

**DOCKET NO. D-1986-022 CP-4**

**DELAWARE RIVER BASIN COMMISSION**

**Special Protection Waters**

**Crystal Water Supply Company  
Groundwater Withdrawal  
Town of Thompson, Sullivan County, New York**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by G. L. Smith Consulting Engineers, P.C. on behalf of Crystal Water Supply Company (CWSC or docket holder) to the Delaware River Basin Commission (DRBC or Commission) on June 6, 2013 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The original project wells were approved by New York State Department of Environmental Conservation (NYSDEC) Permit No. 3084-0770 for WSA No. 7485 and Permit No. 3086-0145 for WSA No. 7689 on April 5, 1985 and May 7, 1986, respectively. NYSDOH approved the plans for the public water supply improvement (addition of additional groundwater sources, disinfection, storage, pumping and transmission) on January 11, 2010.

The Application was reviewed for continued inclusion in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Sullivan County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on September 9, 2014.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this project is to renew the approval of an existing groundwater withdrawal project to supply up to 9.3 million gallons per month (mgm) of groundwater to the docket holder's public water supply system from existing Wells Nos. A and B and new Wells Nos. OB-1 and TW-2. The two new groundwater sources were interconnected to the CWSC distribution system in 2010 due to diminished yields in the docket holder's previously approved wells. The total allocation of groundwater approved by this docket is a reduction in the total allocation from that contained in its prior DRBC approval.

**2. Location.** The project wells are completed in the Walton Formation in the drainage area of an unnamed tributary to Kiamesha Creek in the Sheldrake Stream watershed, a tributary to the Neversink River, in the Town of Thompson, Sullivan County, New York within the drainage area to the Middle Delaware, which is classified as Special Protection Waters.

Specific location information has been withheld for security reasons.

3. **Area Served.** The existing and new project wells will continue to supply water to the 150-unit Hidden Ridge residential development and the former Kutsher's Country Club, which has been sold. The new owner plans to renovate and convert the hotel into a health spa. The service area is delineated on a map entitled "U.S.G.S. Wells Location Map", dated May 25, 2013 submitted with the Application.

For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** The CWSC system serves water to the former Kutcher's Country Club and a 150 unit residential subdivision (Hidden Ridge Development). In 2012, the Kutcher's Country Club was closed and sold to a new owner who plans to convert the former Kutcher's Hotel into a health spa. The CWSC system continues to supply water to the Hidden Ridge Development and when the hotel renovations are completed, will resume water supply to the resort. The water supply system previously served approximately 2,000 persons (hotel guests, employees and permanent and seasonal residents) and recorded an average and maximum water demand of 0.150 million gallons per day (mgd) and 0.300 mgd, respectively. The current plans for the hotel indicate that the renovations will result in a reduction in the total number of guest rooms, but the plans have not been finalized. Because the current health spa plans indicate the likelihood of a reduced number of guest rooms, the allocation of 9.3 mgm (0.300 mgd) should be sufficient to meet the future demands of the system.

b. **Facilities.** The existing and new project wells have the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
Well A	440'	110' / 8"	150 gpm	1986
Well B	546'	130' / 6"	125 gpm	1986
TW-2	430'	77' / 6"	84 gpm	2003
OB-1	300'	120' / 6"	50 gpm	1980

Well B is currently inactive, but is retained for back-up use. NYSDOH approval is required prior to any withdrawals from this well.

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, water is disinfected by chlorine.

The project wells are outside the 100-year floodplain.

The water system is not presently interconnected with any other system.

c. **Other.** Wastewater is conveyed to the Sullivan Infra West, Inc. sewage treatment facility, which was previously owned by Old Liberty Road Sewerage Company, Inc. most recently approved by DRBC Docket No. D-92-10 on March 25, 1992. The NYSDEC transferred its SPDES Permit No. NY0033600 from Old Liberty Rd. Sewerage Co, Inc. to Sullivan Infra West, Inc. on March 3, 2014. The treatment facility has adequate capacity to continue to receive wastewater from the project.

d. **Cost.** The overall cost of connecting the two new wells to the existing distribution system was \$130,000.

e. **Relationship to the Comprehensive Plan.** The project was previously included in the Comprehensive Plan by the Commission in Docket No. D-86-22 CP approved on June 25, 1986. The project including new wells Nos. OB-1 and TW-2 will be added to the Comprehensive plan upon approval of this docket.

## B. FINDINGS

### Special Protection Waters

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations* (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of Special Protection Waters. The wells providing water supply to CWSC are located within in the drainage area to the Special Protection Waters. Although this project does entail the construction and renovation of the existing resort, the health spa renovations will be made within the existing footprint of the former hotel. Additionally, other buildings and facilities on

the property will be removed and vegetated decreasing the post construction stormwater discharges. Since there are not new or increased non-point source loads associated with this approval, the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition C.II.v. has been included in the Decision section of this docket.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

Wells TW-2 and OB-1 were interconnected to the existing water supply system in 2010 to provide additional water due to decreasing well yields. The wells have been in operation since that time. In 2003, short-term pumping tests (8 to 24 hours in duration) were performed on Wells Nos. TW-2 and OB-1 at rates of 75 gpm and 50 gpm, respectively. These wells were installed and tested for potential water supply sources for a proposed casino project on the property that was never developed. Their predictions using site-specific aquifer parameters calculated from the pumping test data indicated that the individual maximum yields for Wells Nos. TW-2 and OB-1 were 250 gpm and 85 gpm, respectively. However, the Hydrogeologic Evaluation report indicated that if all wells in the tested well field were pumped simultaneously (a total of 6 wells), interference would reduce the long-term safe yields of Wells Nos. TW-2 and OB-1 to 100 gpm and 50 gpm, respectively. The Hydrogeologic Evaluation report indicated that the zone of significant influence from the tested wells was calculated to extend up to 1,100 feet from the pumping wells. The nearest private domestic wells are reported to be located north-northwest of the two new wells at a distance of greater than 1,800 feet.

