

DOCKET NO. D-1981-029 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Hawley Area Authority
Wastewater Treatment Plant Upgrade
Lackawaxen Township, Pike 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 Hawley Area Authority (docket holder) on September 2, 2014 (Application), for review of a wastewater treatment plant (WWTP) upgrade project. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0060330 for the project discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP) on September 14, 2010.

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 (Compact)*. The Wayne County Planning Commission and Pike County Planning Commission have been notified of pending action. A public hearing on this project was held by the DRBC on March 10, 2015.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew and approve a modification to the docket holder's existing 0.20 million gallons per day (mgd) WWTP and its associated discharge. The proposed modifications consist of adding flow equalization, adding a vertical automatic fine screen, upgrading the existing aeration system, upgrading the existing clarifiers, replacing the existing chlorine contact disinfection system with an ultraviolet light (UV) disinfection system, upgrading the existing sludge handling system, and appurtenant improvements. The docket holder's WWTP will remain at an annual average design flow of 0.20 mgd.

2. Location. The docket holder's WWTP is located off of Hudson Street in Lackawaxen Township, Pike County, Pennsylvania. The facility will continue to discharge treated WWTP effluent to the Lackawaxen River at River Mile 277.7 – 16.2 (Delaware River – Lackawaxen River) via Outfall No. 001, within the drainage area to the Upper Delaware Special Protection Waters (SPW).

The project outfall is located in the Lackawaxen River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 28' 33"	75° 09' 54"

3. **Area Served.** The docket holder’s WWTP is located in Lackawaxen Township, Pike County, Pennsylvania, and will continue to serve Hawley Borough and portions of Palmyra Township located in Wayne County, Pennsylvania. The service area is not proposed to be modified.

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 existing 0.20 mgd WWTP utilizes an extended aeration / activated sludge treatment system and chlorine contact disinfection. The proposed upgrades will utilize a similar extended aeration treatment system, and replace the existing chlorine contact disinfection system with UV disinfection.

b. **Facilities.** The existing WWTP facilities consist of a manual bar screen and bypass screen, a flow splitter, two (2) aeration tanks, two (2) final clarifiers, two (2) chlorine contact disinfection units, two (2) reed bed pits, and a sludge holding basin. Aeration is provided by mechanical surface aerators located in the aeration basins. Settled sludge in the clarifiers is pumped via air lifts and either returned to the aeration tanks (return activated sludge or RAS) or wasted to the sludge holding tank (waste activated sludge or WAS). Following disinfection via sodium hypochlorite in the chlorine contact tanks, effluent is aerated via a cascade structure prior to discharge to the Lackawaxen River. The docket holder’s WWTP will remain at an annual average design flow of 0.20 mgd.

The proposed upgrades to the existing facilities consist of:

- Converting the existing reed bed sump to additionally serve as flow equalization to handle wet weather surges;
- Installing a new vertical automatic fine screen for greater solids removal at the existing headworks;
- Modifying the existing aeration basins by replacing the mechanical surface aerators with a new aeration diffuser system, comprised of blowers on variable feed drives (VFDs) and fine bubble diffusers;
- Replacing airlifts and exposed piping in the clarifiers with submersible pumps and submerged piping, in order to reduce inefficiency and eliminate freezing of the piping;

- Replacing the existing chlorine contact disinfection system with UV disinfection, and converting the existing sludge holding tank and sludge sump to an aerobic digester.

The docket holder did not submit site plans for the project upgrades as the project is still in the design phase. The final plans and specifications are required to be submitted to DRBC for approval by the Executive Director prior to the initiation of construction of the WWTP upgrades approved in this docket (see Condition II.i. in the Decision section).

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. (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 existing WWTP has a remote alarm system installed that continuously monitors plant operations. The proposed upgrades include installing a SCADA remote alarm system. (SPW)

The docket holder has not prepared and implemented an emergency management plan (EMP) for the existing WWTP in accordance with Commission requirements. The docket holder is required as part of this docket approval to prepare and implement an EMP prior to the proposed upgrade, or for the existing facilities within two (2) years of approval of this docket, whichever occurs first (See DECISION Condition II.s.). (SPW)

The docket holder's existing wastewater treatment facility does not discharge directly to Outstanding Basin Waters (OBW), and is not required to have a nonvisible discharge plume. (SPW)

The docket holder's existing WWTP has incorporated natural wastewater treatment technologies into the design of the treatment facility in the form of reed beds, which will continue to be used after the WWTP upgrade. Additional natural treatment alternatives were evaluated by the docket holder, however, adequate land was not available and costs were too significant to include additional natural treatment technologies as part of the upgrade in order to meet the effluent limits set by this docket. (SPW)

Direct dischargers to OBW or significant resource waters (SRW) performing "Substantial Alterations or Additions" or expanding their wastewater treatment plant are required to provide "Best Demonstrable Technology" (BDT) as a minimum level of treatment. The facility is not a direct discharger to OBW or SRW.

