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July 7, 1993

Mr. Francisco LaGreca, P.E.  
U.S. Department of the Navy  
Northern Division - NAVFACENGCOM  
10 Industrial Highway  
Code 1823 - Mail Stop #82  
Lester, PA 19113-2090

**received**  
7-9-93

RE: Response to RIDEM Comments  
Draft Phase II RI/FS Work Plan  
Site 02 - Melville North Landfill  
Naval Education and Training Center (NETC)  
Newport, Rhode Island  
Contract N62472-86-C-1282  
TRC Project No. 6760-N81-110

Dear Mr. LaGreca:

TRC Environmental Corporation is pleased to present responses to Rhode Island Department of Environmental Management (RIDEM) comments, dated February 3, 1993 on the Draft Phase II RI Work Plan for the Melville North Landfill site at the NETC in Newport, Rhode Island.

Should you have any questions or comments, please contact me.

Sincerely,

TRC ENVIRONMENTAL CORPORATION

James Peronto, P.E.  
Field Operations Manager

Enclosures

c: R. Smith/TRC

## **RESPONSE TO RIDEM COMMENTS**

### **DRAFT PHASE II RI/FS WORK PLAN MELVILLE NORTH LANDFILL NETC, NEWPORT, RHODE ISLAND**

#### **1. General Comment**

The Division recommends that the Table of Contents and the Introduction be revised to relate strictly to Melville North Landfill and thus eliminate any confusion to the reader.

*Response: Section 1.0 (Introduction) of the Melville North Landfill RI/FS Work Plan will be revised to note that this plan has been developed for the Melville North Landfill site.*

#### **2. General Comment**

Sections of the work plan such as History of NETC (Vol. I, Sec. 2.1) and Regional Physiography (Vol. I, Sec. 2.2) should be updated to include historical information which brings the reader to 1992.

*Response: Noted, additional available NETC history will be added to Section 2.1. The regional physiography of NETC Newport has not changed significantly (e.g., in a manner which would impact the Phase II RI/FS) since issuance of the Draft Work Plan. Thus no changes will be made to Section 2.1 of Volume I.*

#### **3. General Comment**

Please explain why sediment sampling is not addressed in this workplan. The Division recommends collecting additional sediment samples from the wetland in the northern portion of the site as well as surface soil samples from the shoreline at the site. In addition, although not stated it is assumed that leachate outbreaks will be sampled during Phase II activities.

*Response: Additional sediment samples will be collected from the wet area immediately north of the site and site shoreline. The location and number of these sediment samples will be discussed with RIDEM prior to collection. There are no known leachate springs at this site. However, if any are observed, these locations will be sampled during Phase II sampling activities.*

**4. General Comment**

The Work Plan has failed to include topographic maps of the sites. These maps should be included in the report as they are necessary for the evaluation of proposed sample locations (for example, surface soil sampling points).

*Response: Noted. A Figure will be added to the Final Work Plan which will indicate topographic relief (5-foot contours) at the site.*

**5. General Comment**

The scale of the figures in the Phase II Work Plan does not correspond to the scale employed in the Phase I RI. All subsequent figures should employ the scale used in the Phase I RI, (ie, figures used in the Phase II RI and the FS).

*Response: The scale of the figures in the Draft Phase II Work Plan are the same as those presented in the Phase I RI report; however the figures may not overlay exactly as a result of slight reproduction differences. Greater care will be taken in subsequent reports to reproduce site maps having the same scale.*

**6. General Comment**

The sample location rationale provides valuable information concerning the proposed location of sampling. However, in a number of cases, additional justification is warranted for the proposed sample locations points.

*Response: During the revision of the draft Work Plan some of the sample location rationale explanations will be modified. However, specification of those specific locations requiring additional justification is requested.*

**7. General Comment**

The State would consider proposals to investigate offsite or onsite soil or groundwater contamination with microwells.

*Response: The Navy plans to install additional permanent ground water monitoring wells to further investigate ground water conditions at the Melville North Landfill.*

**8. General Comment**

The PREVIOUS SITE INVESTIGATIONS - Soil Assessment sections of the report provide detailed discussions of soil contamination at each of the sites. For completeness, and if significant, the report should distinguish between surface soil and subsurface soil contamination.

*Response: Noted. The requested modification will be made to the final Work Plan.*

**9. General Comment**

The PREVIOUS SITE INVESTIGATIONS - Soil Assessment sections of the report address the IAS and CS carried out at each site. For completeness the Work Plan should comment on the sediment and mussel study carried out by the Army Corp of Engineers at the site. The Work Plan should also note any differences in the collection or analysis methods carried out during the Army Corp of Engineers Investigation and the investigation carried out during Phase I activities.

