



**State of New Jersey
Department of Environmental Protection and Energy**

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 839 136 845

Mr. Dinker Desai
SELFM-EH-EV
Department of the Army
Headquarters CECOM Fort Monmouth
Fort Monmouth, NJ 077703-5000

APR 20 1994

Dear Mr. Desai,

Re: Weston Remedial Investigation Workplan
Fort Monmouth Base (Main Post and Charles Wood)
Tinton Falls, Monmouth County

The NJDEPE has reviewed the draft Remedial Investigation Workplan submitted by Roy F. Weston, Inc. on behalf of the Directorate of Public Works, Fort Monmouth Facility, Monmouth County, and we approve the document as submitted *with* the incorporation of the following comments.

These comments are specifically based on the Technical Regulations for Site Remediation (N.J.A.C. 7:26E - Tech. Regs) and if there are any discrepancies, the Tech Regs should be referred to in order to clarify the requirements.

General Comments:

There is a tremendous amount of information in this document and although the document is readable, it is extremely hard to track those sites which are in need of additional information and those sites which Fort Monmouth has determined to be within compliance of the NJDEPE's criteria. The revised document should contain a brief chart or summary of proposed samples. This chart could also contain a note on suspected contaminants, sampling parameters, type and depth of sample.

The Evans Area: In a recent conversation with Mr. Joseph Fallon of your staff, I have been informed that the Evans Area investigation will be completely taken over by the BRAC site investigation which is being conducted by Earth Technologies Inc. under Army, EPA and DEPE oversight, under the Base Realignment and Closure program. Due to this, no comments are provided in this letter regarding the Evans Area investigations (see comment letter on the Earth Technologies submission dated March 4, 1994). These sections will be removed from the Weston Report.

Certification: In accordance with section 1.5 of the Tech Regs, all submissions must be certified using the applicable clause with all necessary signatures. This requirement will be necessary for all submissions, including the revisions to this document.

Sampling and Analysis: All samples must be taken and handled in accordance with the May 1992 DEPE Field Sampling Procedures Manual in order to be acceptable to the DEPE.

Quality Assurance/Quality Control: While the DEPE does not require an exact number of samples to be QA/QC'd, we do require information to be provided which would clearly indicate that enough QA/QC has been performed to verify the precision and accuracy of the subject information. Specific sections of the Tech. Reg's require that environmental samples be verified, these sections include sections 2.1, 3.10 (particularly subsections 3 and 4 et seq.), and Appendix A (as indicated in Section 7.3 of the report). The DEPE will require an appropriate number of samples to be verified by an approved source. The approval of the QA/QC person shall be requested by Fort Monmouth and granted by the DEPE in writing.

Soil Cleanup Criteria: All soil samples shall be compared to the February 3, 1994 New Jersey Soil Cleanup Guidance Criteria or subsequent versions of those criteria. These are Criteria, not Standards as stated on page 4-84, and throughout the Weston report.

Maps and Figures: The maps and figures should all contain azimuth and labels for areas and media of interest. This includes ground water flow, surface water flow and wetland areas. Several of the maps do not include this information, and while under most circumstances it can be determined, it should be provided to save time and assure accuracy.

Tables: For future submissions, it is requested that all tables include a list of contaminants sampled for and in corresponding columns, the following information should be provided: Method/sampling detection limit, detected concentration, appropriate state required criteria, appropriate federal criteria, Practical Quantitation Limit, and depth of sample.

Additional Area(s) of Concern: Based on the information provided in the report, the DEPE is concerned that there is potential for environmental contamination resulting from the disposal of contaminated sludges produced by the sewage treatment plants. It is of particular concern that the Charles Wood golf course is contaminated through the use of contaminant laden sludge. Some written discussion of this must be presented. This may result in additional samples being taken throughout the areas of sludge placement to assure protection of human health and the environment.

Marine and Shellfish studies: In accordance with a request from the DEPE's Division of Science and Research, Bureau of Marine Water Classification and Analysis, I am requesting that the surface waters, and sediment sampling proposed be biased to determine what, if any, impact the historical operations at Fort Monmouth have had on the marine life and shellfish beds of the area. Depending on the evaluation of the information provided, the DEPE may require additional study and delineation to evaluate pollutant loads in the water, sediment and shellfish (clams, oysters and mussels) tissue. Mr. William Eisele of that Bureau may be contacted for further information on this topic. Mr. Eisele's telephone number is (609) 748-2000.