The existing and proposed project facilities are not located in the 100-year floodplain.

Waste sludge will continue to be applied to the existing reed beds and 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 provided by a spring and groundwater wells owned and operated by Aqua, Pennsylvania. The water withdrawal is described in detail in Docket No. D-1975-078 CP-3, which was approved on May 10, 2012.

d. **NPDES Permit / DRBC Docket.** PADEP issued draft NPDES Permit No. PA0060330 for the project discharge on September 14, 2010, which includes final effluent limits for the project discharge to surface waters classified by the PADEP as high quality, trout stocking fishery (HQ-TSF) and migratory fishery (MF). The following average monthly effluent limits and monitoring requirements listed in EFFLUENT TABLE A-1, based on a flow of 0.20 mgd, are for DRBC parameters listed in the NPDES permit that meet or are more stringent than the effluent requirements of the DRBC, and are in effect upon issuance of this docket and remain in effect after the project upgrade goes into operation.

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

OUTFALL 001 (Lackawaxen River)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	30 mg/l; 50 lbs/day	As required by NPDES permit
CBOD (5-Day at 20° C)	25 mg/l; 42 lbs/day	As required by NPDES permit
Ammonia-Nitrogen 5/01-10/31 11/01-4/30	4.0 mg/l; 6.7 lbs/day 12.0 mg/l; 20.0 lbs/day	As required by NPDES permit
Fecal Coliform 5/01-9/30 10/01-4/30	200 colonies per 100 ml as a geo. avg. 2,000 colonies per 100 ml as a geo. avg.	As required by NPDES permit
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES permit

The following average monthly effluent limits and monitoring requirements are for DRBC parameters not included in the NPDES permit and are in effect until the project upgrade goes into operation.

EFFLUENT TABLE A-2: DRBC parameters not included in NPDES permit, to be in effect prior to the plant upgrades going into operation

Outfall No. 001 (Lackawaxen River)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l	Quarterly
Total Phosphorous	Monitor & Report	Monthly
Nitrate+Nitrite as N	Monitor & Report	Monthly
Total Kjeldahl Nitrogen (TKN)	Monitor & Report	Monthly
CBOD (5-Day at 20° C) Influent	Monitor & Report	Taken Concurrently with CBOD5 sample

* See Condition II.w. in DECISION section

The following average monthly effluent limits and monitoring requirements are in effect after the project upgrade goes into operation.

EFFLUENT TABLE A-3: DRBC Parameters not included in NPDES permit to be in effect after the plant upgrades are operational

Outfall No. 001 (Lackawaxen River)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l	Quarterly
Total Phosphorous (TP)	5.1 lbs/day**	Monthly
Nitrate + Nitrite as N	14.8 lbs/day**	Monthly
Total Kjeldahl Nitrogen (TKN)	10.5 lbs/day**	Monthly
CBOD (5-Day at 20° C) Influent	Monitor & Report	Taken Concurrently with CBOD5 sample

* See Condition II.w. in DECISION section

** See FINDINGS section

- e. **Cost.** The overall cost of this project is estimated to be \$2,750,000.00.
- f. **Relationship to the Comprehensive Plan.** The docket holder's WWTP was added to the Comprehensive Plan via Docket No. D-1981-029 CP-1 on November 20, 1981. This docket (D-1981-029 CP-2) approves an upgrade of the WWTP.

B. FINDINGS

The docket holder applied to renew the DRBC approval and to upgrade the docket holder's existing 0.20 mgd WWTP.

