

# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH



Raul Pino, M.D., M.P.H.  
Commissioner

Dannel P. Malloy  
Governor  
Nancy Wyman  
Lt. Governor

Drinking Water Section

September 29, 2016

Mr. John P. Walsh  
Aquarion Water Company  
600 Lindley Street  
Bridgeport, CT 06606

SUBJECT: Declaration and Order for the Greenwich, Darien, New Canaan & Stamford Water Service Area.

Dear Mr. Walsh:

Attached you will find the Department of Public Health "Declaration & Order" that is hereby issued in consultation with the Department of Energy and Environmental Protection (DEEP) and the Public Utilities Regulatory Authority (PURA).

If you have any questions concerning this order and its terms, please do not hesitate to contact me at (860) 509-7333.

Sincerely,

A handwritten signature in blue ink that reads "Lori D. Mathieu".

Lori Mathieu  
Public Health Section Chief  
Drinking Water Section

cc: Ms. Caroline C. Baisley, Director of Health, Greenwich Health Department  
Mr. Chuck Firlotte & Mr. John Herlihy, Aquarion  
Deputy Commissioner Addo, DPH  
Deputy Commissioner Mike Sullivan, DEEP  
Jack Betkoski & Nicholas Neeley, PURA  
Under Secretary David LeVasseur, OPM  
First Selectman Peter Tesei, Greenwich; [ptesei@greenwichct.org](mailto:ptesei@greenwichct.org)  
Paul Kutzy, Westchester County Dept. of Health, [pjk3@westchestergov.com](mailto:pjk3@westchestergov.com)  
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First Selectman Jayme Stevenson, Darien; [jstevenson@darienct.gov](mailto:jstevenson@darienct.gov)  
First Selectman Robert Mallozzi, New Canaan; [Robert.Mallozzi@newcanaanct.gov](mailto:Robert.Mallozzi@newcanaanct.gov)  
Mayor David Martin, Stamford; [dmartin@ci.stamford.ct.us](mailto:dmartin@ci.stamford.ct.us)  
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### **DECLARATION AND ORDER**

Pursuant to section 25-32b of the General Statutes (*Conn. Gen. Stat.*), the Commissioner of Public Health ("Commissioner"), in consultation with the Commissioner of Energy and Environmental Protection and the Public Utilities Regulatory Authority ("PURA"), upon receipt of information that a public water supply emergency exists, is imminent or can reasonably be expected to occur without the immediate implementation of conservation practices, hereby declares a public drinking water supply emergency ("Declaration"). Such Declaration is based upon the following information received by the Department of Public Health ("the Department") from Aquarion Water Company of Connecticut ("Aquarion"):

1. Aquarion is a water company, as defined in *Conn. Gen. Stat.* § 25-32a, that owns and operates public water systems in fifty-one towns and cities throughout Connecticut, including Darien, Greenwich, New Canaan, and Stamford.
2. On September 16, 2016, Aquarion's public water systems in Darien, Greenwich, New Canaan, and Stamford had a daily usage of approximately 50 million gallons per day ("mgd"). Its sources of supply consist of ground water wells, which are located in Darien, New Canaan, and Stamford, surface water sources in Greenwich and Stamford, and the Southwest Regional Pipeline ("SWRP"), which draws water from the Aquarion's Main System in Bridgeport.
3. Aquarion has registrations for its Bargh Reservoir Pump Station (Registration Number 7407-015-PWS-IM) in Stamford in the amount of 13.9 mgd, the Laurel-Barge Interconnection (Registration Number 7407-017-PWS-RA) in Stamford for 1 mgd, the Palmer Hill Road Interconnection CAWC (Registration Number 7000-017-PWS-TR) in Greenwich for 2 mgd, and the Post Road Interconnection CAWC (Registration Number 7000-018-PWS-TR) in Greenwich for 4 mgd.
4. Aquarion has a diversion permit from the Department of Energy and Environmental Protection ("DEEP") for its SWRP diversion (Diversion Number DIV-1997-13r) in Bridgeport for 7.26 mgd and a diversion permit from DEEP for its Stamford to New Canaan diversion (Diversion Number DIV-201101438GP) in Stamford for 1 mgd ("Diversion Permits").



