



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

Phone (717) 238-0423 • Fax (717) 238-2436

Web <http://www.srbc.net>

Docket No. 20040912

Approval Date: September 8, 2004

KNOUSE FOODS COOPERATIVE, INC. PEACH GLEN PLANT

Consumptive Water Use of Up to 0.700 mgd,
for Fruit Processing,
Tyrone and Huntington Townships, Adams County, and
Dickinson Township, Cumberland County, Pennsylvania

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, §803.42, relating to the consumptive use of water. The Commission received the application on July 2, 2001.

Description

Purpose. The purpose of the application is to request approval for the consumptive use of water associated with processing fruit products and bottling drink products.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Bermudian Creek Watershed, Tyrone and Menallen Townships, Adams County, Pennsylvania.

Project Features. The project sponsor has requested approval for the consumptive use of water of up to 0.700 million gallons per day (mgd). Based on metered water use data submitted by the project sponsor, Commission staff calculates the project's maximum average 30-day consumptive water use to be 0.290 mgd, and current peak-day consumptive water use to be 0.700 mgd.

Knouse Foods Cooperative, Inc. (Knouse Foods) operates seven processing/bottling facilities in three states, including three facilities in the Susquehanna River Basin. Operations at the Peach Glen facility began in 1943.

Knouse Foods' Peach Glen facility processes apples, cherries, peaches, blueberries, and frozen strawberries for the production of pie filling. The facility bottles gallon-size jugs of "Arizona Tea" and apple juice, and produces vinegar for bulk hauling. A specialty line produces apple slices.

Consumptive water use at the facility includes water incorporated into product, steam production for cooking and heating, evaporation by the facility's cooling towers, evaporation as a result of on-site spray irrigation of treated process wastewater, and any water trucked off-site for product shipping and wastewater disposal.

Water is supplied to the processing facility from nine wells, eight of which were in use prior to 1978. These wells also provide water to four private residences.

Water from the wells is pumped to a covered raw water reservoir with a capacity of 0.260 mgd. The water is treated to potable standards and stored in a finished water reservoir (floating cover) with a capacity of 2.2 mgd. A concrete tank with a capacity of 2.5 mgd is currently under construction to replace the existing 2.2 mgd reservoir. Water discharged from the finished water reservoir to the plant is metered.

The process wastewater generated at the facility is discharged through a metered outfall to one of the facility's three interconnected on-site wastewater ponds that have a total surface area of 3.4 acres. Disposal of wastewater is through an on-site metered spray irrigation system. Domestic wastewater from the facility is treated on-site using a subsurface treatment system.

Knouse Foods' Peach Glen facility is regulated by the Pennsylvania Department of Environmental Protection (PADEP). PADEP has issued PWS Permit No. 7010415 for the public water supply of the facility and PADEP Permit No. 0177201 for the wastewater disposal by spray irrigation.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.42.

All water incorporated into product, used for boiler make-up, evaporated by fruit processing operations, trucked off-site and evaporated by the facility's cooling towers and refrigeration is considered to be used consumptively. Consumptive water use as a result of spray irrigation of process wastewater is 85 percent of the total metered amount delivered to the spray system during the months of June through October, and 10 percent of the total metered amount, during the months of November through May.

The onsite wastewater storage ponds predate the Commission's consumptive water use regulation; therefore, the project sponsor is not required to provide compensation for the evaporative losses from these ponds.

Total water supplied to the facility and total discharge from the facility is metered. Total water delivered to the spray irrigation system is metered. Commission staff recommends that the project's total daily consumptive water use be calculated by subtracting the facility's metered discharge from total metered water supplied to the facility, plus the quantity consumptively used by the spray irrigation system. Rainfall collected in the wastewater storage ponds may be quantified on a daily basis, at the rate of 1 inch of rainfall equals 27,152 gallons per acre of

surface area of the wastewater storage pond. Total daily rainfall may be subtracted from the facility's consumptive water use on the day of the rain event.

The project sponsor has requested a consumptive water use approval of up to 0.700 mgd. Based on analysis of water use records supplied by the project sponsor and consideration of all of the processes that comprise the facility's consumptive water use, Commission staff is recommending approval of the requested quantity. Should the project's future consumptive water use exceed or be expected to exceed 0.700 mgd, the project sponsor must apply for a modification to this docket at that time.

The project sponsor was consumptively using water at the facility for processing fruit products before January 23, 1971, the effective date of Commission Regulation §803.42. Based on detailed records of water use at the facility supplied by the project sponsor, Commission staff determined pre-1971 consumptive water use to be 0.204 mgd. For purposes of this docket, this quantity of water is considered "grandfathered," and is exempt from water compensation requirements.

The project's consumptive use of water in excess of the grandfathered quantity is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to make quarterly payments to the Commission in-lieu-of providing actual compensation water.

Of the nine wells used by the facility, eight were in operation prior to 1978. Knouse Foods added Well 13 in November 2001 to supplement the existing water supply. Based on historic water use data provided by Knouse Foods, Commission staff determined the peak 30-day average withdrawal to be 0.235 mgd prior to 1978. The current peak 30-day average withdrawal from all wells, based on supplied data, is 0.270 mgd, which is less than the threshold specified in Commission Regulation §803.43, relating to groundwater withdrawals. Should the project's future groundwater withdrawal exceed or be expected to exceed 0.335 mgd as a 30-day average, the project sponsor must apply for approval of its groundwater withdrawal at that time.

