

**DOCKET NO. D-2013-017 CP-1**

**DELAWARE RIVER BASIN COMMISSION**

**Lehigh County Authority  
Arcadia West Industrial Park Wastewater Treatment Plant  
Weisenberg Township, Lehigh County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Lehigh County Authority (LCA or docket holder) on October 18, 2013 (Application), for approval of the docket holder's existing Arcadia West Industrial Park wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0064149 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on July 30, 2013, effective August 1, 2013.

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 Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on June 10, 2014.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to approve the docket holder's existing 0.16 million gallons per day (mgd) WWTP and its discharge. The PADEP and DRBC have based effluent limits on an annual average discharge of 0.04 mgd.

**2. Location.** The WWTP will continue to discharge treated effluent to an unnamed tributary (UNT) of Mill Creek above Maiden Creek Reservoir at River Mile 92.47 – 84.9 – 10.47 – 11.37 – 0.83 (Delaware River – Schuylkill River – Maiden Creek – Mill Creek – UNT) via Outfall No. 001, in Weisenberg Township, Lehigh County, Pennsylvania as follows:

<b>OUTFALL NO.</b>	<b>LATITUDE (N)</b>	<b>LONGITUDE (W)</b>
001	40° 34' 51"	75° 42' 53"

**3. Area Served.** The docket holder's WWTP will continue to serve the Arcadia West Sewer System located in Weisenberg Township, Lehigh 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 will continue to operate its existing 0.16 mgd WWTP. The PADEP and DRBC have based effluent limits on an annual average discharge of 0.04 mgd.

b. **Facilities.** The WWTP consists of an influent pump station with sewage grinder, two (2) sequencing batch reactors (SBRs), an equalization tank, two (2) chemical feed tanks, a disk filter, an aerobic digester, and an ultraviolet (UV) disinfection unit.

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 distribution system.

d. **NPDES Permit / DRBC Docket.** NPDES Permit No. PA0064149 was issued by the PADEP on July 30, 2013 (effective August 1, 2013) and includes final effluent limitations for the project discharge of 0.04 mgd to surface waters classified by the PADEP as a cold water fishery (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**

<b>OUTFALL 001 (WWTP)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	10 mg/l 1,095 lbs (Annually)	As required by NPDES Permit
CBOD <sub>5</sub> (at 20° C)	10 mg/l (85% Minimum Removal)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	2.7 mg/l 8.2 mg/l	As required by NPDES Permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml as a geo. avg. 2000 colonies per 100 ml as a geo. avg.	As required by NPDES Permit

The requirement in EFFLUENT TABLE A-2 is not listed in the NPDES Permit, but is a Commission basin-wide parameter that must be met as a condition of this docket approval. Commission staff have requested PADEP include this parameter in their next Permit for this facility. Monitoring shall begin July 1, 2014 for said parameter (See DECISION Condition II.d.).

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

<b>OUTFALL 001 (WWTP)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
Total Dissolved Solids*	1,000 mg/l	Quarterly

\* See DECISION Condition II.p.

*The PADEP has required monitoring for Phosphorous, Total Kjeldahl Nitrogen, Nitrate + Nitrite as N, and Total Nitrogen. The DRBC does not require monitoring for any of these parameters outside of Special Protection Waters (SPW).*

- e. **Cost.** There are no construction costs associated with this existing WWTP.
- f. **Relationship to the Comprehensive Plan.** Issuance of this docket shall include the 0.16 mgd Arcadia West Industrial Park WWTP in the Comprehensive Plan (See DECISION Condition I.).

## **B. FINDINGS**

The purpose of this docket is to approve the docket holder's existing 0.16 mgd WWTP and its discharge. The PADEP and DRBC have based effluent limits on an annual average discharge of 0.04 mgd.

At the docket holder's WWTP discharge, the UNT of Mill Creek is defined by the Commission as an intermittent stream with an estimated seven-day low flow with a recurrence interval of ten years (Q<sub>7-10</sub>) of less than 0.1 cfs.

The nearest surface water intake of record for public water supply is located approximately 22 River Miles downstream of the docket holder's WWTP on Maiden Creek and is operated by the Reading Area Water Authority (RAWA).

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 *Water Quality Regulations (WQR)*.

### C. DECISION

I. Effective on the approval date for Docket No. D-2013-017 CP-1 below, 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 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*.

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 directly to the DRBC Project Review Section. 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. 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.

l. 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.

m. 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.

n. 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.

o. 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.

p. 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.

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**

**DATE APPROVED:            June 11, 2014**

**EXPIRATION DATE:        July 31, 2018**