

DOCKET NO. D-1987-057 CP-3

DELAWARE RIVER BASIN COMMISSION

Special Protection Waters

**Tobyhanna Army Depot
Groundwater Withdrawal
Coolbaugh Township, Monroe County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by Tobyhanna Army Depot (TYAD or docket holder) to the Delaware River Basin Commission (DRBC or Commission) on May 7, 2013 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The project wells were reviewed under the Pennsylvania Safe Drinking Water Act for a public water supply construction permit and approved by the Pennsylvania Department of Environmental Protection (PADEP) on November 9, 1988, (Permit No. 4587504), subject to approval by the DRBC.

The Application was reviewed for continued inclusion in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Monroe County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on March 11, 2014.

A. DESCRIPTION

1. Purpose. The purpose of this project is to renew the approval of an existing groundwater withdrawal of up to 20.66 million gallons per month (mgm) to the TYAD distribution system from existing Wells Nos. 1, 2, 3, 4, 5 and 6, without an increase in the existing allocation of groundwater. Water is used for domestic water supply, industrial processes and cooling and commercial purposes at TYAD.

2. Location. The project wells are completed in the Poplar Gap Member of the Catskill Formation in the Tobyhanna Creek Watershed in Coolbaugh Township, Monroe County, Pennsylvania within the drainage area to the Lower Delaware, which is classified as Special Protection Waters. Tobyhanna Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Cold Water Fishes (CWF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The project wells supply water to the docket holder’s distribution system which serves the TYAD installation and adjacent off post housing areas as delineated on the map entitled “Tobyhanna Army Depot Water Service Area Map” submitted with the application. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** The TYAD water supply system serves water to 4,516 persons through 120 domestic service connections, 22 industrial service connections and 5 commercial service connections and records an existing average and maximum water demand of 0.150 million gallons per day (mgd) and 0.576 mgd, respectively. Through continued water conservation and leak detection activities, the docket holder projects the 10-year average and maximum water demand to decrease to 0.132 mgd and 0.500 mgd, respectively. The allocation of 20.66 mgm should be sufficient to meet the future demands of the TYAD.

Presently, water usage at TYAD is divided as follows: 57 percent for domestic use, 40 percent for industrial processes, 2 percent for industrial cooling and approximately 1 percent for commercial use.

b. **Facilities.** The existing project wells have the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
1	450’	48’/8”	73 gpm	1976
2	380’	50’/8”	103 gpm	1942
3	185’	20’/8”	127 gpm	1930s
4	450’	65’/8”	87 gpm	1954
5	420’	80’/8”	132 gpm	1942
6	215’	73’/8”	141 gpm	1986

All wells are metered.

Approximately 65 percent of the TYAD service connections are metered. Over the past several years, additional meters have been installed in areas with high water consumption as part of building upgrade/renovation projects. Portable water meters are used at water using equipment to help account for water usage. Also, TYAD utilizes real time monitoring of system pressure and daily data from 56 acoustic leak sensors which are read monthly to detect any system leaks.

Well water is treated by pH adjustment (soda ash and sodium hydroxide) chlorination (liquid and gas) and corrosion control (polyphosphate) prior to entering the distribution system. Also, water from Well No. 3 is treated for low-level TCE contamination by an air stripping column prior to entering the distribution system.

TYAD is not interconnected with any other water distribution systems.

Existing Well No. 6 is located within the boundary of the FEMA mapped 100-year floodplain. Base flood elevations have not been determined in this area. The wellhead is located on a concrete pad one foot above the pump house floor.

c. **Other.** Wastewater is conveyed to the TYAD sewage treatment facility most recently approved by DRBC Docket No. D-2009-041 CP-1 on May 5, 2010. A renewal application has been submitted. The PADEP issued its most recent NPDES Permit No. PA0010987 on January 30, 2008 for this treatment facility. Renewal of the NPDES Permit is expected shortly. The treatment facility has adequate capacity to continue to receive wastewater from the project.

d. **Cost.** There are no project costs associated with this docket renewal.

e. **Relationship to the Comprehensive Plan.** The project wells were previously included in the Comprehensive Plan by the Commission in Docket No. D-87-57 CP approved on January 25, 1989.

B. FINDINGS

Special Protection Waters

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations* (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan 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 Special Protection Waters. The wells providing water supply to TYAD are located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities/service areas (i.e., there aren't any new or

increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition C.II.t has been included in the Decision section of this docket.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

This project consists of an existing withdrawal of groundwater from Well Nos. 1 through 6. The docket holder has requested allocations for the wells based on existing water use. These rates are provided in Decision Condition II.d. in the Decision Section of this docket. As the existing water withdrawals have already been realized by the local hydrologic system, there should be no significant impacts from continued withdrawals from the existing system wells.

Based on consumptive use estimates of 10 percent for domestic and commercial uses, 30 percent for industrial process use and 5 percent for industrial cooling use, water use at the facility results in a consumptive use of approximately 18 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

In its Application, TYAD requested to retain the previously approved allocation of 20 mg/30 days (20.66 mgm). Although the estimated ten-year projected maximum water use as stated in the Application is only 15.5 mgm (0.500 mgd), the additional allocation capacity would be available for TYAD to take on additional future workload in the event of base realignment and closure of other United States Army installations.

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.

C. DECISION

I. Effective on the approval date for Docket No. D-1987-057 CP-3 below:

a. The projects described in Docket Nos. D-87-57 CP and D-87-57 CP RENEWAL are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1987-057 CP-3; and

b. Docket Nos. D-87-57 CP and D-87-57 CP RENEWAL are terminated and replaced by Docket No. D-1987-057 CP-3.

c. The project and the appurtenant facilities described in the Section A “Physical features” shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” 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 water supply permits, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. The docket holder shall register with and report to the PADEP all surface and ground water sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

b. The wells and operational records shall be available at all times for inspection by the DRBC.

c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the combined withdrawal from all well sources shall not exceed 20.66 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
Well 1	73 gpm	3.10 mgm
Well 2	103 gpm	3.10 mgm
Well 3	127 gpm	3.10 mgm
Well 4	87 gpm	3.10 mgm
Well 5	132 gpm	4.13 mgm
Well 6	141 gpm	4.13 mgm

e. The wells shall be equipped with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and ½ inch ID drop pipes as repairs or modifications are made at each existing well.

f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.

g. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

h. The docket holder shall implement to the satisfaction of the PADEP, the continuous program to encourage water conservation in all types of use within the facilities

served by this docket approval. The docket holder will report to the PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

i. No water 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 docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

k. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

l. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

m. 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.

n. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

o. 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.

p. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

q. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any

domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

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. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

t. 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 Non-Point Source Pollution Control Plan (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.

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.

BY THE COMMISSION

APPROVAL DATE: March 12, 2014

EXPIRATION DATE: March 12, 2024