H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
tel 631.756.8000
fax 631.694.4122

June 16, 2015

Mr. Robert W. Schick, P.E., Director
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7015

Re: Bethpage Water District
Naval Weapons Industrial Reserve Plant, Bethpage, New York
Operable Unit 3 Pre-Design Investigation
BPWD 15-50

Dear Mr. Schick:

The Bethpage Water District was recently informed during a conference call on May 27th of groundwater quality data results from the NWIRP OU-3 pre-design investigation. Although the contamination concentrations found during the field work are all significant, the most significantly and alarming information to the District was the 14,700 ug/l TVOC found in RW-21_MW-3 at a depth of approximately 560 feet below grade and about 1,800 feet from Plant 4 and 3,400 feet from Plant 5. Not only is this result by far the highest concentration of groundwater contamination discovered off-site in three decades, we sense this finding surprised the DEC.

For the most part, the tone of the conference call was merely a presentation of data by Arcadis on behalf of NGC. There was no sense of urgency or plan of action exhibited by the DEC to react and respond to the discovery of this excessive contamination. From the District's perspective, this lackluster response was not surprising given the manner by which the DEC has managed and supervised this program for the past 20+ years. During the call, we would have hoped for some anger, disappointment, indignation, or at least some concern. Moments of silence begged for the DEC to show some leadership and describe some aggressive next steps. Instead, there was just more of the same, simple indifference. Is this behavior ever going to change?

OU-3 was identified by the DEC in 2004. Now, 11 years later, the DEC recently discovered the highest deep Magothy off-site contamination concentration in the three decades of managing the NWIRP program. After all this time, effort, cost, and missed opportunity, this plume and this program are as misunderstood and out of control as ever. The time for more study has long since passed. Action is required.

Now, with the discovery of 14,700 ug/l TVOC in RW-21_MW-3, the DEC's assumption that the 10,500 ug/l TVOC discovered in MW-111 was the highest groundwater contamination in the

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plume (to which we disagreed) has been disabused. Further, the likelihood that the 14,700 ug/l is the highest contamination concentration in the groundwater plume is highly speculative based on the past history of this program. Indeed, the more you look, the higher concentrations you find. Therefore, the threat to the Bethpage supply wells continues to be overwhelming.

Yes, treatment systems exist to fully remove the TVOCs, but treatment systems do not provide full-proof guarantees that all contaminants will be removed entirely at all times. Even with the best technology in monitoring and the most diligent operations, systems can and do wear and fail. Constantly riding on the razor's edge is no way to operate a public water supply system, and the ever-increasing pressure being placed on the District and the community is grossly unfair.

Further, as part of commenting on the OU-2 Feasibility Study back in 2000, the District urged the DEC to select any one of Alternatives 5, 6, 7 and 8, each of which included "off-site plume containment" (copy of alternative figures attached). Six extraction wells located north of Hempstead Turnpike from the west of Wantagh Avenue to just west of the Seaford Oyster Bay Expressway were proposed as shown. The DEC chose to proceed with a lesser alternative. The result: a golden opportunity to attack this devastating plume and possibly control it forever was unfortunately missed. The collateral damage of that shortsightedness continues to rear itself every day, as the view of the extent and magnitude of the plume only continues to worsen with continued investigation.

Lastly, in January 2010, the District met with the DEC to present a mutually beneficial plan and opportunity for any one of the DEC/NGC/Navy to take over the operation of the supply wells and treatment facilities at Plant 4 to be used for the remediation of the NWIRP plume. Given the potential environmental benefit of utilizing the District's facilities, the District was proposing to partner in the program by developing replacement facilities and turning over operation of Plant 4. Part of the proposal even included a sustainable element of water re-use to irrigate public facilities with the treated discharge water. In short, the District's proposal was broadly dismissed by the DEC without response. We've come to understand that the plan fell flat because the DEC felt that managing the treated discharge water would have been too challenging. So, not only was too little thought put into how to effectively manage the discharge water, it seemed that the proposal was too burdensome for the DEC to review. The scenario again shows the failure of the DEC to think outside of the box and to extend to the District the respect it deserves as a potentially valuable partner in resolving the complex issues with which all are faced by the NWIRP plume.

At this point, it appears that every time a hole is put in the ground as part of these investigations, the worse the plume is discovered to be. The DEC, or some other regulatory authority, needs to take decisive action to force the containment and removal of contamination to the greatest extent possible. The Bethpage Water District has clear thoughts and ideas for taking action, and would be pleased to meet with you to discuss them in detail.

