



## SUSQUEHANNA RIVER BASIN COMMISSION

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### Groundwater Withdrawal Application Summary

**Source Name:** Center Square Well 1

**SRBC Pending No.:** 2017-002

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

Total Project Water Usage	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 Amount:

Estimated Daily Hours of Operation per Day (Ex. = 5): 19

Maximum Instantaneous Withdrawal Rate (gpm): 80

Maximum 24-Hour Day (mgd): 0.107

Maximum 30-Day Average (mgd): 0.107

#### 2.2 Facility Location

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

Street Address:	Stumpstown Road
State:	PA
County:	Cumberland
Municipality:	Upper Allen Township
Zip Code:	17055
Subbasin:	Middle Susquehanna

2.0 Project Facility Information  
1/13/2017

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. [REDACTED]

CS Well 1 was drilled in 1966 into the Elbrook Formation to a depth of 160 feet below the ground surface. Ground surface elevation at this location is 440 feet above mean sea level. CS Well No. 1 is constructed as an eight-inch diameter open rock well with a steel casing extending to a depth of 52 feet bgs.

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 with a 12-inch diameter casing for 21 feet and 8-inch casing for 54 feet for a total casing depth of 75-feet. The remaining borehole is constructed as an 8-inch diameter open rock well.

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) [REDACTED]

██████████ 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. 1 and 2 were 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). CS Well No. 2 produces the majority of the water supply, and CS Well No. 1 was historically used to supplement the system as needed on an emergency basis. Since April 29, 2016 both CS Wells No. 1 and No. 2 have been operating together. For the time period 4/29/2016 to 12/31/2016, Well No. 1 averaged 0.027 MGD and Well No. 2 averaged 0.090 MGD for a total of 0.117 MGD.

Based on typical SCADA information, Well No. 1 typically starts pumping at 80 gpm and decreases to 70 gpm after two hours for an average of 75 gpm. At the same time, Well No. 2. Typically starts pumping at 275 gpm and decreases to 245 gpm after two hours for an average of 260 gpm. Combined the two wells average approximately 335 gpm.

The projected year 2031 customer connections of 1933 would generate a maximum 30-day average demand of 0.379 MGD. Based on a combined average pumping rate of 335 gpm, the wells are estimated to pump 18.9 hours per day. The maximum 30-day average system 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. 1 and No. 2.