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DOCKET NO. D-2004-022 CP-3

DELAWARE RIVER BASIN COMMISSION

**West Bradford Township
DuPont Property Wastewater Treatment Plant
West Bradford Township, Chester County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by AECOM on behalf of West Bradford Township (WBT or docket holder) on December 1, 2017 (Application), for renewal of the docket holder's existing DuPont Property wastewater treatment plant (WWTP) and its discharge. Water Quality Management (WQM) Permit No. 1504404 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on February 1, 2017.

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 Chester County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on August 15, 2018.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.1465 million gallons per day (mgd) DuPont Property WWTP and its discharge to land via spray irrigation.
- Location.** The WWTP will continue to discharge treated effluent to land via spray irrigation fields located in the West Branch Brandywine Creek Watershed, in West Bradford Township, Chester County, Pennsylvania as follows:

| SPRAY FIELD NO. | LATITUDE (N) | LONGITUDE (W) |
|------------------------|---------------------|----------------------|
| Spray Area A | 39° 58' 03" | 75° 45' 15" |
| Spray Area B | 39° 57' 47" | 75° 45' 29" |

3. **Area Served.** The docket holder's WWTP will continue to serve the DuPont Estates/Stock Grange Farm residential development in West Bradford Township, Chester 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 0.1465 mgd WWTP utilizes an aerated lagoon treatment process with chlorine disinfection. The WWTP discharges via spray irrigation to two (2) adjacent spray fields covering a 25.82-acre area. No WWTP effluent will be discharged to surface waters, as the existing facilities feature a 14.7 million gallon storage pond that holds effluent for up to 100 days during prolonged cold or wet weather periods.

b. **Facilities.** Sewage influent is conveyed to the WWTP by a combination of gravity sewers, individual grinder pumps, and a pumping station from the DuPont Estates/Stock Grange Farm development site. At the WWTP, an influent lift station with a wet-well and duplex submersible pumps conveys flow to a comminutor that includes a bypass channel and bar-screen chamber. Following the removal of large solids, the wastewater flows to a two-cell treatment lagoon, operating in series and separated by a floating baffle. The treatment lagoon is lined with low density polyethylene and is equipped with floating aerators to mix and aerate the wastewater. Effluent is stored in the 14.7 million gallon storage pond of the same lined, earthen construction and use of surface aerators.

There are two (2) spray areas designated as Spray Fields A and B. Each spray field is divided into four (4) zones which can be independently controlled and operated. Of the 25.82 acres of spray fields, 24.02 acres is planted with hay crop and 1.8 acres is wooded. Approximately 190 sprinklers are used to distribute the effluent to the spray irrigation areas.

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

The existing WWTP does not generate sludge.

c. **Water withdrawals.** The potable water supply in the project service area is provided by surface water intakes owned and operated by Pennsylvania America Water Company. The surface water withdrawal was most recently approved via Docket No. D-1996-016 CP-3 on December 13, 2017.

d. **Effluent Requirements.** EFFLUENT TABLE A-1 below contains effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.II.c.). WQM Permit No. 1504404 was issued by the PADEP on February 1, 2017 and includes final effluent limitations for the project discharge of 0.1465 mgd to land via spray irrigation. The following average monthly effluent limits are among those listed in the WQM Permit and meet or are more stringent than the effluent requirements of the DRBC.

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

| DuPont Property WWTP Treated Effluent Discharging to Spray Irrigation Fields | | |
|---|--|---------------------------|
| PARAMETER | LIMIT | MONITORING |
| Flow | Monitor & Report | As required by WQM Permit |
| pH (Standard Units) | 6 to 10 at all times | As required by WQM Permit |
| Total Suspended Solids | 30 mg/l | As required by WQM Permit |
| CBOD ₅ (at 20° C) | 25 mg/l | As required by WQM Permit |
| Total Nitrogen | Monitor & Report | As required by WQM Permit |
| Fecal Coliform | 200 colonies per 100 ml as a geo. avg. | As required by WQM Permit |

e. **Relationship to the Comprehensive Plan.** The project was previously included in the Comprehensive Plan by DRBC Docket No. D-2004-022 CP-1 on March 16, 2005 and then continued via Docket No. D-2004-022 CP-2 which was approved on December 4, 2013. Issuance of this docket will continue the approval of the 0.1465 mgd DuPont Property WWTP in the Comprehensive Plan (See DECISION Condition C.I.c.).

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder's existing 0.1465 mgd DuPont Property WWTP and its related discharge to land via spray irrigation fields. No modifications to the WWTP are proposed.

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 WQM 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 *Water Quality Regulations (WQR)*.

C. DECISION

I. Effective on the approval date for Docket No. D-2004-022 CP-3 below:

a. The project described in Docket No. D-2004-022 CP-2 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2004-022 CP-3; and

b. Docket No. D-2004-022 CP-2 is terminated and replaced by Docket No. D-2004-022 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. The facility and operational records shall be available at all times for inspection by the DRBC.

b. The facility shall be operated at all times to comply with the requirements of the Commission’s *WQR* and Flood Plain Regulations (*FPR*).

c. 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.

d. 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*.

e. 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.

f. 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.

g. 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.

h. 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.

i. 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).

j. 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.

k. 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.

l. 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).

m. 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).

n. 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).

o. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

p. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the *Delaware River Basin Compact*, cases and controversies arising under the *Compact* are reviewable in the United States district courts.

q. The docket holder 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

APPROVAL DATE:

EXPIRATION DATE: February 28, 2022

DRAFT