The project is located on the divide between the Bermudian Creek and Mountain Creek watersheds, in the extreme headwaters area. Seven of the nine currently active wells are located in a wellfield in the headwaters of the Mountain Creek Watershed, the remaining two wells are on the Bermudian Creek side of the divide. The upgradient watershed and groundwater basin providing water to the well field has an area of approximately 0.91 square miles. The well field draws water from one of the least productive aquifers in the Susquehanna River Basin, with well yields of a few tens of gallons per minute being exceptionally high. The 1-in-10-year average annual low-flow recharge available to the well field is estimated to be 0.141 mgd. The current peak 30-day average withdrawal from the well field is 0.270 mgd (188 gpm), or 191 percent of the available recharge during a 1-in-10-year average annual drought.

Based on the evaluation of groundwater availability, Commission staff has concluded that the existing groundwater withdrawal may potentially impact the local surface water and groundwater resources. Commission staff recommends that the project sponsor initiate a study to investigate the adequacy of the groundwater source and prepare a groundwater monitoring

plan to determine whether its water withdrawals impact surface water or existing groundwater users. The results of the required study and a plan to address any supply deficiencies should be submitted to the Commission within 12 months from the date of this approval. The plan shall be accompanied by the appropriate application(s) needed for the approval of any supplemental sources identified in the plan.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §804.20(b).

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.

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.

Compliance Incentive Program

Commission staff has determined that the project sponsor is eligible to participate in the Commission's Compliance Incentive Program (CIP). Therefore, the project sponsor would not be subject to penalties for water consumed in violation of Commission Regulation §803.42 prior to January 1, 2001. In accordance with the CIP, payment to the Commission as a method of compensation for the project's consumptive water use shall be effective and applicable to all consumptive water used by the project beginning January 1, 2001.

Decision

The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision. The project's consumptive water use of up to 0.700 mgd is 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 consumptive water use reporting requirements, as per Commission Regulation §803.42.

b. The project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity incorporated into product, used for boiler make-up, evaporated by fruit processing operations, trucked off-site, and evaporated by the facility's cooling towers and refrigeration, and water consumptively used as a result of spray irrigation of process wastewater; to be calculated by subtracting the facility's metered discharge from total metered water supplied to the facility, plus the quantity consumptively used by the spray irrigation system. The daily quantity of water consumptively used for spray irrigation of process wastewater is 85 percent of the total metered quantity delivered to the spray

system during the months of June through October, and 10 percent of the total metered quantity delivered to the spray system during the months November through May. The project sponsor shall maintain metering on the water supplied to the facility, the water discharge from the facility, and the water delivered to the spray irrigation system, accurate to within five (5) percent. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

c. The project sponsor shall keep daily records of the project's groundwater withdrawal, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter. The project sponsor may propose alternative monitoring to the Commission for staff review and approval. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.

d. If an increase in the project's groundwater withdrawal exceeds the threshold specified in Commission Regulation §803.43, the project sponsor shall submit the appropriate application for review and approval by the Commission.

e. The project sponsor shall develop a groundwater monitoring plan for the site to determine whether its water withdrawals impact surface-water or existing groundwater users. The groundwater monitoring plan shall be submitted within sixty (60) days for Commission staff's review and approval. The results of this study shall be submitted to the Commission within one (1) year from the date of this approval.

f. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity of water incorporated into product, used for boiler make-up, evaporated by fruit processing operations, trucked off-site, and evaporated by the facility's cooling towers and refrigeration, and consumptively used as a result of spray irrigation of process wastewater. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project, less the grandfathered quantity of 0.204 mgd. If the daily grandfathered quantity exceeds the project's daily consumptive water use, that day's consumptive water use is considered to be zero. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

g. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §804.20(b).

h. The project sponsor is eligible to participate in the Commission's Compliance Incentive Program (CIP). Therefore, the project sponsor is not subject to penalties for its prior noncompliance. In accordance with the CIP, payment to the Commission as a method of compensation for the project's consumptive water use shall be effective and applicable to all

water used consumptively by the project beginning January 1, 2001. The project sponsor shall provide records of its consumptive water use and make a payment to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used, above the daily grandfathered quantity of 0.204 mgd, during the period from January 1, 2001, until the effective date of this approval. This payment shall be calculated separately and included in the first quarterly payment made by the project sponsor in accordance with the requirements of condition (f) above.

i. If the Commission determines that the operation of the project's groundwater withdrawal from its well field 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.

j. 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.

k. 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.

l. 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.

m. 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.

n. 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

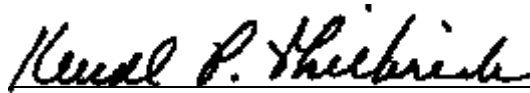
of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

o. This approval is effective until September 8, 2029. The project sponsor shall submit a renewal application by March 8, 2029, and obtain Commission approval prior to continuing operation beyond September 8, 2029.

p. If the project is discontinued for such a period of time and under such circumstances that an abandonment of the project may reasonably be 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:

Dated: September 8, 2004



Kendl P. Philbrick, Chair
Maryland Commissioner