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/Middle 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. (Upper/Middle SPW)

The project discharge is located in the drainage area to the Upper Delaware SPW. Section 3.10.3.A.2.d.8) of the Commission's *WQR* requires that new wastewater treatment facilities and existing wastewater treatment facilities located in SPW that are proposing substantial alterations and additions demonstrate "...that the project will cause no measurable change to Existing Water Quality..." Section 3.10.3.A.2.d.9) of the Commission's *WQR* states that "For wastewater treatment facility projects subject to the no measurable change

requirement, the demonstration of no measurable change to existing water quality shall be satisfied if the applicant demonstrates that the new or incremental increase in the facility's flow or load will cause no measurable change at the relevant water quality control point for the parameters denoted by asterisks in Tables 1 and 2 of this section: ammonia (NH₃-N); dissolved oxygen (DO); fecal coliform (FC); nitrate (NO₃-N) or nitrite + nitrate (NO₂-N+ NO₃-N); total nitrogen (TN) or total Kjeldahl nitrogen (TKN); total phosphorous (TP); total suspended solids (TSS); and biological oxygen demand (BOD) (Table 1 only)."

The project WWTP is an existing wastewater treatment facility that is proposing a substantial alteration and addition and is subject to the no measurable change (NMC) to existing water quality (EWQ) requirement. NMC to EWQ is to be demonstrated at the Lackawaxen River Boundary Control Point (Lackawaxen BCP), which is located on the Lackwaxen River just prior to its confluence with the Delaware River.

Section 3.10.3A.2.a.4) of the Commission's *WQR* defines "Measurable Change" as "an actual or estimated change in a seasonal or non-seasonal mean (for SPW waters upstream of and including River Mile 209.5) or median (for SPW waters downstream of River Mile 209.5) in-stream pollutant concentration that is outside the range of the two-tailed upper and lower 95 percent confidence intervals that define existing water quality."

EWQ is defined as the actual concentration of a water constituent at an in-stream site or sites, as determined through field measurements and laboratory analysis of data collected over a time period determined by the Commission to adequately reflect the natural range of the hydraulic and climatologic factors which affect water quality. EWQ is described in terms of:

- (a) an annual or seasonal mean of the available water quality data,
- (b) two-tailed upper and lower 95 percent confidence limits around the mean, and
- (c) the 10th and 90th percentiles of the data set from which the mean was calculated.

The determination of NMC is based on a comparison of historical water quality observations at the Lackawaxen BCP with the modeled (predicted) EWQ at the Lackawaxen BCP. EWQ for the Lackawaxen BCP (listed in Table B-1 below) was derived from in-stream water quality data collected by Commission staff as part of the Scenic Rivers Monitoring Program (SRMP) and from data collected by PADEP. The data collection spanned the years 1998-2011, and was mainly performed during the summer months May through September.

Table B-1: EWQ for Lackawaxen BCP

	BOD₅ (mg/l)	TSS (mg/l)	TP (mg/l)	Nitrite – Nitrate N (mg/l)	Ammonia – N (mg/l)	TKN (mg/l)	DO ** (mg/l)
EWQ Mean	*	3.60	0.028	0.106	0.021	0.275	9.26
95% C.L.	*	4.50	0.033	0.118	0.026	0.293	9.03

* BOD₅ EWQ not established at Lackawaxen BCP

**DO objective is the lower 95% C.L.

Section 3.10.3.A.2.d.9) of the *WQR* states

“In making the demonstration required in (Section 3.10.3.A.2.d.8) the applicant shall use a DRBC-approved model of the tributary or main stem watershed if available. Where a DRBC-approved model is not available, the applicant shall use other methodologies submitted to and approved in advance by the Commission to estimate cumulative effect at the applicable control point.”

A DRBC-approved model is not available, and therefore DRBC staff used two approaches to evaluate whether a measurable change to EWQ would be predicted as a result of the project upgrade: 1) “hold the load” approach and 2) a mass-balance approach.

In order to demonstrate NMC to EWQ using the hold the load approach, DRBC staff reviewed available WWTP historic effluent data submitted by the docket holder. Flow data and effluent data from the facility for the parameters TSS, Ammonia, and DO was available from 1991 – 1995, which is around the time period that the Upper Delaware was designated as SPW (1992). Historic data from that time period was not available for the parameters TP, Nitrite+Nitrate, and TKN; however, effluent data was available from 2010.

In 2010, the treatment technology and average flow at the WWTP had not changed since the Upper Delaware was designated SPW in 1992, and therefore, DRBC considers 2010 WWTP effluent data representative of effluent data at time of SPW designation, and used this data to estimate the WWTP load for TP, Nitrite+Nitrate, and TKN at the time of SPW designation. The WWTP flow at the time of SPW designation, based on average monthly data from 1991-1995, is 0.15 mgd, and is referred to as the grandfathered flow. Similarly, the WWTP load for each parameter at the time of SPW designation is referred to as the grandfathered load.