In addition, significantly higher concentrations of contaminants were observed in the samples collected by the Army Corp of Engineers compared to the samples collected during the Phase I Investigations. The basis for this disparity must be ascertained prior to the collection of sediment samples from the sites.

*Response: Available information concerning any Army Corps of Engineers sampling at or near the site will be added to the revised Work Plan.*

**10. General Comment**

In the RECONNAISSANCE SURVEYS sections for each of the sites, it is stated that "Prior to initiating sampling activities a site walkover will be conducted by field investigative team members to familiarize themselves with current site conditions."

In order to minimize the effects of vegetative cover, site reconnaissance surveys should be conducted in the spring. In addition, it is assumed that RIDEM will receive a schedule of field activities.

*Response: Noted. An attempt will be made to conduct the initial reconnaissance surveys during the Spring; however, the actual initiation of the field investigation activities is dependant upon finalization of the Phase II Work Plan and award of the Phase II investigation activities.*

**11. General Comment**

In the Geophysical Surveys section of the specific site sampling plans, the planned locations of EM, magnetometer and seismic surveys are discussed. The Work Plan should include figures depicting the specific locations for these geophysical surveys as they will be applied to each site.

*Response: Noted. These figures will be added to the Final Work Plan. However, the scope (location) of the seismic survey will be determined in the field with geophysical contractors prior to the surveys. The actual proposed scope of the planned seismic survey will be discussed with the EPA and RIDEM prior to initiation of this survey.*

**12. General Comment**

The Waste Pits (fenced in area in the northern portion of the site) identified in the Initial Assessment Study and the Confirmation Study were not investigated during Phase I activities carried out at the site. The Phase II Sampling Plan has also failed to address this area. This area must be investigated during Phase II activities. This investigation should at a minimum include surface and subsurface soil samples, waste pit samples and monitoring wells.

*Response: A total of nine environmental samples are planned to be collected and analyzed from within the former "waste pile" area of the site. These samples include three surface soil samples (SS-25, SS-26 and SS-27) and six soil boring samples (@ B-20 and MW-8(S)). It is believed that this sampling program is adequate to achieve project objectives. It is expected that the waste soil piles will be removed prior to the Phase II sampling. Thus, these samples are planned to document the soil quality in that area of the site.*

**13. General Comment**

The Phase I report and the Phase II Work Plan have failed to address the "oily tar" deposits found on the site. All data concerning these deposits must be included in the report. Additional sampling of these deposits may be required to fully characterize the deposits. Finally, the location of these deposits should be depicted on a map.

*Response: Noted. A figure will be added to the final Work Plan which will identify the approximate location of the "oily tar" deposits at the site. A total of 11 environmental samples are planned to further characterize this area in the final Work Plan. These samples include two surface soil samples (SS-22 and SS-23) and nine soil boring samples (@B-14, B-15, and MW-7(S)).*

**14. General Comment**

The report should note that TCLP analysis may be required for certain samples or sample locations.

*Response: Analysis for TCLP parameters is not planned at this stage of the investigation. TCLP testing is more appropriately conducted to characterize soils prior to off-site removal and disposal.*

**BACKGROUND INVESTIGATION REPORT**

**15. Volume I, Page 1-1,1-2:  
Section 1.0, Paragraph 3**

Remove the following sentences because the Navy has stated that no land is being exceeded.

- a. "The only RI/FS ... is the Old Fire Fighting Training Area".
- b. "The final sale ... results of the IR program".

*Response: Noted. The requested modification will be made in the Final Work Plan.*

**16. Volume I, Page 2-11:  
Section 2.2, Paragraph 5**

Blue and Gold Sea Farms has been inactive for approximately 6-10 years due to financial problems brought on by weather damage. Please update the document.

*Response: Noted. The requested modification will be made in the Final Work Plan.*

**17. Volume I, Page 2-3:  
Section 2.1, Paragraph 8**

The status of the 44 acre parcel in Coddington Cove should be updated in future documents to reflect the current status.

*Response: Noted. The requested modification will be made in the Final Work Plan.*

**18. Volume I, Page 2-8:  
Section 2.2.3, Paragraph 4**

The document should state if sediment samples were taken during the Confirmation Study.

*Response: The Draft Work Plan notes that sediment sampling was conducted during the IAS in Section 2.3.*

**19. Volume I, Page 2-11  
Section 2.2.3, Paragraph 5**

Please note for future reference that Blue and Gold Seafarms has been out of business since approximately 1985.