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5. On July 14, 2016, Aquarion issued a press release requesting that its customers in the cities and towns that Aquarion serves voluntarily conserve water. Aquarion also posted such voluntary conservation request on its Internet webpage.
6. In August, Aquarion's combined system storage reservoir model predicted that the reservoir that serves Aquarion's public water system in Greenwich ("Greenwich System") had a 5 percent likelihood of hitting the emergency trigger in its water supply plan prepared pursuant to *Conn. Gen. Stat. § 25-33d*.
7. On August 18, 2016, Aquarion issued a press release requesting that its customers in Darien, Greenwich, New Canaan, and Stamford limit outside watering to two days per week. Aquarion also posted such voluntary conservation request on its Internet webpage.
8. In September, Aquarion's combined system storage reservoir model predicted that the reservoirs that serves Aquarion's public water system in Stamford ("Stamford System") have a 5 to 10 percent likelihood of hitting the emergency trigger in its water supply plan prepared pursuant to *Conn. Gen. Stat. § 25-33d*.
9. On September 16, 2016, Aquarion issued a press release in which it instituted a mandatory ban on outdoor water use in Darien, Greenwich, New Canaan, and Stamford. Aquarion also posted such mandatory ban on its Internet webpage.
10. On September 19, 2016, Aquarion contacted the Department regarding Aquarion's concern about its combined system storage reservoir model that predicted the reservoirs that serves Aquarion's Greenwich System had increased from a 5 percent to a 25 percent likelihood of hitting the emergency trigger in its water supply plan prepared pursuant to *Conn. Gen. Stat. § 25-33d* and noted the possible need for the Department to issue a public drinking water supply emergency order pursuant to *Conn. Gen. Stat. § 25-32b*.
11. On September 21, 2016, Aquarion's average daily water usage in Greenwich, Darien, Stamford, and New Canaan was approximately 35 mgd. As a result of instituting the mandatory ban on outdoor water use in Darien, Greenwich, New Canaan, and Stamford, Aquarion achieved an approximately 30 percent reduction in water use.
12. On September 23, 2016, the Department sent the New York Department of Health a letter regarding the institution of conservation measures in Rye, Rye Brook and Port Chester in Westchester County, New York, which are the towns that are served by Suez to whom Aquarion sells water.
13. On September 25, 2016, the reservoir that serves Aquarion's Greenwich System was at 34 percent capacity.
14. On September 25, 2016, the reservoir that serves Aquarion's Stamford System was at 47.5 percent capacity.
15. On September 25, 2016, the reservoir that serves Aquarion's public water system in Bridgeport ("Bridgeport System") was at 74.3 percent capacity.
16. As of September 25, 2016, Aquarion has approximately sixty days of water supply available to the Greenwich service area based on the amount of usable storage in the reservoirs that serve the Greenwich System.

17. On September 28, 2016, Aquarion sent a letter to the Commissioner of Public Health requesting that the Department declare a public drinking water supply emergency for Aquarion's Greenwich System because "an emergency situation [in Aquarion's Greenwich System] will be reached within the next month." In that letter, Aquarion requested authorization to construct temporary infrastructure, such as temporary pumps and piping, to increase Aquarion's capacity to transfer water from its Stamford System to its Greenwich System and to increase Aquarion's capacity to transfer water between its reservoirs in Greenwich. Aquarion also requested authorization to transfer water between its public water systems in excess of the quantities currently authorized in Registration Number 7000-018-PWS-TR and to take two mgd of water from Converse Lake, which is an inactive, privately-owned surface water supply that is identified in Aquarion's water supply plan as one of Aquarion's emergency sources of supply.

### ORDER

Pursuant to *Conn. Gen. Stat.* § 25-32b, and based on the Declaration, the Commissioner of Public Health hereby orders the following:

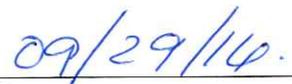
1. Aquarion shall continue to institute and enforce the mandatory ban on outdoor water use in Darien, Greenwich, New Canaan, and Stamford that Aquarion put in place on September 16, 2016.
2. Aquarion shall continue to work with Suez to ensure that the communities in New York that are served by Suez with water purchased from Aquarion are implementing mandatory bans on outdoor water use.
3. Aquarion shall update Aquarion's water conservation plan in its water supply plan prepared pursuant to *Conn. Gen. Stat.* § 25-33d. It shall specifically update the trigger levels for all of Aquarion's Greenwich System, Stamford System and public water systems in Darien ("Darien System") and New Canaan ("New Canaan System") by resetting the percentage of the trigger levels.
4. Aquarion shall not add any new customers to any of its public water systems in Darien, Greenwich, New Canaan, and Stamford without the Department's review and approval.
5. Aquarion shall implement its program for reducing unaccounted for water by calibrating supply and main line meters, calibrating consumers' meters, taking pipeline flow measurements, conducting leakage surveys, and inspecting bleeders.
6. Aquarion shall maximize the use and production of all its registered and permitted sources of supply and interconnections that are registered and permitted by DEEP pursuant to *Conn. Gen. Stat.* §§ 22a-365 through 22a-378, inclusive.
7. Aquarion shall develop a plan of action to maximize and enhance the delivery of water from its Main System in Bridgeport to its Stamford System and then into its Greenwich System. Aquarion shall finance and implement the permanent infrastructure improvements needed to enhance the delivery in accordance with a schedule reviewed and approved by the Department and PURA. The plan of action with an implementation schedule shall be submitted to the Department and PURA by October 28, 2016.

8. Aquarion shall provide public notification not less than weekly regarding the status of its sources of supply in Darien, Greenwich, New Canaan, and Stamford.
9. Aquarion shall identify and conduct a water audit of Aquarion's top twenty largest water users in Darien, Greenwich, New Canaan, and Stamford. In addition, Aquarion shall assist such large users in identifying ways in which to reduce usage. Finally, Aquarion shall submit its water audit findings to the Department within sixty days of issuance of this Order.
10. Aquarion shall monitor the water entering the treatment plants in Greenwich and Stamford for the following: bacteriological and physical parameters on a daily basis; the two cyanotoxins (microcystin and cylindrospermopsin) on a weekly basis, and inorganic chemicals and pesticides at least monthly.
11. Aquarion is authorized to increase the capacity of the Havemeyer Pump Station from 4 mgd, which is what Registration Number 7000-018-PWS-TR authorizes, to up to 5.5 mgd, to transfer water from Stamford to Greenwich.
12. Aquarion is authorized to take two mgd of water from Converse Lake in accordance with the existing contract with the Lake's owners, which is one of Aquarion's emergency sources of supply.
13. Aquarion is authorized to implement the following temporary infrastructure:
  - a. Install pumps at the Bargh Reservoir and above-ground piping from the Bargh Reservoir to the Rockwood Reservoir to increase Aquarion's capacity to transfer raw water from the Bargh Reservoir to the Rockwood Reservoir not to exceed 13.9 mgd in any twenty-four hour period.
  - b. Install pumps at the Putnam Dam in Greenwich to increase Putnam Reservoir's usable storage. Withdrawals from the Putnam Reservoir shall not exceed 25 mgd in any twenty-four hour period.
  - c. Install pumps and piping to increase the capacity of the Havemeyer Pump Station to transfer water from Stamford to the Greenwich System in an amount up to but not to exceed 5.5 mgd in any twenty-four hour period.
  - d. Install a larger pressure regulator and approximately 300 feet of above-ground piping to increase the capacity of the Palmer Hill interconnection to transfer water from Stamford to the Greenwich System in an amount not to exceed 2 mgd in any twenty-four hour period.
14. Aquarion shall cease utilizing the temporary infrastructure authorized in Paragraph 13 as soon as this Order is lifted, but shall not maintain such infrastructure in place more than 120 days after the lifting of this Order.
15. Aquarion shall weekly report to the Department, DEEP, and the local health directors in Darien, Greenwich, New Canaan and Stamford, and shall weekly publish the following on Aquarion's Internet webpage:
  - a. Information regarding Aquarion's supply and demand in its Darien, Greenwich, New Canaan, and Stamford Systems. The information for the surface water supplies shall include at a minimum the weekly measurements of water elevation, instantaneous usable storage capacity, reservoir withdrawals, amount of precipitation, and supply

