## DOCKET NO. D-1991-030 CP-3

## **DELAWARE RIVER BASIN COMMISSION**

## **Discharge to a Tributary of Special Protection Waters**

# Hackettstown Municipal Utilities Authority Water Pollution Control Plant Wastewater Treatment Plant <u>Washington Township, Morris County, New Jersey</u>

## **PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Gannett Fleming, Inc. on behalf of the Hackettstown Municipal Utilities Authority (HMUA or docket holder) on September 8, 2015 (Application), for renewal of the docket holder's existing Water Pollution Control Plant (WPCP) wastewater treatment plant (WWTP) and its discharge, as well as approval to demolish an existing equalization basin. New Jersey Pollutant Discharge Elimination System (NJPDES) Permit No. NJ0021369 for this facility was issued by the New Jersey Department of Environmental Protection (NJDEP) on June 2, 2008, effective August 1, 2008. The NJDEP determined that Treatment Works Approval (TWA) was not required for the demolition of the equalization basin.

The Application was reviewed for inclusion/continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Morris County Planning Board has been notified of pending action. A public hearing on this project was held by the DRBC on November 10, 2015.

### A. DESCRIPTION

**1.** <u>**Purpose**</u>. The purpose of this docket is to renew approval of the docket holder's existing 3.39 million gallons per day (mgd) WWTP and its discharge, as well as to approve the demolition of the existing equalization basin and its related appurtenances. The proposed work does not meet the Commission's definition of substantial alterations or additions.

**2.** <u>Location</u>. The WWTP will continue to discharge treated effluent to the Musconetcong River at River Mile 174.6 – 28.3 (Delaware River – Musconetcong River) via Outfall No. DSN002A, within the drainage area to the Lower Delaware Special Protection Waters (SPW), in Washington Township, Morris County, New Jersey as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
DSN002A	40° 49' 7"	74° 50' 7.5"

**3.** <u>Area Served</u>. The docket holder's WWTP will continue to serve the Town of Hackettstown, as well as parts of Independence and Mansfield Townships, all of which are located in Warren County, New Jersey. The docket holder's WWTP will also continue to serve parts of Mount Olive and Washington Townships located in Morris County, New Jersey. 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 will continue to operate its existing 3.39 mgd WWTP. Demolition of the equalization basin will not change the capacity or treatment level of the WWTP.

**b.** <u>Facilities</u>. The existing WWTP consists of a mechanical bar screen, a pump station, two (2) splitter boxes, two (2) primary clarifiers, a primary digester, a secondary digester, two (2) trickling filters, two (2) intermediate clarifiers, a pre-thickened sludge holding tank, gravity belt thickeners, a thickened sludge holding tank, an equalization basin, two (2) nitrification tanks, two (2) final clarifiers, numerous recirculating pumps, a step cascade, and an ultraviolet (UV) disinfection unit.

The modified WWTP will consist of a comminutor, a pump station, two (2) splitter boxes, two (2) primary clarifiers, a primary digester, a secondary digester, two (2) trickling filters, two (2) intermediate clarifiers, a pre-thickened sludge holding tank, gravity belt thickeners, a thickened sludge holding tank, two (2) nitrification tanks, two (2) final clarifiers, numerous recirculating pumps, a step cascade, 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 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 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 docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements.

The project facilities are located in the flood fringe portion of the 100-year floodplain. The docket holder has flood-proofed the facilities to at least one (1) foot above the 100-year flood elevation.

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's system, which was approved by the Commission on December 7, 2005 via Docket No. D-2004-23 CP-1.

