### DOCKET NO. D-2015-002 CP-1

## **DELAWARE RIVER BASIN COMMISSION**

# Plumsted Municipal Utilities Authority New Egypt Wastewater Treatment Plant <u>Plumsted Township, Ocean 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 Plumsted Municipal Utilities Authority (PMUA or docket holder) on January 30, 2015 (Application), for approval of a new wastewater treatment plant (WWTP) and its associated discharge. The New Jersey Department of Environmental Protection (NJDEP) issued draft New Jersey Pollutant Discharge Elimination System (NJPDES) Permit No. NJ0226271 for the WWTP discharge on October 31, 2014. The docket holder has yet to submit a Treatment Works Approval (TWA) permit application to the NJDEP for the project construction.

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*. The Ocean County Planning Board has been notified of pending action. A public hearing on this project was held by the DRBC on June 9, 2015.

#### A. DESCRIPTION

<u>**Purpose</u>**. The purpose of this docket is to approve the incorporation of the docket holder's new 0.6 million gallons per day (mgd) New Egypt WWTP and its associated discharge into the Comprehensive Plan. The WWTP will consist of a membrane bioreactor (MBR) treatment system along with equalization, screening, ultraviolet light (UV) disinfection, and reaeration.</u>

2. <u>Location</u>. The proposed WWTP will be located off of Monmouth Road just west of the New Egypt Town Center, in Plumsted Township, Ocean County, New Jersey. The WWTP will discharge treated effluent to the non-tidal portion of Crosswicks Creek at River Mile 128.5 - 21.3 (Delaware River - Crosswicks Creek).

The new WWTP outfall will be located in the Crosswicks Creek Watershed as follows:

| OUTFALL NO.  | LATITUDE (N) | LONGITUDE (W) |
|--------------|--------------|---------------|
| Outfall 001A | 40° 05' 03'' | 74° 32' 21''  |

**3.** <u>Area Served</u>. The WWTP will receive domestic and commercial wastewater flows from the New Egypt Town Center residential and commercial area of Plumsted Township, Ocean County, New Jersey. For the purpose of defining the Area Served, sections 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>.

**Design Criteria**. The proposed 0.6 mgd New Egypt WWTP will treat domestic sanitary wastewater through an MBR treatment system with UV disinfection.

**a.** <u>Facilities</u>. The proposed WWTP facilities will include an influent pump station, an equalization tank with screening, an MBR treatment unit, a UV disinfection unit, and a post-aeration unit.

The docket holder did not submit site plans for the project construction 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 (see FINDINGS section and Condition II.i. in the DECISION section).

The project facilities are not proposed to be located in the 100-year floodplain.

Wasted sludge will 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 provided by groundwater wells owned and operated by New Jersey American Water Company, whose groundwater withdrawal was most recently approved in DRBC Docket No. D-2009-050 CP-1 on May 5, 2010 and by the NJDEP via Water Allocation Permit No. 5154 on August 24, 2012.

**d.** <u>NJPDES Permit / DRBC Docket</u>. Draft NJPDES Permit No. NJ0226271 was issued by NJDEP on October 31, 2014 and includes interim effluent limitations (based on 0.3 mgd) and final effluent limitations (based on 0.6 mgd) for the project discharge. The following average monthly interim and final effluent limits are among those listed in the NJPDES permit and meet or are more stringent than the effluent requirements of the DRBC.

| Outfall 001A (Crosswicks Creek) |  |                              |
|---------------------------------|--|------------------------------|
| PARAMETER                       | LIMIT  | MONITORING                   |
| pH (Standard Units)             | 4.5 (instantaneous minimum)<br>7.5 (instantaneous maximum) | As required by NJPDES Permit |
| Total Suspended Solids          | 6.01 mg/l (85% removal)                                    | As required by NJPDES Permit |
| CBOD5 (5-Day at 20° C)          | 1.0 mg/l (85% removal)                                     | As required by NJPDES Permit |
| Ammonia Nitrogen                | 1.0 mg/l   | As required by NJPDES Permit |
| E. Coli                         | 126 colonies /100 ml as a geo. avg.                        | As required by NJPDES Permit |
| Total Dissolved Solids*         | 1,000 mg/l   | As required by NJPDES Permit |

**EFFLUENT TABLE A-1**: DRBC Parameters Included in the NJPDES permit

\* See Condition II.t. in the DECISION Section

e. <u>Cost</u>. The overall cost of this project is estimated to be \$10,400,000.