- days left in such reservoirs. In addition, the information for Aquarion's groundwater sources shall include at a minimum the weekly reading of instantaneous flow rate, total quantity of water delivered over the previous week and groundwater elevations.
- b. Information regarding Aquarion's conservation practices and the effect of such practices on Aquarion's supply and demand.
  - c. Information regarding Aquarion's communications with town and local health officials in Rye, Rye Brook and Port Chester in Westchester County, New York, which are the towns that are served by Suez to whom Aquarion sells water. The effectiveness of the demand reduction efforts in these towns shall be measured by taking weekly readings of the water sold to Suez by Aquarion at all active interconnections and such weekly readings shall be reported to the Department, DEEP, PURA, and the local health officials in Rye, Rye Brook, Port Chester, Darien, Greenwich, New Canaan, and Stamford.
  - d. Information regarding Aquarion's communications with town and local health officials in Darien, Greenwich, New Canaan, and Stamford, as well as information regarding any tickets or fines issued by such town or local health officials.
  - e. The results of the water quality monitoring required in paragraph 10 of this Order.
  - f. Information regarding the daily diversion of water authorized in Paragraphs 11, 12 and 13 of this Order. Aquarion shall report the total withdrawal, diversion or transfer of water in each twenty-four hour period in gallons per day.
  - g. Documentation regarding stream flow conditions downstream of the diversion of water authorized in Paragraphs 11, 12 and 13 of this Order and any adverse environmental outcomes resulting from such increased utilization of the diversion registration.

This Order shall remain in effect for not more than thirty days. The Commissioner of Public Health may extend such order for additional periods of thirty days up to one hundred fifty days, consistent with the contingency procedures for a public drinking water supply emergency in Aquarion's water supply plan approved pursuant to *Conn. Gen. Stat. § 25-32d*, to the extent the Commissioner deems appropriate.

  
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Raul Pino, MD, MPH  
Commissioner

  
\_\_\_\_\_  
Date

cc: Commissioner Rob Klee, Department of Energy and Environmental Protection  
Commissioner John w. Betkoski, Public Utilities Regulatory Authority

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## DEPARTMENT OF PUBLIC HEALTH



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Drinking Water Section

September 26, 2016

Dr. Roger Sokol  
NY State Department of Health  
Empire State Plaza, Corning Tower, Rm 1110  
Albany, NY 12237

**SUBJECT:** Water Conservation Efforts in Westchester County of Customers Served Water by Aquarion Water Company. **CT0570011**

Dear Roger:

Thank you for our discussion last week concerning water conservation efforts and the mandatory restrictions instituted by Aquarion Water Company in certain Connecticut towns. As we discussed, the reservoirs capacity of the Aquarion system in Greenwich Connecticut has dropped significantly in the past few weeks and absent of any major rain event the supply capacity of this system is limited to about 60 days.

Last week, Aquarion, working in cooperation with town and city officials in Greenwich, Stamford, New Canaan, and Darien, implemented a mandatory ban on the use of outdoor watering devices, including irrigation systems, sprinklers, and soaker hoses. Aquarion continues to remind customers about the watering ban with automated phone calls.

It is our understanding that Greenwich town officials on 09/23/2016 have formally enacted its water shortage ordinance placing mandatory restrictions on all outdoor water use, and empowering the Greenwich police department to enforce the ban and issue summonses to violators. We understand that other Connecticut towns are very supportive of the outdoor mandatory restrictions. The ban in Connecticut thus far has helped in reducing demand by 19% in Greenwich.

You have indicated that on Wednesday September 21, the Westchester County Department of Health, Suez, Aquarion and representatives from the three Westchester County municipalities that receive water from Aquarion via Suez met to discuss the current water supply situation and mechanisms to implement water restrictions, and at least two of the three towns have water ordinance to facilitate the outdoor water use restrictions.



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September 26, 2016

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As a result, CTDPH is very grateful to your outreach efforts and the three Suez-Westchester municipalities willingness to implement water conservation measures similar or equal to the one instituted and in practice now in Greenwich.

Thank you again for your support and help with this matter. We look forward to working with you as this situation moves forward. Please contact me with any questions at (860) 509-7333.

Sincerely,



Lori Mathieu  
Public Health Section Chief  
Drinking Water Section

cc: Ms. Caroline C. Baisley, Director of Health, Greenwich Health Department  
Mr. Chuck Firlotte & Mr. John Herlihy, Aquarion  
Deputy Commissioner Addo, DPH  
Deputy Commissioner Mike Sullivan, DEEP  
Jack Betkoski, PURA  
Under Secretary David LeVasseur, OPM  
First Selectman Peter Tesei, Greenwich; [ptesei@greenwichct.org](mailto:ptesei@greenwichct.org)  
Paul Kutzy, Westchester County Dept. of Health, [pjk3@westchestergov.com](mailto:pjk3@westchestergov.com)  
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