

UNITED STATES GYPSUM COMPANY – WASHINGTONVILLE PLANT

Proposed Groundwater Withdrawal and Consumptive Use of Water

The Project: *United States Gypsum Company (USG) proposes to use groundwater from an on-site well field for the production of gypsum wallboard at its Washingtonville Plant, Derry Township, Montour County, Pennsylvania. USG applied to the Susquehanna River Basin Commission (SRBC) for the groundwater withdrawal of 350,000 gallons per day (gpd) and the consumptive water use of up to 432,000 gpd from Well WA-8, reduced from its November 5, 2007, application for a withdrawal of 576,000 gpd and a consumptive use of up to 576,000 gpd.*

USG is proposing to use artificial gypsum produced at PPL Montour, LLC's (PPL's) facility. PPL currently has SRBC approval to provide up to 1 million gpd of water for the production of commercial wallboard at the USG facility; SRBC Docket No. 19940901-2, December 5, 2006.

The Susquehanna River Basin Commission (SRBC) is a federal-interstate compact commission established by the federal government and the states of New York, Pennsylvania, and Maryland. SRBC is responsible for managing the basin's water resources. The Susquehanna basin covers a 27,510-square-mile area that drains into the Chesapeake Bay.

What are SRBC's regulatory authority and consumptive use provisions?

SRBC regulates, under 18 CFR Parts 801, 806 and 807, the withdrawal and use of water resources in the Susquehanna basin. Following are the three primary SRBC water use regulations and their respective threshold quantities:

- *Consumptive water use* – 20,000 gallons per day (gpd) or more (over a 30-day average) of surface and groundwater. SRBC is the only agency in the Susquehanna basin that regulates consumptive water use;
- *Withdrawals* – 100,000 gpd or more (over a 30-day average) of surface water, groundwater, or a combination of the two;
- *Diversions (out-of-basin diversions are regulated as consumptive water uses)* – any quantity involving a diversion into the basin, or 20,000 gpd or more (as the peak consecutive 30-day average) for diversion out of the basin.

Project sponsors must apply for and receive SRBC's approval before construction of water-related facilities.

What is consumptive water use?

SRBC defines consumptive water use as water that is withdrawn from the Susquehanna River Basin and used in such a way that it is not returned to the basin. Water is considered lost to the basin when it is:

- evaporated, such as through cooling towers at power plants, from storage ponds, or through irrigation;
- transpired due to irrigation, including golf course operations;
- incorporated into manufactured products, such as concrete and food and beverage products;
- injected into a subsurface formation; or
- diverted out of the Susquehanna basin, regardless of its intended use.

SRBC's consumptive water use regulation is designed to maintain streamflows to protect water supplies, instream uses such as fish and aquatic life, and recreation during periods of low streamflow. Regulated consumptive water users must mitigate for their consumptive water use during times of designated low flows.

Who is the project sponsor for the pending application?

Based in Chicago, United States Gypsum Company (USG) produces SHEETROCK® Brand gypsum wallboard.

Why did USG choose Washingtonville for the location of this facility?

USG specifically chose the site in Washingtonville to use synthetic gypsum generated as a flue gas desulfurization byproduct at the adjacent PPL Montour LLC (PPL) power plant. The facility is designed to produce up to 1 billion square feet of gypsum wallboard annually. Two-thirds of the gypsum used at the facility will be generated from the PPL facility.

Another factor in the company’s decision was to minimize shipping to supply wallboard products in the Northeastern United States.

With the ability to use process water supplied by PPL, why is USG proposing to use groundwater from an on-site production well?

The manufacturing of gypsum wallboard requires low temperature, filtered, and treated process water. USG prefers to use groundwater over surface water due to its lower temperature and turbidity.

USG is proposing to use groundwater from its production well as its primary water source, and to use water from PPL to supplement its process.

What is the status of USG’s applications?

USG submitted its applications on November 5, 2007, for the withdrawal of 576,000 gpd from four on-site wells, and consumptive water use of up to 576,000 gpd.