The District is not sure what it will take to create the fire and the will necessary to cause action, but is hoping that this is it.

Thank you for your time and attention. If you wish to meet with the District, it is available any time.

Very truly yours,

H2M architects + engineers

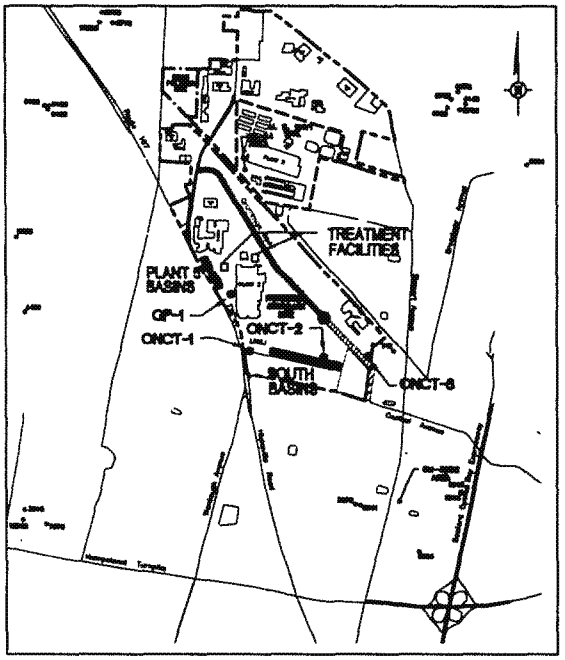
Richard W. Humann, P.E.
President & CEO

RWH:jac

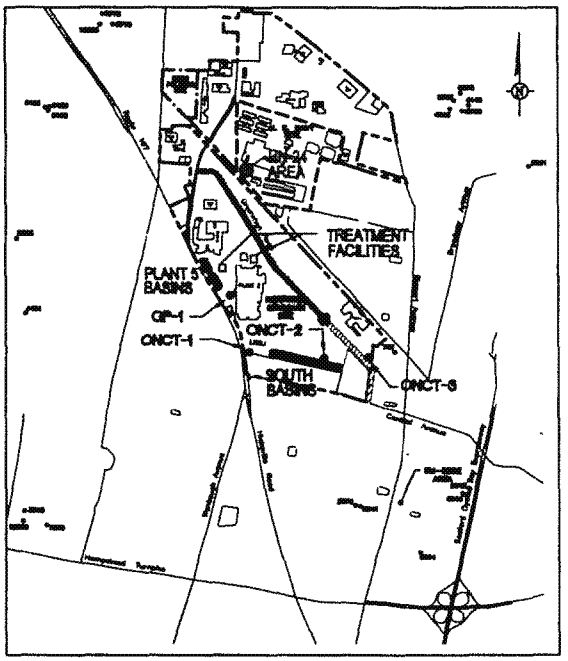
Enclosure

cc: Board of Commissioners
Supt. Michael Boufis
Michael Ingham, Esq.
Hon Charles Schumer, US Senator
Hon Kemp Hannon, NYS Senator
Hon Carl Marcellino, NYS Senator
Hon Michael Montesano, NYS Assemblyman
Hon Joseph Saladino, NYS Assemblyman
Hon Edward Mangano, Nassau County Executive
Hon Rose Walker, Nassau County Legislator
Hon Laura Schaefer, Nassau County Legislator
Commissioner Joe Martens, NYSDEC
Jim Harrington, P.E., NYSDEC
Steve Scharf, P.E., NYSDEC
Commissioner Howard Zucker, M.D., J.D., NYSDOH
Steve Karpinski, NYSDOH
Commissioner Lawrence Eisenstein, MD, FACP, NCDOH
Don Irwin, NCDOH
Joe DeFranco, P.E., NCDOH

