



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20040601

Approval Date: June 9, 2004

VILLAGE OF OXFORD

Groundwater Withdrawal (30-Day Average) of 0.500 mgd from Well 3,
and a Total System Groundwater Withdrawal Limit (30-Day Average) of 0.500 mgd,
for Public Water Supply,
Village of Oxford, Chenango County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10 of the Susquehanna River Basin Compact, P.L. 91-575, 84 Stat. 1509 et seq., and Commission Regulations §803.4, relating to projects requiring review and approval, and §803.43, relating to groundwater withdrawals. The Commission received the application on November 24, 2003.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a municipal water supply system.

Location. The project is located in the Upper Susquehanna River Subbasin, HUC 02050102, Chenango River Watershed, Village of Oxford, Chenango County, New York.

Project Features. The project sponsor has requested approval for the withdrawal (30-day average) of 0.500 million gallons per day (mgd) of water from Well 3. The well will be used as the primary source to supply water to a municipal water supply system that currently relies on Wells 1 and 2. Wells 1 and 2 were drilled in 1965 and 1980, respectively. Well 1 currently is used as an emergency backup well to Well 2, and its use predates Commission Regulation §803.43. The Commission previously approved a withdrawal of 0.43 mgd from Well 2 in 1982.

Well 3 was drilled in 1994 as a replacement well for Well 1, which had been pumping sand and experiencing related maintenance problems. The project sponsor proposes to use Well 3 as the primary water supply well, and use Well 2 as an emergency backup well. The use of Well 1 will be discontinued.

Well 3 is located to the south end of the Oxford Middle School property, approximately 245 east and 320 feet north of the Chenango River, in a sand and gravel (glacial outwash) aquifer. Well 3 was constructed with a 12-inch-diameter inner steel casing to a depth of 90 feet

below ground surface (bgs), an 18-inch diameter outer casing to a depth of 92 feet bgs, and a 12-inch diameter, gravel-packed stainless steel screen from a depth of 90 feet to 111 feet bgs.

The Commission approved the use of Well 3 in 1995 (Docket No. 19951102), however, that approval expired in 1998. Well 3 has not been used to date due to a petroleum spill related to underground storage tanks at the Oxford Middle School property that impacted the groundwater quality. The petroleum spill since has been remediated and was assigned an “inactive status” by the New York State Department of Environmental Conservation (NYSDEC) in May 2001.

The public water supply system has an existing average daily demand of 0.390 mgd, and an existing maximum daily demand of 0.650 mgd. The average daily demand is projected to grow to 0.500 mgd by 2029. The project sponsor serves the Village of Oxford.

The wastewater generated throughout approximately 10 percent of the water system distribution area is discharged to the sanitary sewer system and treated at the Village of Oxford wastewater treatment facility, which discharges to the Chenango River. Wastewater from the remainder of the distribution area is discharged to individual on-lot sewage treatment facilities.

Pumping Test. A 72-hour constant-rate pumping test was conducted July 7–10, 2003, for Well 3, with prior Commission approval. In addition to the pumping well, four monitoring wells (MW-2, 4, 5 and 6), four test wells (TW-1, 2, 3 and 4), and the Chenango River were monitored during the test. Pumping at an average rate of 700 gallons per minute (gpm), total drawdown at the pumping well was approximately 5.45 feet.

Coordination. Commission staff has coordinated with the NYSDEC Region 7 Office during review of the project. NYSDEC issued a Water Supply Permit on May 8, 1996, and NYSDEC staff has reviewed this docket for consistency with its requirements.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.43.

Pumping test results indicate that Well 3 draws water from a highly transmissive valley-fill aquifer. Commission staff recommends approval of a 30-day average withdrawal of 0.500 mgd from Well 3, and a total system 30-day average withdrawal of 0.500 mgd. Although the average pumping rate during the required well testing was 700 gpm, Commission staff recommends approval of a peak instantaneous pumping rate of 400 gpm for Well 3, the pumping rate previously approved by NYSDEC.

Commission staff recommends that the project sponsor install appropriate metering on Well 3 and keep daily records of the metered withdrawal.

The project is subject to the Commission’s water conservation requirements, as per Commission Regulation §804.20(a). The water system is 98 percent metered, which is not in

compliance with this regulation, and the system had an unaccounted-for water loss of 65 percent in 2003, which exceeds the 20 percent maximum set forth in Commission Regulation §804.20(a)(1). Based on a review of water usage provided by the project sponsor, Commission staff finds that the calculated unaccounted-for water loss is inaccurate, partly because it includes the water usage from several unmetered connections (Fire Station, Department of Public Works Building, Wastewater Treatment Plant, and Fire Hydrants). Commission staff recommends that the project sponsor be required to comply with Commission Regulation §804.20(a) within 5 years, and to report annually on its actions to install additional metering and reduce unaccounted-for water to the required 20 percent or less standard.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §803.28, and in accordance with Commission Resolution 98-19, as amended by Commission Resolution 2000-06. The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

No adverse impacts on other area groundwater withdrawals and on the environment are anticipated. The project is physically feasible, does not conflict with or adversely affect the Commission's comprehensive plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision. The project's groundwater withdrawal of 0.500 mgd (30-day average) from Well 3 and a total system groundwater withdrawal limit (30-day average) of 0.500 mgd are approved pursuant to Article 3, Section 3.10 of the Compact subject to the following conditions:

- a. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal reporting requirements, as per Commission Regulation §803.43.
- b. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on Well 3, accurate to within five (5) percent, to measure its groundwater withdrawal. The project sponsor shall keep daily records of the metered withdrawal and weekly water levels from Well 3. The required reporting data shall be submitted to the Commission annually, and as otherwise required. Monitoring reports are due within sixty (60) days after the close of the preceding year. The project sponsor shall maintain the existing meter, accurate to within five (5) percent, on Well 2. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.
- c. The maximum instantaneous rate of production from Well 3 shall not exceed 400 gpm.
- d. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(a). The project sponsor shall have installed the necessary meters and achieved 100 percent compliance with the requirements by June 9, 2008. The project sponsor shall report to the Commission annually on the progress made pursuant to this

requirement. The project sponsor must petition the Commission for an extension should unforeseen events occur that preclude compliance with the June 9, 2008, deadline.

e. If the Commission determines that the operation of the project's groundwater withdrawal from Well 3 adversely affects any existing groundwater or surface-water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

f. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

g. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling, to take photographs, to perform measurements, surveys, and other tests, to inspect the methods of construction, operation, or maintenance, to inspect all measurement equipment, to audit, examine, and copy books, papers, and records pertinent to any matter under investigation, and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

h. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation or order of the Commission, or any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate fines and penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of noncompliance.

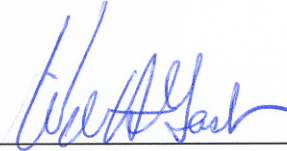
i. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

j. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

k. This approval is effective until June 9, 2029. The project sponsor shall submit a renewal application by December 9, 2028, and obtain Commission approval prior to continuing operation beyond June 9, 2029.

l. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:



William A. Gast, Chair
Pennsylvania Commissioner

Dated: June 9, 2004