**f.** <u>**Relationship to the Comprehensive Plan**</u>. The New Egypt WWTP will be added to the Comprehensive Plan via the approval of this docket.

## B. FINDINGS

This docket approves the incorporation of the docket holder's new New Egypt WWTP and its associated discharge to the non-tidal portion of Crosswicks Creek into the Comprehensive Plan. The WWTP will utilize an MBR treatment system and will have a hydraulic design capacity of up to 0.6 mgd.

Pursuant to Section IV.C.3. of the December 2009 Administrative Agreement (AA) between the DRBC and NJDEP, once a project has been incorporated into the Comprehensive Plan by the Commission, the review and decision making regarding project renewals and/or modifications shall be managed by the NDJEP as provided in the AA. Under the AA, this project will be classified as Category D project after the approval of this docket by the Commission.

#### **Construction Plan Approval**

The docket holder has yet to complete final plans and specifications for the construction of the WWTP. This docket includes a condition providing that the Executive Director must approve the final plans and specifications for the WWTP construction prior to initiation of the construction (See Condition II.i. in the DECISION section).

# Project Review Fee

The docket holder's Application did not include the DRBC project review fee, calculated based on the total estimated project cost, nor did the Application include DRBC's "Applicant Statement – Project Review Fee" form with the total estimated project cost. The docket holder is required to submit the fee form and \$4,000.00 of the project review fee by

June 18, 2015, and the remainder of the project review fee (total project review fee minus \$4,000.00) by December 31, 2015 (See Condition II.v. in the DECISION section).

At the docket holder's WWTP discharge, the Crosswicks Creek has an estimated sevenday low flow with a recurrence interval of ten years (Q7-10) of 3.9 mgd (6.0 cfs). The ratio of this low flow to the hydraulic design flow of the WWTP (0.6 mgd) is approximately 7 to 1.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 27 River Miles downstream of the docket holder's proposed WWTP, and is operated by the Lower Bucks County Joint 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 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 *Water Quality Regulations (WQR*) of the DRBC.

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

I. Effective on the approval date for Docket No. D-2015-002 CP-1 below, the project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be incorporated into the Comprehensive Plan. Pursuant to Section IV.C.3. of the December 2009 Administrative Agreement (AA) between the DRBC and NJDEP, once its incorporation into the Comprehensive Plan by the Commission, the review and decision making regarding project renewals and/or modifications shall be managed by the NDJEP as provided in the AA.

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 and TWA permits 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 Flood Plain Regulations (*FPR*).

d. The docket holder shall comply with the requirements contained in the EFFLUENT TABLE 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.

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

i. The docket shall submit final constructions plans and specifications for the project construction and have the plans approved by the Executive Director prior to the initiation of construction of the WWTP. The docket holder shall construct the WWTP 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

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definition of "project cost" set forth in the DRBC's project review fee schedule in effect at the time application was made.

1. This docket approval shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

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 or wildlife 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. 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.

s. 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.

t. 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.

u. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing

such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

v. The docket holder shall submit a project review fee form that indicates the total estimated project cost, and \$4,000.00 of the project review fee by June 18, 2015. The docket holder is required to submit the remainder of the project review fee (total project review fee minus \$4,000.00) by December 31, 2015.

# BY THE COMMISSION

DATE APPROVED: June 10, 2015

EXPIRATION DATE: June 10, 2020