DOCKET NO. D-2010-009 CP-2

DELAWARE RIVER BASIN COMMISSION

Reading Area Water Authority Maiden Creek Water Filtration Plant <u>Ontelaunee Township, Berks County, Pennsylvania</u>

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Cardno BCM on behalf of the Reading Area Water Authority (RAWA or docket holder) on April 28, 2015 (Application), for renewal of the docket holder's existing Maiden Creek water filtration plant (WFP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0051781 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on September 30, 2009, effective October 1, 2009. Renewal of the Permit is expected shortly.

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 Berks County Planning Commission 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 35 million gallons per day (mgd) WFP and its discharge of up to 4.3 mgd of filter backwash, pump seal water, chlorine analyses, and diesel generator cooling water. The PADEP and DRBC have based effluent limits on a discharge flow of 3.26 mgd.

2. <u>Location</u>. The WFP will continue to discharge treated effluent to Maiden Creek at River Mile 92.47 – 85.63 – 0.24 (Delaware River – Schuylkill River – Maiden Creek) via Outfalls Nos. 001 and 002, in Ontelaunee Township, Berks County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 25' 33"	75° 56' 38''
002	40° 25' 30''	75° 56' 45"

3. <u>Area Served</u>. The docket holder's WFP will continue to supply drinking water to the City of Reading; Bern, Grill, Greenfield, Kenhorst, Lower Alsace, and Ontelaunee Townships; and portions of Muhlenberg and Cumru Townships; all in Berks County, Pennsylvania. Additionally, the docket holder sells water wholesale to the Boroughs of Wyomissing, West Reading, Shillington and Mount Penn; and Muhlenberg Township, all in Berks County, Pennsylvania. The docket holder also has interconnections with Bern Township Municipal Authority (0.9 mgd), Ontelaunee Township Municipal Authority (1.6 mgd), and Reading Regional Airport Authority (0.2 mgd). The WFP processes up to 35 mgd from Lake Ontelaunee Reservoir (up to 35 mgd) and Maiden Creek (up to 5.0 mgd on an emergency basis), with a resulting filter backwash discharge of up to 4.3 mgd. 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 35 mgd WFP and discharge up to 4.3 mgd of filter backwash, pump seal water, chlorine analyses, and diesel generator cooling water to Maiden Creek. The PADEP and DRBC have based effluent limits on a discharge flow of 3.26 mgd.

b. <u>Facilities</u>. The WFP consists of four (4) sludge thickeners, two (2) centrifuges, one (1) backwash tank, two clarifiers, and a storage lagoon. Treated water will continue to be disinfected via chlorination and fluoridated prior to conveyance to the distribution system.

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

WFP sludge will continue to be dried by a centrifuge and hauled off-site by a licensed hauler for disposal at a state-approved facility.

c. <u>Water Withdrawals</u>. The water withdrawals for this facility from Lake Ontelaunee and Maiden Creek were most recently approved by the Commission on May 11, 2011 via Docket No D-2000-059 CP-2.

d. <u>NPDES Permit / DRBC Docket</u>. NPDES Permit No. PA0051781 was issued by the PADEP on September 30, 2009 (effective October 1, 2009) and includes final effluent limitations for the project discharge of 3.26 mgd to surface waters classified by the PADEP as warm water fisheries (WWF). Renewal of the NPDES Permit is expected shortly. 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.

OUTFALLS 001 & 002 (WFP)				
PARAMETER	LIMIT	MONITORING		
pH (Standard Units)	6 to 9	As required by NPDES Permit		
Total Suspended Solids	30 mg/l	As required by NPDES Permit		

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

The requirement in EFFLUENT TABLE A-2 was not listed in the NPDES Permit, but is a Commission basin-wide parameter that was included in Docket No. D-2010-009 CP-1 and must continue to be met as a condition of this docket approval. Commission staff have requested PADEP include this parameter in their renewed Permit (See DECISION Condition II.d.).

OUTFALLS 001 & 002 (WFP)				
PARAMETER	LIMIT	MONITORING		
Total Dissolved Solids*	1,000 mg/l	Quarterly		
Total Dissolved Solids*	1,000 mg/l	Quarterly		

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

* See DECISION Condition II.n.

e. <u>Cost</u>. There are no construction costs associated with this WFP renewal.

f. <u>Relationship to the Comprehensive Plan</u>. The RAWA water supply facilities on Antietam Creek and Lake Ontelaunee Reservoir were included in the Comprehensive Plan on July 25, 1962 via Resolution R-62-14, Addendum No. 1, Section VII, Pre-Existing Projects. In 1974 the connection to Antietam Creek was removed. The Commission approved Docket No. D-2010-009 CP-1 on September 15, 2010, which included the WFP discharge to Maiden Creek in the Comprehensive Plan. Issuance of this docket will continue approval of the WFP in the Comprehensive Plan (See DECISION Condition I.c.).

B. <u>FINDINGS</u>

The purpose of this docket is to renew approval of the docket holder's existing 35 mgd WFP and its discharge of up to 4.3 mgd of filter backwash, pump seal water, chlorine analyses, and diesel generator cooling water. The PADEP and DRBC have based effluent limits on a discharge flow of 3.26 mgd.

According to the United States Geological Survey (USGS) Streamstats program Maiden Creek at the docket holder's WFP discharge has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 26.1 mgd (40.4 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 4.3 mgd WFP is 6 to 1.

The nearest surface water intake of record for public water supply is located on the Schuylkill River approximately 29.5 River Miles downstream of the docket holder's WFP, and is operated by the Pottstown Borough 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 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) and Flood Plain Regulations (FPR)*.

C. <u>DECISION</u>

I. Effective on the approval date for Docket No. D-2010-009 CP-2 below:

a. The project described in Docket No. D-2010-009 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2010-009 CP-2; and

b. Docket No. D-2010-009 CP-1 is terminated and replaced by Docket No. D-2010-009 CP-2; 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 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* 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. 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. 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.

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. 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.

l. 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.

m. 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.

n. 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.

BY THE COMMISSION

DATE APPROVED:	December 9, 2015
EXPIRATION DATE:	November 30, 2020