream as a drinking water source. The EPA's Safe Drinking Water Act's secondary standard for TDS is 500 mg/l.

The docket holder has identified high levels of TDS in the well water for the on-site wells. Furthermore, the docket holder has an industrial user on-site that pre-treats their effluent and is a source of TDS. That pre-treatment facility flushes reverse osmosis (RO) backwash water into the conveyance system for the WWTP, which contributes to effluent concentration exceedances of TDS.

The WWTP discharges to Hummler Run, which is classified as an intermittent stream. Thereby, the WWTP's discharge becomes the stream flow during low-flow conditions. Due to the in-stream concentrations not being able to meet the Commission standards, the Commission is unable to grant a permanent variance to its basin-wide effluent limitation of 1,000 mg/l.

The docket holder has performed evaluations of potential new groundwater sources on-site, it is expected that by utilizing other nearby groundwater sources, the well water TDS concentrations will decrease. Therefore, once the new wells are constructed and utilized, it is expected that the WWTP will be able to come into compliance with the Commission's 1,000 mg/l TDS effluent limit. The docket holder is currently in the process of receiving approval from PADEP to construct and implement new source water wells. It is expected that once the new wells become operational, the WWTP will be able to comply with the Commission's TDS effluent limit of 1,000 mg/l. Therefore, this docket establishes an interim TDS effluent limit of

1,500 mg/l until new proposed groundwater source wells become active. Thereafter, the Commission's basin-wide TDS effluent limit of 1,000 mg/l will take effect.

Other

The docket holder's WWTP discharges to the drainage area to the Lower Delaware River SPW. The docket holder's WWTP discharge is required to comply with the SPW requirements, as outlined in Article 3.10.3A.2. of DRBC's *Water Quality Regulations (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 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 Condition C.II.1. has been included in this docket.

The nearest surface water intake of record for public water supply is located on the Lehigh River approximately 64 River Miles downstream of the docket holder's WWTP and is operated by the Northampton Borough Municipal 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-2009-041 CP-4 below:

a. The project described in Docket No. D-2009-041 CP-3 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2009-041 CP-4; and

b. Docket No. D-2009-041 CP-3 is terminated and replaced by Docket No. D-2009-041 CP-4; 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.

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.

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: April 30, 2024