

# SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788 Phone (717) 238-0423 • Fax (717) 238-2436 Web http://www.srbc.net

# Groundwater Withdrawal Application Summary

Source Name: Center Square SRBC Pending No.: 2016-101

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

#### 1.1 Project Sponsor

Company Name: SUEZ

Mailing Address Line 1: 4211 East Park Circle

Mailing Address Line 2:

City: Harrisburg

State: PA ZIP Code: 17111

# Contact Person:

First Name: Steven
Last Name: Metzler
Title: Sr. Engineer
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#### 1.3 Existing and Projected Facility Water Use

The usage should be entered in million gallons per day (mgd) and rounded off to the nearest one thousand gallons (three decimal places).

Projected Design Year:

2031

<b>Total Project Water Usage</b>	Existing Usage (mgd)	Projected Usage For Design Year (mgd):
Maximum 30-day Average Water Demand:	0.124	0.379
Maximum Daily Water Demand:	0.16	0.489
System Capacity:	0.432	0.432
1.4 Requested Withdrawal Amou	nt:	
Estimated Daily Hours of Operation	n per Day (Ex. = $5$ ): 24	
Maximum Instantaneous Withdrawal Rate (gpm): 390		
Maximum 24-Hour Day (mgd):	0.489	
Maximum 30-Day Average (mgd):	0.379	

#### 2.2 Facility Location

Please enter the address of the parcel where the Project Facility is located.

Street Address: Stumptown Road At Hawethorne Dr. Mechanicsburg (Upper Allen Township)

State: PA

County: Cumberland

Municipality: Upper Allen Township

Zip Code: 17055

Subbasin: Lower Susquehanna

#### 2.0 Project Facility Information

# a. Site/Facility name:

Center Square (CS) Water System. SRBC Docket No. 19861104.

# b. Anticipated long-term owner and operator:

Center Square Wells No. 1 and No. 2 are owned and operated by SUEZ Water Pennsylvania, Inc. (SUEZ) formerly known as United Water Pennsylvania.

# c. Type of facility:

The CS wells and well house facilities are located along Stumpstown Road between Sheffield Avenue and Hawthorne Avenue in Upper Allen Township, in Cumberland County, PA.

CS Well 2 was drilled in 1987 into the Elbrook Formation to a depth of 385 feet below the ground surface. Ground surface elevation at this location is 440 feet above mean sea level. CS Well No. 2 is constructed as an eight-inch diameter open rock well with a steel casing extending to a depth of 54 feet bgs.

# d. Purpose of the withdrawal:

Potable water from the Center Square Well House is currently distributed to 633 connections in a section of Upper Allen Township (41% of the population).

Engineering projections using known development plans estimate that a total of 1,933 connections by the year 2031. These include: 633 existing connections, 300 new connections in Ashcomb Farms, 750 new connections in Ashcomb Meadows and 250 new connections in other surrounding areas could occur during the permit approval period if the proposed development construction resumes.

# e. Description of site activities:

Two water supply wells are piped to the Center Square Well House treatment system for
disinfection treatment using sodium hypochlorite and water quality monitoring. System water
storage is located off site at the CS storage tank (239,000 gallons)
and the Rose Garden storage tank (250,000 gallons)
for a total storage of 489,000 gallons.

The CS Water System has interconnections with both the Grantham and Mechanicsburg Water Systems. These interconnections are normally closed.

Upper Allen Township provides public sewer service to the water service area. Collected wastewater is collected and treated at the Upper Allen Township treatment plant and discharged to the Yellow Breeches Creek.

f. The requested quantity of the water to be withdrawn:

CS Well No. 2 was initially permitted by the SRBC in Docket No. 19861104, and approved for a 30-day average system withdrawal of 0.3888 million gallons per day (MGD). CW Well No. 2 produces the majority of the water supply, and CS Well No. 1 is used to supplement the system as needed.

Based on typical SCADA information, currently Well No. 2 initially starts pumping at an approximate rate of 355 gpm. During a normal 2-hour pumping period the pumping rate decreases to approximately 323 gpm. Based on maximum 30-day average demand of 0.124 MGD, the well would pump for approximately 6.4 hours per day.

The projected year 2031 customer connections of 1933 would generate a maximum 30-day average demand of 0.379 MGD. Based on pumping rate of 323 gpm, the well is estimated to pump 19.6 hours per day. The maximum 30-day average demand is expected to remain within the current SRBC limit of 0.389 MGD.

g. Provide the date operations began at the site or are anticipated to begin:

SUEZ purchased the Center Square Water System in April 2000 and has been operating the system since that time.

SUEZ has contracted GeoServices, Inc. to conduct aquifer testing activities on CS Well No. 2, as the existing permit is due to expire on November 13, 2016. GeoServices completed an ecological resource screening for the project site through the Pennsylvania Natural Diversity Inventory (PNDI ID #2016011254139). A conservative project area of 2,478.9 acres was selected to represent the interpreted groundwater recharge basin of CS Wells No. 1 and No. 2. According to the search results, no known impacts were reported within the project area.