NWIRP/Grumman-May 10, 2016 Groundwater Quarterly Coordination Meeting Agenda

1. OU 2 Update

   - Plant 6 Pilot – Update (Navy): Six weeks of pumping; believe data collection is now sufficient. Pumping rate expected to be about 1300 gpm. Report expected by end of July.

   - Plant 6 treatment upgrade project (BWD). BWD won't bid project until after Navy provides the $4M. However, cost estimate is now up to $7M or $8M; will need to go to DOJ to ask for more money before bid. The estimated construction time frame is 18 – 24 months.

   - Navy/NG coordination on RE108 Hotspot work (Navy/NG). Navy and NG continue sharing of info; NG is sampling some Navy wells. The next technical exchange meeting between the Navy and NG is scheduled for June.

   - Additional delineation (Navy): Looking at potential for other sources north and east. Hit of TCE at 9 ppb just north of Hempstead turnpike. Freon 113 keeps popping up; Navy indicates detections are not consistent with a single source. While Freon 113 was used at site, other potential sources are geothermal wells, industrial sources and dry cleaners. Observed a hit to west of site and north of Southern State Pkwy that was in hundreds whereas everywhere else finding concentrations in the 9's or 10's ppb.

   - Property acquisition for RE108 hot spot system (treatment plant and discharge)-report out on work session (Navy). Navy has tried to contact owners of property that is for sale/lease, but the owners are not responsive. Discussion regarding where to pump and where to dispose water. Expectation that we will need to use Plant 6 and may need to put some of it into distribution, but also need to look closely at discharge to creeks and basins. Rich Humann suggested Bethpage State Park may be able to use water. DEC agreed to engage Parks representatives. July is critical timeframe in the schedule for Navy property acquisition.

   - Question of putting treated water into water supply identified as a major issue that the group needs to tackle.
   - Bob S to try to engage high levels at DOH
     - Bob S to try to engage senior managers at DOH
     - Need to demonstrate that other options are not viable or sufficient
     - Need to consider other remediation systems in figuring out capacity
     - Need basin inventory with capacity
     - Consider discharge into Massapequa Creek. Jim H to reach out to DEC Fish &Wildlife
     - Consider Bethpage State Park- Get State Parks to evaluate the use of alternative water. DEC to try to engage

- Gary suggested 11-acre basin on N. Wantagh Avenue that had potential –need to get contact at DOT to Navy. DEC will give DOT a heads up
- Navy to produce white paper on options, discussing pros and cons of alternatives. DEC will raise to management and will use for trying to engage senior managers at DOH
- Rich Mach – use of BWD as remediation wells will protect downgradient wells from needing additional treatment
- Grumman preference not to put treated water into supply

- Public water supply protection program – monitoring of new sentinel wells (Navy). NG continues to sample outpost and monitoring wells. The next technical exchange meeting between the Navy and NG is scheduled for June

2. ONCT –OU2 Status of Operations (NG). Flow rate at Well 18 increased to 1,000 gpm. New communications system has been acquired and will be installed. Annual OMM Report was updated with April 2016 data from the Navy

3. OU 3 Update

residential yards (NG); 100 percent cooperation (38 of 38 agreed) PCBs mostly in the 2-3 inches but down to 14. Turned out to be mostly a chromium issue. NG thought that for most part leaving properties better than they started

- PCB/metals/voc area (NG). Pre-design sampling and remedial technical evaluation submitted by NG in October 2015

- downgradient Hot Spot (NG). PDI Report submitted in February 2016 and approved by DEC on 4/6/2016. NG will install 3 wells @ 500 gpm this year; pumping and treatment will probably begin next year. Wells are about 600 to 650 feet deep. System will be designed so that it can be expanded. NG will meet with property owners to explain what is going on. Discharge to Arthur Avenue basin. NG proposes to install 2nd basin in GM38 area to provide redundancy. A firmer schedule will be developed after a meeting with the DEC Commissioner scheduled for a few weeks. Upcoming submittal by NG is the RD/RA work plan
- hydraulic effectiveness study (NG).

- Drum issue (DEC). Tipster; whistleblower. Says saw whole open up with drums and close with drums. Grumman has prepared a report that looks at all existing data. Law enforcement folks have been trying to track down the original sources without much luck. Looked at other people that worked at same time. Hope to have things out this week. Want to get park open and pool open.

4. Status of efforts regarding Chapter 543 of the Laws of 2014 – evaluation of options relative to the groundwater plume associated with the former Navy/Grumman Bethpage facility (DEC). DEC noted that they were meeting the next day (May 11) with the Commissioner to update him on the status of the work and indicated that if they had any new information on the status of the

release of the studies they would let the group know. DEC has been flat out on Hoosick Falls; they hope to be able to set an aggressive schedule.

5. Additional discussion of potential for use of wells at BWD Plants 4,5,6 as remediation wells should BWD cease using them as public water supply wells (placeholder for future discussion).

6. DEC radium 226 and 228 sampling (DEC). DEC reported that Phase 1 was completed in Nov-December. Phase 2 sampling got done by mid-April (30 wells in 2 days) and also added 2 public supply wells.

7. 1,4 dioxane and TCE sampling- CSIA

   - Results to date (DEC). DEC reported out on the findings of the report. Navy and NG expressed some disappointment and took issue with the findings of the CSIA report. Concerns were raised about schedules dictated by the Governor's office

   - Future work (open).
   - Group agreed that if the end game is to identify other sources then the work needs to be well planned, and implemented properly on a reasonable schedule. Group agreed that it would be good for EPA expert on CSIA (Jon Gabry) review the data and the findings of the report. Navy and Grumman said they would submit written comments

8. Community outreach issues (open)
   - Newsletter/handouts for non-Navy work (NG and DEC)
   - Possible public meeting for NG work. Jim and Ed had spoken about possible meetings. Ed/Jim will report out on status at the next quarterly coordination meeting; expect to start meetings almost immediately thereafter
   - Report out on April 20 RAB meeting. All agreed that RAB meeting went very well.

9. Calendar review for dates for next quarterly meeting (target second half of August)
   - Dates for August were limited. It was decided that the coordination group should try to meet to have a focused discussion on treatment and discharge of remediation water, and that DOH should be asked to participate. DEC wanted to be able to share Navy white paper with management and senior managers at DOH before the next coordination meeting.

10. Follow up items:

   - White paper on disposal options – Navy to draft w/ NG input: Revised white paper submitted September 26
   - Property acquisition (really access) workshop July: Not held?
   - Meeting w/ DOH to discuss discharge to public water supply – timing dependent on receipt of white paper from Navy: Scheduled for November 15
   - Saladino Report release – Bob Schick to look into: Report was released in August
   - JBH to reach out to F&W – Jim H contacted Rob Marsh R1 FW&MR
   - DOT 11-acre basin - get contact at DOT: Stan Carey provided contact on May 16
   - DEC to engage NYS Parks regarding use of treated water at Bethpage State Park:

- DEC and NG to agree on plan for an update meeting with the public: Update to be provided at next quarterly meeting
- EPA to have Jon Gabry review draft Pace Analytical CSIA report: Review completed on July 14

11. Attendees-Sign in Sheet (attached).