

**Aqua New York
Bethpage Water District
Massapequa Water District
South Farmingdale Water District**

October 19, 2011

Dale A. Desnoyers, Director
Division of Environmental Remediation
625 Broadway - 12th Floor
Albany, NY 12233-7015

Re: Northrop Grumman-Navy Groundwater Contamination Plume
Technical Roundtable Meeting Held on September 15, 2011

Dear Mr. Desnoyers:

The undersigned four water suppliers thank the DEC for your attendance at the above captioned meeting. Commissioners of the Massapequa Water District together with Commissioner Martens and Deputy Commissioner Leff have worked diligently for this meeting to occur since March 2011. The object of this meeting was for the affected water districts to present alternatives to the DEC PRAP for the contamination source known as OU3. We also appreciate the attendance of Mr. Swartwout and Mr. Harrington from your office and acknowledge the participation of the New York State Department of Health via conference call.

This letter summarizes the items discussed, and we trust it will serve as a basis to develop an effective OU-3 PRAP that can be converted into a ROD thereby providing optimum protection of our vital drinking water supply wells that serve approximately 260,000 residents. As you are aware, these residents together with Senator Charles Schumer, are demanding that the DEC take immediate action to stop the forward migration of the plume to prevent impact of additional water supply wells. Based on our meeting, it is our understanding that the OU-3 PRAP is not intended to be issued for another 60 to 90 days and that gives more time to reconsider alternatives.

As you recall, we reviewed the following specific OU-3 FS Study area concerns:

- a. The FS needs to assess the impact to the supply wells in the path of the comingled plume. Wellhead treatment and associated cost must be considered.
- b. The selection of Alternative 3 is not proper since all viable alternatives have not been evaluated.

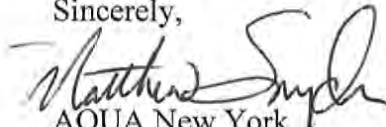
- c. The NYSDEC must support the following Navy Optimization Report conclusions:
- i. The hot spot in the OU-3 Plume contains much higher VOC concentrations than the rest of the off-site plume. This hot spot needs to be effectively contained to reduce future impacts to the down-gradient aquifer. It is our understanding that Trichloroethene (TCE) and cis-1,2-dichloroethene (cis- 1,2-DCE) were determined to be the predominant VOCs detected (based on frequency of detection and concentration) in groundwater above Standards, Criteria, and Guidance values (SCGs), followed by 1,1-dichloroethane (1,1-DCA); tetrachloroethene (PCE); 1,1-dichloroethene (1,1-DCE); vinyl chloride (VC); 1,2-dichloroethane (1,2- DCA); Freon 113; toluene, chloroform, 1,1,1-trichloroethane (1,1,1-TCA); and trans 1,2-dichloroethene (trans-1,2-DCE).*
 - ii. A more technically integrated approach among various stakeholders for managing groundwater impacts in OU-2 and OU-3 would provide many advantages at this site.*
- d. The NYSDEC must consider plume containment of the entire comingled OU-2 and OU-3 plume. A preliminary concept is illustrated on the attached map. Given an average horizontal groundwater flow rate of 1 foot per day, a conceptual hydraulic barrier of 12,000 feet wide by 600 feet deep by 1 foot thick, and an average porosity of 25 to 40%, a preliminary theoretical withdrawal rate of approximately 20 MGD would be needed in the identified zone. This conceptual approach will protect the non-impacted South Farmingdale, Aqua and Massapequa supply wells. We look forward to reviewing the Navy study that is presently underway and our anticipated review of its evaluation and findings related to plume containment.
- e. Grumman and Navy must pay for all wellhead treatment costs for the supply wells that are presently impacted.
- f. The Bethpage Water District (BWD) has immediate needs regarding the impact of this latest contamination, and ongoing contamination of its drinking water supply from the Grumman/Navy plume. Mr. Rich Humann, of H2M, presented a new approach to the alternatives for the most immediate and critical needs at Bethpage Plant 4 site that must be recognized by the DEC. In addition to being innovative, this approach represents a cost savings to the overall cleanup process as it relates to the VOC contamination impacting Plant 4 as well as an identified hot spot in the OU-3 study area. BWD presented a cost effective and environmentally progressive solution for addressing disposal of treated

groundwater through water re-use at the Bethpage golf course that is in close proximity to BWD Plant 4. Since the level of threat by the excessive concentrations of contamination surrounding Plant 4 will result in the long term loss of the plant as a public drinking water facility, that resulting impact necessitates the replacement of lost pumping capacity. The Bethpage Water District has commenced a study for the replacement of Plant 4 that could be achieved by locating supply wells and storage facilities outside of the plume area, northeast of the plume.

In the spirit of working together with the DEC and the Navy/Grumman, once replacement capacity is achieved, the BWD would have a treatment system in place at Plant 4, which would serve to provide partial hotspot cleanup of the OU-3 plume. As Senator Schumer has stated, none of the local water districts should be burdened with any of the cleanup costs. Therefore, Northrop Grumman and/or the Navy must pay BWD for new supply wells and facilities and assume the costs for Plant 4 as a partial remediation facility.

We, the undersigned water suppliers, request that the dialogue between the DEC and water suppliers continue on an immediate time schedule since it is apparent that this plume with all of its fingers, and sources will impact more drinking water supply wells sooner than expected.