Table B-3 below lists grandfathered flow and load for the Hawley Area WWTP, which is calculated from historic WWTP average monthly effluent data from 1991-1995 for flow, TSS, and Ammonia, and average monthly effluent data from 2010 for TP, Nitrite+Nitrate, and TKN, as provided by the docket holder.

Table B-2: Grandfathered Load

Grandfathered Flow = 0.15 mgd	TSS	Ammonia (Summer)	Ammonia (Winter)	TP	Nitrite+Nitrate	TKN
1991-1995 or 2010 Concentration	11.9 mg/l	0.38 mg/l	1.7 mg/l	4.1 mg/l	11.8 mg/l	8.4 mg/l
Grandfathered (GF) Load	14.9 lbs/day	0.47 lbs/day	2.2 lbs/day	5.1 lbs/day	14.8 lbs/day	10.5 lbs/day

From a review of the WWTP effluent data, discussions with the docket holder, and review of similar NPDES permit / DRBC docket treatment requirements for nearby WWTPs in the Lackawaxen River watershed, it appears that the Hawley Area WWTP can “hold the load” (i.e. achieve the grandfathered load as load limitations) for TP, Nitrite+Nitrate as Nitrogen, and TKN. The WWTP is required to meet the load limits for TP, Nitrite+Nitrate as Nitrogen, and

TKN after the project upgrade goes into operation. See EFFLUENT TABLE A-3 in Section A.4.d of this docket.

The following table (Table B-3) indicates the equivalent design effluent concentration for the load limits for TP, Nitrite+Nitrate, and TKN for the Hawley Area WWTP design/permitted flow (0.20 mgd), and is provided for design and informational purposes.

Table B-3: Design Effluent Concentration under Full Design Flow

Design Flow = 0.20 mgd	TP	Nitrite+ Nitrate	TKN
Grandfathered (GF) Load	5.1 lbs/day	14.8 lbs/day	10.5 lbs/day
Design Flow Concentration*	3.1 mg/l	8.9 mg/l	6.3 mg/l

* Effluent concentrations are based on the facility operating at the design flow and loading and are provided for informational purposes only. The load limitations are SPW requirements.

In order to demonstrate NMC to EWQ using the hold the load approach, DRBC staff performed the analysis at the Lackawaxen BCP, using the following equation:

$$Q_{\text{WWTP}} \times \text{Conc}_{\text{WWTP}} + Q_{\text{stream}} \times \text{Conc}_{\text{stream}} = Q_{\text{total}} \times \text{Conc}_{\text{streamresult}}$$

Where:

Q_{WWTP} = Design WWTP flow = 0.20 mgd

$\text{Conc}_{\text{WWTP}}$ = WWTP effluent concentration limit (in mg/l) for each NMC parameter (See EFFLUENT TABLES A-1 & A-3)

Q_{stream} = Lackawaxen River mean in-stream flow at BCP = 439 mgd

$\text{Conc}_{\text{stream}}$ = Lackawaxen River EWQ concentration, in mg/l (See Table B-1 above)

Q_{total} = Lackawaxen mean flow plus WWTP flow = 439 + 0.20 = 439.20 mgd

$\text{Conc}_{\text{streamresult}}$ = In-stream concentration (in mg/l) at Lackawaxen BCP as a result of the proposed project discharging at effluent limits from EFFLUENT TABLES A-1 & A-3

Using this mass balance approach, DRBC staff calculated the in-stream concentration (in mg/l) at Lackawaxen BCP for the NMC parameters as a result of the proposed project discharging at full design flow (0.020 mgd) and 1) the NPDES permit concentration limits for TSS, Ammonia, and DO included in EFFLUENT TABLE A-1 in Section A.4.d., which are also being required by this docket; and 2) the equivalent design flow concentrations associated with the load limits for TP, Nitrite+Nitrate, and TKN included in Table B-3 above.

Table B-4: Resultant In-stream Concentrations Mass Balance Analysis

	TSS (mg/l)	Ammonia (mg/l) (See Note)	DO (mg/l)	TP (mg/l)	Nitrite – Nitrate N (mg/l)	TKN (mg/l)
Effluent Concentration	30.0*	4.0*	5.0*	3.1**	8.9**	6.3**
EWQ Mean	3.60	0.021	9.26	0.028	0.106	0.275
95% C.L.	4.50	0.026	9.03	0.033	0.118	0.293
In-stream	3.61	0.023	9.25***	0.029	0.110	0.278

Note: Given that EWQ was established for the Lackawaxen BCP during the summer months 2008-2011, the Ammonia evaluation was performed using the summer (5/1-10/31) NPDES effluent limit of 4.0 mg/l

* NPDES and Docket limits (See EFFLUENT TABLE A-1).

