State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

NOV 26 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 642 595 316

John Kolicius
Project Manager
Naval Facilities Engineering Command
10 Industrial Highway
Code 1821, Mail Stop 82
Lester, PA 19113-2090

Dear Mr. Kolicius:

Re: Remedial Investigation Addendum Work Plan
Draft Feasibility for OU-1
Naval Weapons Station Earle
Colts Neck Twp., Monmouth Co.

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the above referenced documents prepared by Brown and Root Environmental., both dated October 1996. The NJDEP approves the report(s) with the following modifications.

Remedial Investigation Addendum Work Plan:

1) Pervious concerns raised by The Department regarding Site 12 and the planned sampling of railroad ballast material remain unaddressed in the revised plan.

Draft Feasibility Study for OU-1:

1) Any and all reference to Site 26, Explosive "D" Washout Area should be removed from this document. Additional remedial investigation has been required at the site thus, it is inappropriate to evaluate any potential remedial action alternatives/objectives for this site until the additional site work has been completed and submitted for review by the regulatory agencies.

2) For each of the OU-1 sites, the FS report identifies prevention of human exposure to contaminated ground water as the only "Remedial Action Objective" (RAO). A primary RAO must be restoration to the Class II-A aquifer to the applicable standards. The prevention of exposure would be a secondary/interim objective.

3) Supplemental studies to document the effectiveness of a natural attenuation alternative should be proposed for the landfill sites. If containment [i.e., capping] is to remain as the alternative of choice for the landfill sites than and adequate network of monitor wells [i.e., a line of compliance (LOC) wells] must be installed. If ground water criteria are not met at the LOC wells then the natural attenuation alternative will have to be re-evaluated and appropriate actions taken.

4) In section 2.0 of the report, "active ground water response actions" are eliminated from consideration based on source controls and expected natural attenuation of contamination. The Department believes it is inappropriate to eliminate "active ground water response actions" for these three sites (Sites 4,5, and 19) since each of the sites exhibit ground water contamination above the New Jersey's Ground Water Quality Standards (GWQS), and the reasons cited for elimination in the FS are not sufficient of eliminate this option in the Technology Screening phase. Active Ground Water remediation is a viable alternative for each site and must be carried through the detailed analysis phase for each site and evaluated for effectiveness, cost, implementability, etc.

5) Some of the preliminary remediation goals (PRG's) for ground water specified in Table 2-9 (Site 4), Table 2-17 (Site 5) and Table 2-28 (Site 19) are incorrect. In Table 2-9, PRG's for TCE and Vinyl Chloride should be 1 ppb and 2 ppb, respectively, as opposed to the 10 ppb specified. In Table 2-17, the PRG's for the specified VOC's should be as follows: Benzene = 1 ppb, Chloroform = 6 ppb, TCE = 1 ppb and Vinyl Chloride = 2 ppb. In Table 2-28, the PRG for Arsenic should be 8 ppb.

   In Table 2-25, PRG's for Soil at Site 19, the PRG for Chromium VI should be 10 ppm as per Department policy.

   It should be noted that many of the tables in Section 2.0 do not specify "units" for the concentrations shown.

Section Specific Comments:

1) Section 1.3.1: The analytical results generated from several ground water sampling events documents that Trichloroethene exist in MW4-05 at levels up to 55ppb. The ground water quality standard is 1ppb. There is no additional down gradient sample results nor was there an attempt to determine if indeed the wetlands adjacent to the site was being impacted and/or acting as a discharge area for site 4 ground water. There is no mention of any follow up studies to evaluate the effectiveness of the proposed natural attenuation.

   The contractor has made no attempt to substantiate the proposed remedial action objectives, they simply state, "Concentrations of parent compounds (TCE and PCE) may diminish over time, depending upon the presence of contaminated source material that could continue to leach new product into the ground water." This approach must be revised to include, but not limited to, a carry through of active ground water alternatives, any supplemental studies, long term monitoring, and the installation of a line of compliance monitor wells.

If you have any questions, please call me at (609)-633-7237.

Sincerely,

Bob Marcolina

Bob Marcolina, Case Manager
Bureau of Federal Case Management

c: J. Gratz, EPA
G. Geopfert, NWS Earle
L. Jargowsky, Monmouth Co. Health Dept.