Sincerely,


AQUA New York
President

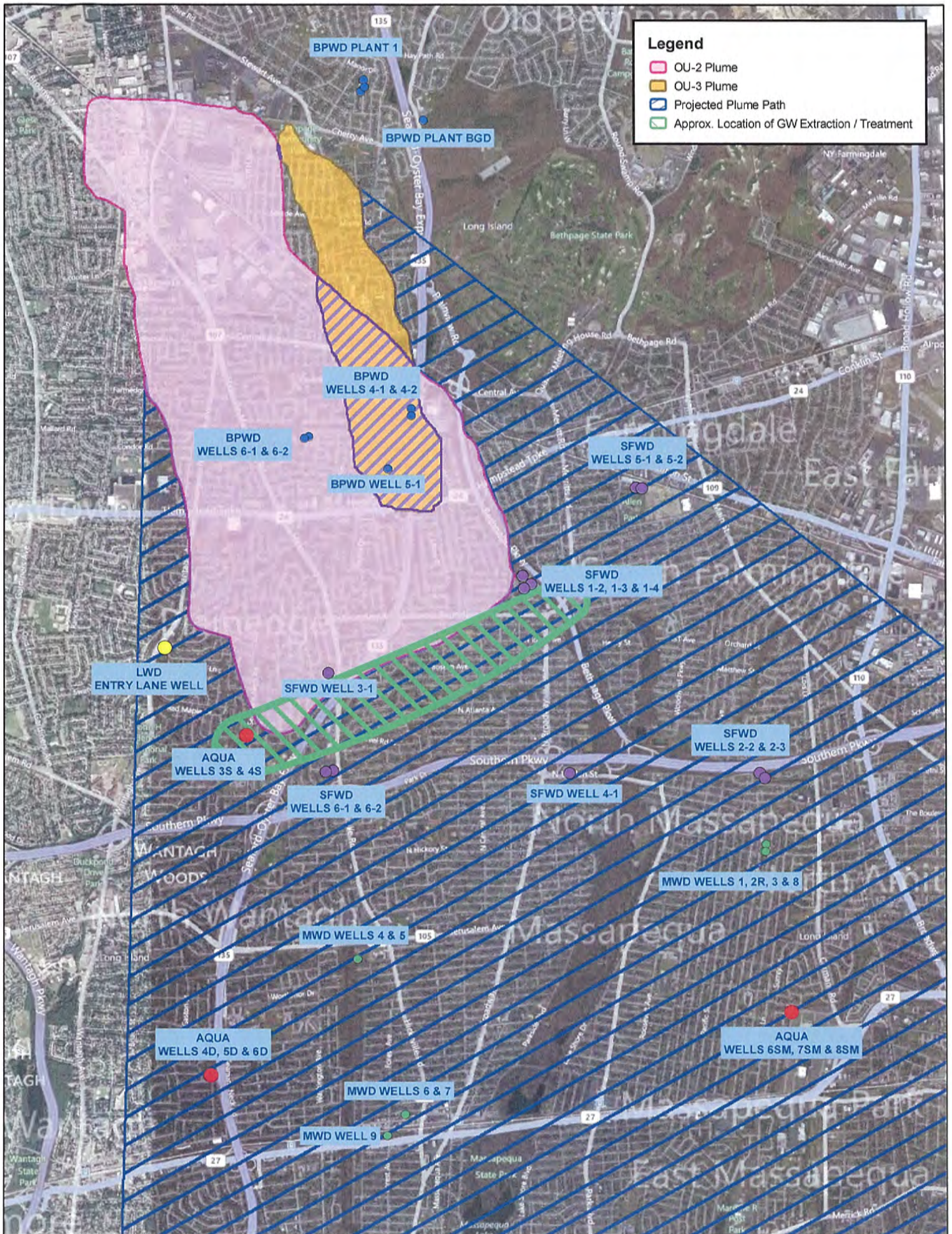

Bethpage Water District
Board of Commissioners


Massapequa Water District
Board of Commissioners


South Farmingdale Water District
Board of Commissioners

cc:

Commissioner Martens -NYSDEC
Deputy Commissioner Leff- NYSDEC
John Swartwout – NYSDEC
Jim Harrington –NYSDEC
Steven Scharf – NYSDEC
Steven Bates – NYSDOH
Barry Tornick – USEPA
Carol Stein - USEPA



Legend

- OU-2 Plume
- OU-3 Plume
- Projected Plume Path
- Approx. Location of GW Extraction / Treatment

BPWD PLANT 1

BPWD PLANT BGD

BPWD WELLS 4-1 & 4-2

BPWD WELLS 6-1 & 6-2

BPWD WELL 5-1

SFWD WELLS 5-1 & 5-2

SFWD WELLS 1-2, 1-3 & 1-4

LWD ENTRY LANE WELL

SFWD WELL 3-1

AQUA WELLS 3S & 4S

SFWD WELLS 6-1 & 6-2

SFWD WELLS 2-2 & 2-3

SFWD WELL 4-1

MWD WELLS 1, 2R, 3 & 8

MWD WELLS 4 & 5

AQUA WELLS 4D, 5D & 6D

MWD WELLS 6 & 7

AQUA WELLS 6SM, 7SM & 8SM

MWD WELL 9