**d.** <u>NJPDES Permit / DRBC Docket</u>. NJPDES Permit No. NJ0021369 was issued by the NJDEP on June 6, 2008 (effective August 1, 2008) and includes final effluent limitations for the project discharge of 3.39 mgd to surface waters classified by the NJDEP as FW2-TM (C2). The following average monthly effluent limits are among those listed in the NJPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

OUTFALL DSN002A (WWTP)			
PARAMETER	LIMIT	MONITORING	
pH (Standard Units)	6.5 to 8.5	As required by NJPDES Permit	
Total Suspended Solids	25 mg/l	As required by NJPDES Permit	
Dissolved Oxygen	6.0 mg/l (Instant Minimum)	As required by NJPDES Permit	
BOD <sub>5</sub> (at 20° C)	20 mg/l, 85% Minimum Removal	As required by NJPDES Permit	
Fecal Coliform	200 colonies per 100 ml as a geo.	As required by NJPDES Permit	
	avg.		
Phosphorus	0.48 mg/l	As required by NJPDES Permit	
Total Dissolved Solids	1,000 mg/l	As required by NJPDES Permit	
Ammonia Nitrogen (5-1 to 10-31)	1.0 mg/l	As required by NJPDES Permit	
(11-1 to 4-30)	2.0 mg/l		
Nitrate as N	Monitor & Report	As required by NJPDES Permit	

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

The requirement in EFFLUENT TABLE A-2 is not listed in the NJPDES Permit, but is a Commission SPW specific parameter that must be monitored as a condition of this docket approval. Commission staff have requested NJDEP include this parameter in their renewed Permit. Monitoring shall begin January 1, 2016 for this parameter (See DECISION Condition II.d.).

**EFFLUENT TABLE A-2**: DRBC Parameter Not Included in NJPDES Permit

OUTFALL DSN002A (WWTP)			
PARAMETER	LIMIT	MONITORING	
Total Nitrogen	Monitor & Report	Monthly	

e. <u>Cost</u>. The overall cost of this project is estimated to be \$1,173,000.

f. <u>Relationship to the Comprehensive Plan</u>. The docket holder's 1.65 mgd WWTP was included in the Comprehensive Plan upon approval of Docket No. D-68-136 CP on October 22, 1968. Its expansion to 3.3 mgd was incorporated in the Comprehensive Plan via Docket No. D-91-30 CP on June 19, 1991. The WWTP's re-rate to 3.39 mgd was incorporated in the Comprehensive Plan via approval of Docket No. D-91-30 CP-2 on July 18, 2007. Issuance of this docket will continue approval of the docket holder's 3.39 mgd WWTP 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 3.39 mgd WWTP and its discharge, as well as approve the demolition of the existing equalization basin and its related appurtenances. The proposed work does not meet the Commission's definition of substantial alterations or additions.

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 entail construction at the facility (i.e., there are new or increased non-point source loads associated with this approval), the NPSPCP requirement is applicable at this time. Accordingly, DECISION Conditions II.q., II.r., and II.w. have been included in this docket.

Docket No. D-91-30 CP-2 established that at the docket holder's WWTP discharge, the Musconetcong River has an estimated seven-day low flow with a recurrence interval of ten years (Q7-10) of 12.3 mgd (19.0 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 3.39 mgd WWTP is 3.7 to 1.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 53.5 River Miles downstream of the docket holder's WWTP, and is operated by the 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 NJPDES 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* and *Flood Plain Regulations* (*FPR*).

#### C. <u>DECISION</u>

I. Effective on the approval date for Docket No. D-1991-030 CP-3 below:

a. The project described in Docket No. D-91-30 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1991-030 CP-3; and

b. Docket No. D-91-30 CP-2 is terminated and replaced by Docket No. D-1991-030 CP-3; 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 NJDEP in its NJPDES 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* and *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 <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: <u>http://www.state.nj.us/drbc/programs/project/application/index.html</u>. 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.

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h. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams.

i. 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.

j. 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.

k. 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 Commission's approval 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.

l. 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.

m. 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.

n. 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).

o. 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.

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p. 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.

q. 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.

r. The docket holder's NPSPCP meets the general requirements of Article 3.10.3.A.2.e.1) of the Commission's *WQR*.

s. 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.

t. 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.

u. 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.

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. 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: December 9, 2015

**EXPIRATION DATE:** December 31, 2020