

**DOCKET NO. D-2003-023-3**

**DELAWARE RIVER BASIN COMMISSION**

**East Penn Manufacturing Company  
Groundwater Withdrawal  
Richmond Township, Berks County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by AECOM Technical Services, Inc. on behalf of East Penn Manufacturing Company (EPMC) to the Delaware River Basin Commission (DRBC or Commission) on October 27, 2014 (Application), for a renewal and approval of an existing allocation of groundwater and review of a groundwater withdrawal project. This docket was previously approved by the Commission on May 6, 2009.

The Application was reviewed for continuation and approval under Section 3.8 of the Delaware River Basin Compact. The Berks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on June 9, 2015.

**A. DESCRIPTION**

- 1. Purpose.** The purpose of this docket is to approve the renewal of an existing supply of groundwater to the docket holder's Lyon Station industrial facility for industrial processes, cooling, and potable use; from existing Wells Nos. 2, 4, 5, 6, 7, 8, 9, 10 and new Well No. 11 and to approve an increase in withdrawal allocation from 20.67 million gallons per month (mgm) to 31.0 mgm.
- 2. Location.** The project wells are located in the Moselem Creek Watershed, in Richmond Township, Berks County, Pennsylvania. The project wells are completed in the Leithsville Dolomite Formation, except for Well No. 8 which is completed in Granitic Gneiss. The Moselem Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Cold Water Fishes (CWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

- 3. Service area.** The project withdrawals will be used to supply water to the docket holder's manufacturing facility system only.

4. **Physical features.**

a. **Design criteria.** The project wells supply water for industrial processes (approximately 65%), industrial cooling (approximately 15%) and potable use (approximately 20%) in the manufacturing of lead-acid batteries.

The average and maximum demand is 0.439 million gallons per day (mgd) and 0.614 mgd, respectively. The docket holder projects an average and maximum water demand of 0.713 mgd and 1.0 mgd, respectively, by the year 2025. The allocation of 31.0 million gallons per month (mgm) should be sufficient to meet the future demands of the EPMC system.

b. **Facilities.** The docket holder's existing well has the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
2	348	231' / 6"	40	1962
4	541	198' / 12"	45	1969
5	521	191' / 10"	230	1974
6	745	238' / 10"	205	1977
7	235	Unknown / 6"	25	Unknown
8	304	90' / 8"	40	1991
9	495	197' / 10"	230	2003
10	693	220' / 8"	300	2008
11	742	201' / 8"	230	2013

The wells are metered.

Prior to entering the distribution system, Well No. 6 is treated with carbon adsorption to treat volatile organic compounds (VOCs). All water that is intended for potable use is treated with ultraviolet light disinfection.

The project facilities are above the 100-year flood elevation.

The EPMC Manufacturing facility is presently not interconnected with any other distribution system.

c. **Other.** Wastewater from the site is conveyed to the Lyons Borough Municipal Authority (LBMA) sewage treatment facility most recently approved by DRBC Docket No. D-1994-080 CP-3 on March 6, 2013. The PADEP issued its most recent NPDES Permit No. PA0085171 on August 1, 2010 for this treatment facility. The LBMA has submitted an application for their NPDES permit on September 28, 2012 and are awaiting approval by the PADEP. The treatment facility has adequate capacity to receive wastewater from the project.

## **B. FINDINGS**

### **Long-term Pumping Test of Well No. 11**

On November 6 through November 8, 2013, a continuous-rate pumping test was conducted to assess withdrawal capabilities of Well No. 11 and to assess the underlying aquifer characteristics and potential impacts to the local hydrologic system. During the 48-hour pumping test, approximately 650 minutes into the test, the generator shut off due to a clogged fuel filter. The filter was replaced and the test was started back up approximately 30 minutes later. As a result, the test was extended an additional 48 hours, and the total duration of the pumping test was 60 hours and 1 minute. The average pumping rate of the test on Well No. 11 was approximately 250 gallons per minute (gpm). Discharge from the pumping well was directed 50 feet away from the pumping well, and was conveyed into a nearby storm water wet pond to the west.

Groundwater response monitoring was conducted in the pumping well (Well No.11) and the Farmhouse observation well. The pumping well and Farmhouse well were monitored with electronic dataloggers and manual measurements. The Farmhouse well was located approximately 1,017 feet northeast of Well No. 11.

Prior to the start of the pumping test, Well No. 11 had a static water level of 61.42 feet below top of casing. Maximum drawdown observed at the pumping well, after approximately 60 hours of pumping was 95.74 feet (water level of 157.16 feet). No drawdown from the pumping at Well No. 11 was observed in farm house observation well.

The observed drawdown in Well No. 11 was used to calculate aquifer parameters to characterize the underlying aquifer. The estimated average transmissivity value for the Well No. 11 test data was 936.5 ft<sup>2</sup>/day at the test rate of 250 gpm.

The DRBC has reviewed the hydrogeological report for the Well No. 11 pumping test. No adverse impacts are expected to occur to the local hydrologic system due to pumping from Well No. 11.

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

The docket holder estimates that the project withdrawals, used for the purposes of industrial processes, cooling, and potable use, result in a consumptive uses of 55%, 45% and 10%, respectively, 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*.

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-2003-023-3 below, Docket No. D-2003-023-2 is terminated and replaced by Docket No. D-2003-023-3.

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, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The well 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 31.0 mgm. No well shall not be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

<b>WELL NO.</b>	<b>INSTANTANEOUS RATE (GPM)</b>	<b>MONTHLY ALLOCATION (MILLION GALLONS)</b>
2	40	1.08
4	45	1.08
5	230	10.267
6	205	4.32
7	25	1.08
8	40	0.86
9	250	11.16
10	505	22.543
11	250	11.16

e. If possible, the wells shall be equipped with a readily accessible capped port and drop pipe so that water levels may be measured under all conditions.

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 annually by June 30, to the PADEP. Withdrawal records shall be available at any time to the Commission if requested by the Executive Director.

g. The docket holder shall continue to implement its Water Conservation Plan as approved by PADEP, and shall report to the PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

h. The docket holder shall incorporate and implement reasonable conservation practices and measures consistent with efficient utilization of water resources.

i. No new water service connections shall be made to the 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.

j. 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.

k. 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 permit. 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*.

l. 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.

m. 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.

n. 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.

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. 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.

q. 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.

r. A long-term monitoring program is required to obtain data on ground water and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as submitted by the docket holder in a letter dated June 25, 2009. This program will include the following:

1. **Ground Water Level Monitoring** – EPMC shall monitor thirty-One (31) wells identified in the above referenced letter to estimate annual ground water fluctuations caused by seasonal changes and/or production well pumping, and detect water level declines

that may affect the performance of public and private wells in the area of the EPMC production wells.

2. **Reports** - All monitoring data, including records required in Conditions “f.” and “r.” herein shall be submitted to the Commission annually, due by April 1. The docket holder is encouraged to submit the annual report electronically. The report shall be prepared by a hydrogeologist and shall assess the effects of well withdrawals on hydrologic conditions in the area. This report shall include an evaluation of the monitoring data required by this docket approval and such information as deemed appropriate by the hydrogeologist or required by the Executive Director.
3. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

**BY THE COMMISSION**

**APPROVAL DATE:            June 10, 2015**

**EXPIRATION DATE:        June 10, 2025**