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State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT

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Naval Air Propulsion Center
Attn: Code 09F3/R. Bower
P.O. Box 7176
Trenton, NJ 08628-0176

19 DEC 1990

Dear Mr. Bower:

Re: Naval Air Propulsion Center (NAPC), Trenton
Navy Response to NJDEP Comments for
Plan of Action (POA) for Ethylene Glycol Spill and
Final Site Investigation (SI) Report

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the above referenced document. Most of the NJDEP's comments have been addressed adequately. However, several comments require further consideration by the Navy. Once these comments have been adequately answered, the Navy should submit a revised Final Site Inspection Report and a Remedial Investigation Work Plan. The Department's comments are as follows:

ETHYLENE GLYCOL SPILL POA

NAPC Comment 3 -

Although any additional geological information garnered from future work may benefit the investigation, this comment requests already existing cross sections.

FINAL SITE INSPECTION (SI) REPORT

The Department has three additional comments regarding the Final SI Report:

1. NAPC should provide data identifying aquifer characteristics. In order to assess potential or actual contaminant migration in ground water, information such as aquifer porosity and ground water flow velocity must be provided. When considering the potential for contaminant plume mixing/overlap from different sources (i.e. different sites) this information is critical.



2. Subsection 7.1 (Site 1) - In the fourth sentence of the second paragraph, "50 ppb" should be "1 ppm."
3. Subsection 7.2 (Site 2) - In light of the fact that the fire fighting area was regraded for construction of the drum storage area and baseball field (see page 3 - 8 of the 4/88 final POA), the increased metal concentrations with depth are more likely indicative of metal contamination at the original (pre-1965) ground surface rather than a downward migration and preferential binding of metals to a subsurface layer of "clay particles." The report text must be rewritten to be consistent with previous NAPC reports.

NAPC Comment 5 -

The Department's June, 1990 comment letter stated that Phase II efforts should include the collection of samples for treatability study work. As an example of potential treatability work, the author included aquifer testing to evaluate pump and treat scenarios. In the response letter, NAPC agreed to propose a pump test and possibly slug testing as part of Phase II activities.

Although slug testing may be incorporated into Phase II activities, it is premature to perform a pump test during this phase of the investigation. Currently there is insufficient information pertaining to bedrock ground water quality. Bedrock ground water quality is needed to determine if aquifer remediation will be required. If remediation is not required, a pump test may not be necessary.

NAPC Comment 8 -

NAPC must sample all monitor wells for full priority pollutants plus 40 including PCBs/pesticides. This is based on the facts that most of the ground water samples collected to date have not been analyzed for PCBs/pesticides, the lack of ground water quality information for the bedrock aquifer, and the presence of pesticides in ground water samples collected from sites 3 and 6. The purpose of analyzing all monitoring wells for priority pollutants plus 40 is to thoroughly characterize the ground water quality beneath the NAPC site.

NAPC Comment 9 -

This response does not answer NJDEP's question. NJDEP asked NAPC to provide justification for how soil sample intervals submitted for analyses were selected. A comparison of Table 4 (OVA Screening Results for Soil Samples) and Table 6 (Soil Sample Results) of the SI Report showed that in some cases the sample intervals analyzed did not correspond to intervals exhibiting elevated OVA readings. The response to this comment fails to address this inconsistency. This apparent inconsistency must be clarified.

NAPC Comment 10 -

NAPC must propose a plan to evaluate the potential impact of surface water run-off from the site on Gold Run. Previously, NAPC proposed to address this as a separate issue since they are in the process of applying for a New Jersey Pollutant Discharge Elimination System/Discharge to Surface Water Permit. Although a surface water permit may address present discharge activities, it may not address potential contamination caused by former site activities.

NAPC Comment 11 -

Headspace measurements must be used to select appropriate depths for subsurface soil samples.

Also see "Specific Comment 2."

NAPC Comment 12 -

As has been previously discussed, the Underground Storage Tank (UST) investigation should be addressed separately, in accordance with Bureau of Underground Storage Tank (BUST) requirements. However, the SI report should specify the locations of all UST's and indicate the five tanks under investigation. In addition, the SI Report should include a brief description of the locations and construction details of the monitor wells installed during the UST investigations, and the results of the ground water investigation, if available.

NAPC Comment 13 -

According to Table 1 of the SI Report, one of the eighteen monitor wells installed was dry: MW-23S. If this monitor well can not be used to provide ground water quality data, then it must be sealed by a New Jersey Certified Well Sealer and a Well Abandonment form (attached) must be submitted to the Bureau of Water Allocation.

NAPC Comment 21 -

NAPC states that gradual leaching of existing contamination may occur in the Ethylene Glycol (EG) spill area as a result of precipitation events or ground water fluctuations. If contaminated soils existing in the EG spill area can be a potential source of ground water contamination, then the contaminated soils should be delineated, removed, and disposed of properly.

NAPC Comment 22 -

In response to NJDEP's requirement to identify the source of contamination existing in bedrock monitor well BRP-1, NAPC proposes the installation of a minimum of two bedrock monitor wells as part of Phase II activities. NAPC must specify the monitor well locations and include construction details in the Remedial Investigation Work Plan.

NAPC Comment 23 -

According to NAPC, the barometric well is active and receives discharges from floor drains, cooling water return flow, and utility drains. The collected water is then pumped to the onsite Industrial Waste Treatment Plant. NAPC must apply for a New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water (NJPDES/DGW) permit to operate the barometric well. Enclosed is a NJPDES application form (CP-1 form). The completed application must be submitted to the Bureau of Information Services at the address shown on the form (p. 9), and a copy must be sent to the Bureau of Ground Water Pollution Abatement at the following address:

New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Ground Water Pollution Abatement
CN-029
Trenton, NJ 08625

SI REPORT - SPECIFIC COMMENTS

NAPC Comment 1 -

NAPC agreed to install monitor wells required by NJDEP, but proposed to relocate the NJDEP monitor well NJ-4-BR outside the above ground tank farm. Since NJ-4-BR is located in the tank farm area, which is being investigated under a separate UST investigation, it is unclear as to whether this well is one of two bedrock wells proposed for the UST investigation or if this well will be installed during the Phase II investigation. NAPC must provide clarification on this question.

NAPC Comment 2 -

Although NAPC agreed to install the shallow bedrock monitor well proposed by NJDEP, they still suggest that since soils exhibited no contamination in this area, it is unlikely that ground water is contaminated.

Although this may be in some cases, NAPC should be aware that soil quality does not always mirror ground water quality. It should be noted that, according to the SI report, soils surrounding the tank were visibly contaminated and returned to the excavation. Since soils were disturbed during this excavation, soil samples from this area cannot be used as reliable indicators of ground water quality.

NAPC Comment 5 -

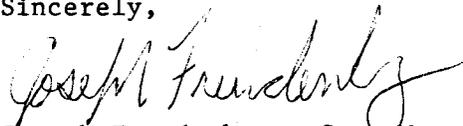
All samples at Site 3 must be analyzed for BNAs in addition to TCL, VOCs and metals.

NAPC Comment 8 -

The proposed background soil sample location (MW-29s) is not on Figure 28. Figure 28 must be revised to include this soil sample location.

If you have any questions or comments, please call me at (609) 633-1455.

Sincerely,



Joseph Freudenberg, Case Manager
Bureau of Federal Case Management

Enclosure

c: William Schrock, NORDIVNAVFAC
Bob Wing, USEPA
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