The NYSDOH permit, issued on January 11, 2010, requires that Well No. A (75 gpm safe yield) be used as the primary water supply, with Well No. TW-2 (100 gpm safe yield) and Well No. OB-1 (50 gpm safe yield) utilized as secondary sources to supply the distribution system. The NYSDOH permit also lists well TW-1 (50 gpm) as an additional secondary source, but DRBC approval for this well was not requested nor is it approved by this docket. Withdrawal approval from Well No. B is continued by this docket; however, this well is not currently approved by the NYSDOH. The docket holder must obtain all necessary approvals from the NYSDOH prior to using Well No. B.

This project consists of an existing withdrawal of groundwater from Wells Nos. A, TW-2 and OW-1. Well No. B is currently inactive but is retained for emergency purposes. The allocations for existing well Nos. A and B are based on the current estimated safe yields of the wells. The instantaneous well allocations for new Wells Nos. TW-2 and OB-1 are based on the long-term safe well yields calculated from the pumping test data. However, the individual monthly well allocations permitted by this docket are limited to the actual pumping test rates. If increased withdrawals are desired in the future, the docket holder must, in consultation with Commission staff, conduct additional aquifer testing at a rate no less than the intended maximum withdrawal rate. Allocations are provided in Decision Condition C.II.d. in the Decision Section of this docket. Because the withdrawals have already been realized by the local hydrologic system, and the total allocation provided by this docket is a slight reduction from the previously approved total allocation, there should be no significant impacts from continued withdrawals from the existing system wells. Upon completion of the hotel renovations, system water demands will not exceed the previous water usage at the site.

**Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd**

Section 2.1.8 of the Water Code states that it is the policy of the Commission to establish a standardized water audit methodology for owners of water supply systems serving the public to ensure accountability in the management of water resources. Voluntary Water Audits were encouraged for public water supply systems through December 31, 2011 (Section 2.1.8.B.). Effective January 1, 2012, the owners of each public water supply system are required to implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance (Section 2.1.8.C). Water audits shall be submitted annually to the Commission by March 31 every year. CWSC has not submitted a Water Audit to date.

The DRBC estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 10 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The property has been sold and ownership of CWSC will change in the future. Within 30 days of the change in ownership, the docket holder must submit an application and all appropriate information for the transfer of ownership to the DRBC (see Condition C.II.w. in the Decision Section of this docket). The application must include letters from the former and new owners, acknowledging the sale of the property and date of the transfer. The new owner must affirm that the future operations will not deviate substantially from that described in this docket and that it will abide by all conditions set forth in this docket.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

**C. DECISION**

I. Effective on the approval date for Docket No. D-1986-022 CP-4 below:

a. The project described in Docket No. D-86-22 CP RENEWAL 2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1986-022 CP-4; and

b. Docket No. D-86-22 CP RENEWAL 2 is terminated and replaced by Docket No. D-1986-022 CP-4.

c. The project and the appurtenant facilities described in the Section A “Physical features” shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC and NYSDOH permits, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. The docket holder shall register with and report to the NYSDEC all groundwater sources described in this docket in accordance with the NYSDEC Regulations ECL Article 15 Title 33 - § 15-3301 Water Withdrawal Reporting.

b. The wells and operational records shall be available at all times for inspection by the DRBC.

c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the combined withdrawal from all well sources shall not exceed 9.3 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
A	75 gpm	3.35 mg
TW-2	100 gpm	3.35 mg
OB-1	50 gpm	2.23 mg
B	30 gpm	1.34 mg

In addition, Well No. B shall only be used for emergency purposes and the docket holder shall obtain the approval from the NYSDOH prior to any withdrawals from this source.

e. The wells shall be equipped, where possible, with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes as repairs or modifications are made at each existing well so that water levels may be measured under all conditions.

f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the NYSDEC annually and shall be available at any time to the Commission if requested by the Executive Director.

g. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

h. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of the NYSDEC, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate non-

revenue water and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.

i. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the Water Code, the docket holder shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding guidance. Water audits shall be submitted annually to the Commission by March 31.

j. The docket holder shall implement to the satisfaction of the NYSDEC, the continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the NYSDEC on the actions taken pursuant to this program and the impact of those actions as requested by the NYSDEC.

k. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

l. The docket holder shall implement to the satisfaction of the NYSDEC, a drought or other water supply emergency plan.

m. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

n. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

o. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

p. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

q. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the

event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

r. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

s. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

t. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

u. For the duration of any drought emergency declared by either New York or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of New York to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

v. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.



w. Within 30-days of the change in ownership of the CWSC, the docket holder shall submit an Application for the transfer of ownership to the DRBC. The application shall include all necessary information as indicated in Findings section of this docket.

x. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

**BY THE COMMISSION**

**APPROVAL DATE: September 10, 2014**

**EXPIRATION DATE: September 10, 2024**