Specific Comments:

- 1) Landfill 2 (M-2): It is stated that there is contamination of the surface water body in excess of the New Jersey Surface Water Criteria for several compounds. Among these were Coliform, Chloride, Cyanide, pH, TDS, TSS, Turbidity and Lead. Page 4-12 states that a sample will be collected from just upstream of where Route 35 crosses the Mill Brook. Does Route 35 have any discharge of runoff water to the Mill Brook? If so, this could effect the accuracy of the results.
- 2) Table 4-2: Cyanide is extremely high in the previous sampling, future sampling should be biased to finding the source of the Cyanide.
- 3) Page 4-18: Section 4.1.4.4; it is stated that "...one of these locations is most likely downgradient of Landfill 4 and upgradient of Landfill 5." The term "most likely" should be explained as it is ambiguous. The DEPE suggests that it should be defined whether the well will be downgradient or not. A downgradient sample is necessary.
- 4) Page 4-35: Section 4.1.10.2; It is stated that "The facility frequently inventories the tanks with a *stick* to determine if the contents are leaking." This is not an approved method of leak detection. Alternate, valid methods of leak detection are necessary.
- 5) Page 4-46: Section 4.1.15.3 & 4; The DEPE recommends the removal of the paint chips regardless of their containing lead.
- 6) Page 4-47: Section 4.1.16.3; Ground water monitoring well placement strategy should be provided as no reasoning for why wells are to be placed where they are proposed is provided.
- 7) Page 4-56: Section 4.1.19.4; Samples of sludges must be taken as well as underlying "original surface" for the parameters listed. The sludge is considered the surface soil and unless some form of institutional control is put in place to prevent contact with contaminated soils, the residential soil criteria applies to all soils.
- 8) Page 4-59: Section 4.1.20.4; It is our determination that since the sampling will likely not occur at this site until late summer/fall, the "attempted" sampling will most likely, not be successful due to the excessive underbrush and vegetation. Sediment sampling must be conducted in this area. If a sample cannot be coordinated to the former sanitary treatment plant outfall, several samples will have to taken to determine the potential for sediment contamination.
- 9) Page 4-77: Section 4.2.3.4; The paragraph states that "if any evidence of surface soil staining is found, surface soil samples will be collected...". The DEPE will require that this statement be expanded to read "if any evidence of surface soil staining or subsurface disposal is found, soil samples will be collected..." (i.e., adding subsurface disposal, and requiring more than just surface soils sampling).
- 10) Page 4-81: Section 4.2.5.4; Composite sampling is not acceptable, except as necessary for waste classification (7:26E-3.4c). All sampling protocol must be acceptable to the DEPE. (Please see the DEPE's Field Sampling Procedures Manual dated May 1992 for

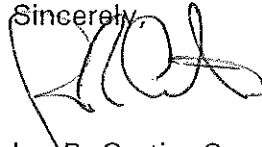
acceptable sampling procedures). The DEPE does allow a type of "averaging" as set forth in the Tech Regs and associated guidance for ground water (7:26E-3.7e(2) and soil (7-26D-3.3) samples. (Although 7:26D has not be repropose, certain sections are still applied with some modification as guidance with DEPE approval.)

11) Page 4-84: Section 4.2.7.2; It is stated that the paved Area B has a drain that empties into a ditch in the woods. No sampling for this outfall was proposed in the subsequent sections. Please provide reasoning for this deletion of a sampling point. This area may be required to be sampled, depending upon the DEPE's acceptance of the discussion provided.

12) Page 4-84: Section 4.2.7.3; See general comment above. Limits for chlordane, and any site specific contaminant where a cleanup criteria does not exist, must be derived in accordance with the risk-based procedures set forth in the Tech Regs, and the Ground Water Quality Standards.

If you should have any questions or require additional information, please do not hesitate to contact me at (609) 633-1455.

Sincerely,



Ian R. Curtis, Case Manager
Bureau of Federal Case Management

cc. James Ott, FTMMTH
William Eisele, BMWCA

RPCE\BFCM\FTMMTH10.IRC