** Equivalent design concentrations for load limits from Table B-3 above

*** D.O. objective is greater than 9.03 mg/l, which is the lower 95% C.L.

As indicated in Table B-4 above, based on a mass balance approach, the upper 95 % C.L. is not predicted to be exceeded for TSS, Ammonia; TP, Nitrite+Nitrate, and TKN and the lower 95% C.L. is not predicted to be exceeded for DO. Therefore, based on an evaluation using a hold the load approach and a mass balance approach, DRBC staff do not predict a measurable change to EWQ for TSS, Ammonia, DO, TP, Nitrite+Nitrate, and TKN as a result of the project. In order to demonstrate NMC to EWQ, after the WWTP upgrade is completed and goes into operation, the WWTP discharge is limited to the effluent limits for each NMC parameter, as listed in EFFLUENT TABLES A-1 & A-3 in Section A.4.d. of this docket.

Construction Plan Approval

The docket holder has yet to submit plans and specifications for the construction of the project upgrades. This docket includes a condition providing that the Executive Director must approve the final plans and specifications for the proposed construction prior to initiation of construction of the WWTP modifications (See Condition II.X. in the Decision section).

Non-Point Source Pollution Control Plan (NPSPCP)

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. The docket holder indicated in the Application that the only future expansion to the WWTP services area is a PADEP-approved sewer service extension along U.S. Route 6 in Palmyra Township, Wayne County, Pennsylvania. Since this project does entail additional construction (i.e., there are new or increased non-point source loads associated with this approval), the NPSPCP requirement is applicable at this time.

Hawley Borough, Palmyra Township, and Lackawaxen Townships have not adopted stormwater ordinances in accordance with the PADEP's model stormwater ordinance. The docket holder is required to submit a NPSPCP for the construction associated with the WWTP modifications and obtain Executive Director approval prior to the modifications being constructed. Also, any future service area expansion in the WWTPs service area must have a NPSPCP in place prior to accepting wastewater flows from the expanded service area. Accordingly, DECISION Condition II.r. has been included in this docket.

Near the project WWTP discharge location, the Lackawaxen River has an estimated seven-day low flow with a recurrence interval of ten years (Q7-10) of 31.0 mgd (48.1 cfs). The ratio of this low flow to the average design discharge (0.2 mgd) from the project WWTP is 155:1.

The nearest surface water intake of record for public water supply downstream of the project discharge is the Easton City intake, located on the Delaware River approximately 109 miles downstream of the project discharge.

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 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-1981-029 CP-2 below:

a. The project described in Docket No. D-1981-029 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1981-029 CP-2; and

b. Docket No. D-1981-029 CP-1 is terminated and replaced by Docket No. D-1981-029 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 PADEP in its NPDES permit and Part II Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. Commission approval of the project upgrade is contingent upon PADEP's approval of the Part II 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 *FPR*.

d. The docket holder shall comply with the requirements contained in EFFLUENT TABLES A-1 and A-2 contained in Section A.4.d. of this docket. After the WWTP upgrade goes into operation, the docket holder shall comply with the requirements contained in EFFLUENT TABLES A-1 and A-3. 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/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. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

i. The docket shall submit final constructions plans and specifications for the proposed upgrades and have the plans approved by the Executive Director prior to the initiation of construction of the WWTP modifications approved in this docket. The docket holder shall construct the WWTP modifications in accordance with the plans approved by the Executive Director.

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.

l. 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 make wastewater discharge in such a manner as to avoid injury or damage to fish, wildlife, and/or other aquatic life 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. Prior to the proposed modifications being constructed, the docket holder shall submit a NPSPCP for the project construction in accordance with Article 3.10.3A.2.e.1) of the Commission's *WQR* and obtain Executive Director approval. 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.

s. The docket holder shall prepare an emergency management plan (EMP) within two (2) years of docket approval (or upon completion of the WWTP upgrade, whichever occurs first.) The docket holder shall submit the EMP and certify in writing to the Commission that it has complied with this condition by March 11, 2017.

t. 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.

u. 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.

v. 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.

w. 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.

x. 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: March 11, 2015

EXPIRATION DATE: September 30, 2020