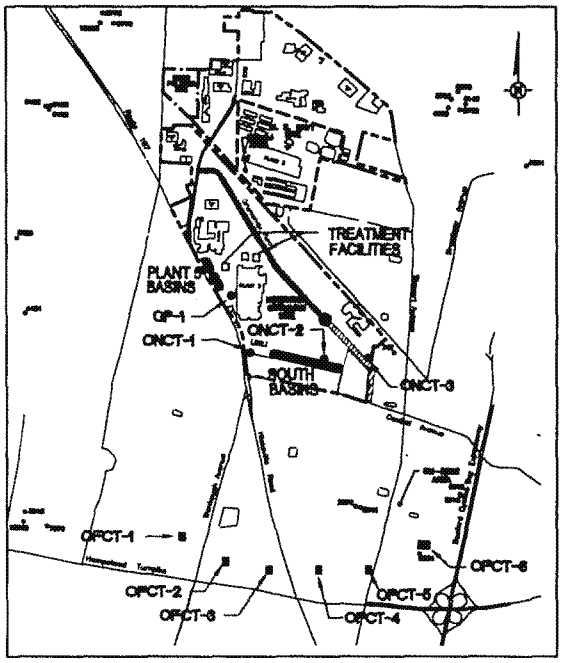
FEASIBILITY STUDY
EIGHT REMEDIAL ALTERNATIVES



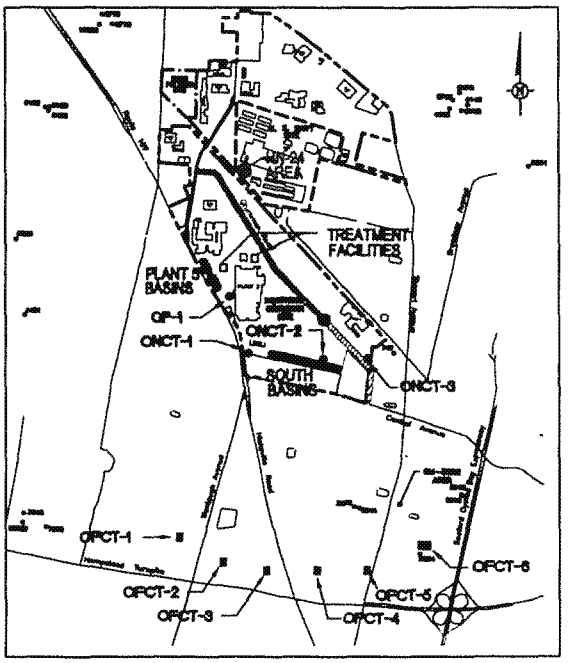
ALTERNATIVE 1:
CONTINUE OPERATION OF IRM



ALTERNATIVE 2:
CONTINUE OPERATION OF IRM, PLUS
TREATMENT OF ON-SITE HN-24 AREA



ALTERNATIVE 5:
CONTINUE OPERATION OF IRM, PLUS
OFF-SITE PLUME CONTAINMENT,

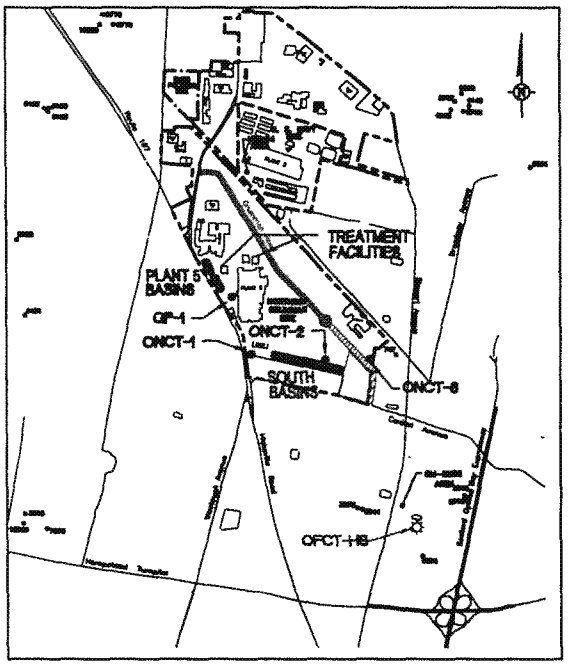


ALTERNATIVE 6:
CONTINUE OPERATION OF IRM, PLUS
OFF-SITE PLUME CONTAINMENT, AND
TREATMENT OF ON-SITE HN-24 AREA

NOTE:
ALL ALTERNATIVES INCLUDE PREPARATION OF A WELL HEAD CONTINGENCY PLAN, GROUNDWATER MONITORING, NATURAL ATTENUATION OF GROUNDWATER, AND CONTAINMENT AND TREATMENT AT IMPACTED SUPPLY WELLS.