Subsequently, USG reevaluated its water needs and reduced its requested withdrawal to 350,000 gpd from one well and a consumptive water use of up to 432,000 gpd.

SRBC is currently reviewing the groundwater withdrawal and consumptive use applications.

As a part of the application review process, SRBC is conducting a public information meeting on June 26, 2008, 6:30 p.m. (EST), at the Jane E. DeLong Memorial Hall, Washingtonville, Pennsylvania.

Is there enough water available to meet USG’s needs?

Yes. USG currently has an interconnection with PPL to meet its process water needs and an on-site well dedicated for its potable water supply. The Pennsylvania Department of Environmental Protection has approved the use of this well. If approved, the pending application would allow USG greater operational and economical control.

What factors has SRBC considered during its review of the applications?

For groundwater withdrawal and consumptive water use applications, the project sponsor (applicant) must demonstrate that the withdrawal and consumptive water use needed to meet their present and future demands will not cause significant adverse impacts to water resources of the basin. SRBC considers, without limitation, the following:

- the location, amount, timing, purpose, and duration of the proposed withdrawal and consumptive water use;
- whether there is a reasonably foreseeable need for the quantity of the withdrawal and consumptive water use;
- potential adverse effects on users in the basin;
- lowering of groundwater or streamflow levels, rendering competing supplies unreliable;
- water quality degradation that may be injurious to any existing or potential water use;
- impacts the withdrawal and consumptive water use will have on fish, wildlife, or other living resources or their habitat;
- permanent loss of aquifer storage capacity;
- impacts, during low flow, to perennial or intermittent streams;
- how the project will affect other environmental, social, or recreational values;
- any land and natural resources planning in the basin; and
- how the project will impact the Chesapeake Bay.

SRBC coordinates its review with state, federal and local government and private sectors in all matters relating to the water resources of the basin.

Aquifer Testing

In support of its application, USG conducted the initial aquifer tests in July and August 2007. The testing identified a strong recharge boundary in response to pumping. As part of its review, SRBC determined that there was potential for surface and shallow aquifer leakage, and the risk of adverse impacts to neighboring wells, wetlands, and surface streams that rely on the shallow aquifer system. Because these issues were not clearly addressed by the initial testing, USG performed a second aquifer test on Well WA-8 in March 2008.

The additional testing was primarily intended to:

- better define the nature and key characteristics of the fractured rock aquifer;
- determine the source of the recharge type boundary observed in the initial tests; and
- better define the potential area and nature of impacts to existing groundwater users and surface water resources.

SRBC is reviewing the results of this test, which were submitted on May 5, 2008.

What public concerns related to the groundwater withdrawal and consumptive water use have been raised regarding these applications?

Concerned citizens have voiced their water-related concerns to the project and SRBC. The citizens are concerned that the project may:

- adversely impact their wells by inducing groundwater drawdown below the bottom of their well or pump intake; and
- adversely impact water quality of the aquifer that supplies their wells.

What are some of the special conditions that SRBC can include in the application to address these water-related concerns?

SRBC commonly adds protective conditions that require the applicant to, among other provisions:

- Mitigate for their consumptive water use during times of low flow;
- Monitor groundwater withdrawal and consumptive water use amounts and stage-approved quantities to the actual demand, and report usage data to SRBC;
- Comply with SRBC's water conservation requirements; and
- Obtain all other required permits and approvals.

USG has designed a mitigation plan to address potential or known impacts to neighboring wells. Commission staff is reviewing the plan to determine the likelihood of impacts and to formulate recommendations to the Commission.

Will SRBC's review process be open for public comment?

Yes. The commissioners will be briefed about the June 26, 2008, public meeting. Additionally, before the commissioners take an action on the application, they will receive and consider all comments and correspondence related to the project. Furthermore, SRBC will take a final action on the applications at a public hearing. All parties that have expressed interest in the applications by submitting comments, attending public meetings or hearings, or otherwise contacting the SRBC will receive notice of this hearing.