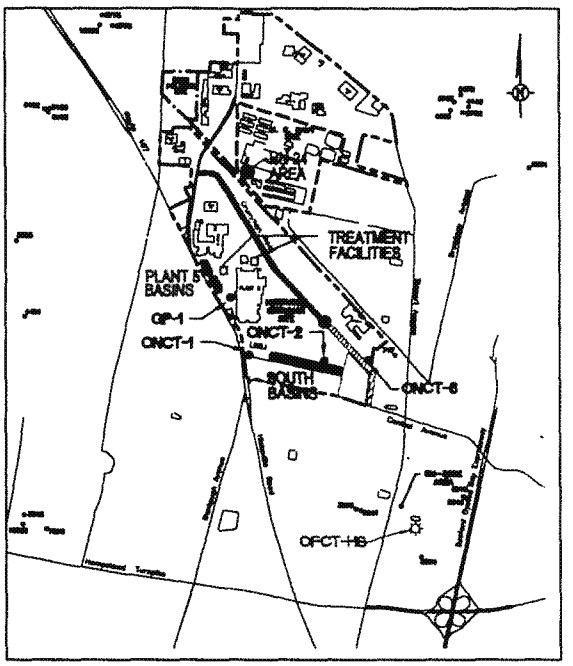
FEASIBILITY STUDY

EIGHT REMEDIAL ALTERNATIVES



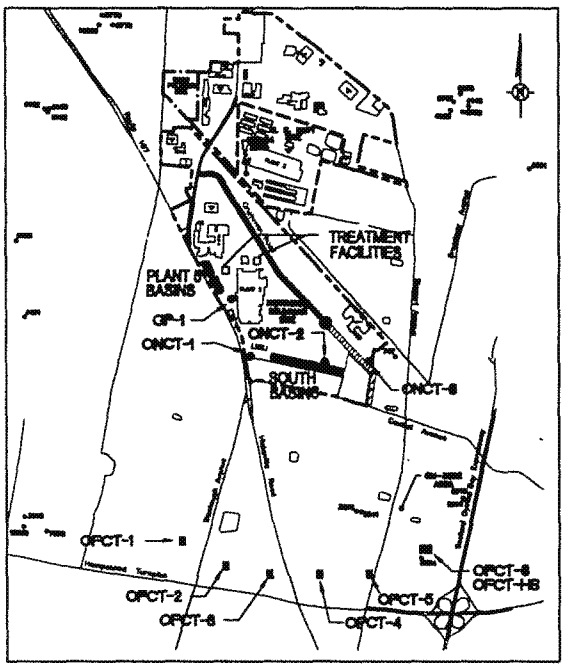
ALTERNATIVE 3:

CONTINUE OPERATION OF IRM, PLUS
TREATMENT OF OFF-SITE GM-38D2 AREA



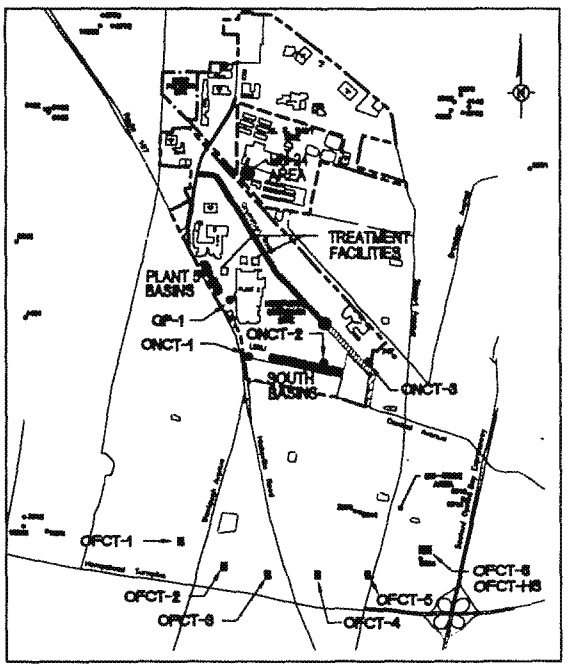
ALTERNATIVE 4:

CONTINUE OPERATION OF IRM, PLUS
TREATMENT OF ON-SITE HN-24 AREA
AND OFF-SITE GM-38D2 AREA



ALTERNATIVE 7:

CONTINUE OPERATION OF IRM, PLUS
OFF-SITE PLUME CONTAINMENT, AND
TREATMENT OF OFF-SITE GM-38D2 AREA



ALTERNATIVE 8:

CONTINUE OPERATION OF IRM, PLUS
OFF-SITE PLUME CONTAINMENT, AND
TREATMENT OF ON-SITE HN-24 AREA AND
OFF-SITE GM-38D2 AREA

NOTE:
ALL ALTERNATIVES INCLUDE PREPARATION OF A WELL HEAD CONTINGENCY PLAN, GROUNDWATER MONITORING, NATURAL ATTENUATION OF GROUNDWATER, AND CONTAINMENT AND TREATMENT AT IMPACTED SUPPLY WELLS.