*Response: As noted in Comment response No. 16, the requested modification will be made in the Final Work Plan.*

**20. Volume I, Page 2-17  
Section 2.4.3**

It is our understanding that the Newport Water Department has connections to obtain water via Tiverton and Fall River reservoirs. Please clarify.

*Response: Noted. The requested clarification will be made in the Final Work Plan.*

**21. Volume I, Page 2-17:  
Section 2.4.3, Paragraph 1**

"While no specific records exist as to private well use in the information reviewed, in general, the majority of private wells are reportedly located on the eastern portion of Aquidneck Island (Personal Communication, Town of Portsmouth, 1992)."

The location of areas not serviced by public water may be obtained from RIGIS water main maps or from local Public Works water main maps. This information may be used to identify targets in the Phase II Risk Assessment Report.

*Response: Noted. These sources will be reviewed and used in the final RI Risk Assessment.*

**22. Volume I, Page 3-1:  
Section 3.1**

- a. Please insert the approximate time frame for disposal activities at Melville North Landfill.
- b. The Department has on record from past State Health Department records that shellfish closure along NETC shoreline dates back to 1939.

*Response: The only available information on the time period for disposal at the Melville North landfill was presented in the Initial Assessment Study (IAS). This report indicated that disposal occurred at the landfill from approximately WW II (early 1940's) until 1955.*

*The second comment is noted and the text of this portion of the Work Plan will be modified accordingly.*

**23. Volume I, Table 1: Summary of NETC Waste Sites**

The Division does not believe these tables are necessary in this document. However, if the tables are to remain, please update the information for each site status. (ex.) SASE sites, USACOE sites, NETC NPL RI sites, etc.

*Response: The tables will remain to provide an overview of NETC hazardous waste site activity as well as to maintain consistency with other similar RI/FS Work Plans conducted at NETC. These tables will be updated.*

**24. Volume I, Table 1: Summary of NETC Waste Sites**

Please clarify the location described as "located in Midway".

*Response: Noted. The requested clarification will be made in the Final Work Plan.*

**25. Volume I, Table 2: Status of NETC Waste Sites**

- a. Sites # 3, 5, 6, 15 and 16 will also be investigated by the ACE in addition to #14.
- b. The last site listed #18 is a duplicate. Please remove.
- c. Please explain reference #4. Navy previously stated no land was to be excised.
- d. Reference #5 - Site 17 is on Navy land. The State of R.I. owns the southern half.

*Response: Noted. The requested clarifications will be made in the Final Work Plan.*

**26. Volume 1, Figure 3**

This surface water data was obtained from a 1983 IAS Report. This data should be updated to reference more recent classifications (September, 1988).

*Response: It is our understanding that the September 1988 modifications to surface water quality classifications within Narragansett Bay are available only within a text form, no map is available. The Final Work Plan will be modified to include the text of the September 1988 Surface Water Classifications, however, the existing figure will remain unless RIDEM can provide more recent maps.*

**PROJECT PLAN**

**27. Volume II, Page 2-1:  
Section 2.1, Paragraph 1**

The analytical results for the dioxin and furan analysis performed at the site were not reported in the Phase I Report or the Phase II Work Plan. The State did receive preliminary results for these test during the December 1992 Project Manager Review Meeting. The Navy will receive comments concerning these results as well as potential requirements for additional sampling under a separate letter to be posted at a latter date.

*Response: Noted.*

## FIELD SAMPLING PLAN

**28. Volume III, Page 2-2:  
Section 3.4, Paragraph 1**

"Activity on the site dates back to 1951, where lagoons and a structure which could be a building or tank are visible on the site. Areas of ponded water are visible at various locations throughout the site from 1951 until 1975. In an undated photo estimated to have been taken between 1970 and 1975, two obviously man-made impoundments are visible along the northern spur access road (see Figure 1-3)."

Please indicate the abovementioned features, as well as other pertinent features, (oily piles, tar deposits, fenced waste pits etc) on the appropriate figure(s). In addition, if available the report should delineate the areas of the bay or wetlands which have been filled in.

*Response: Noted. A figure(s) will be added to the Final Work Plan which will define, to the accuracy implied by the sources (aerial photographs) and methods used, the location of site features which could impact site contaminant distribution.*

**29. Volume III, Page 3-2:  
Section 3.4, Paragraph 1**

"The soil gas survey will be conducted on the 25 foot concentric grid pattern around Phase I well nests MW-3 and MW-4." It is estimated that approximately fifteen (15) soil gas points will be sampled around each well nest.

The above would seem to indicate that fifteen soil gas sampling points will be installed along a twenty five foot radius from the wells. The report should note whether information from the soil gas survey will be used to optimize the location of Phase II monitoring wells 10, 11, 12 and 13 which are proposed to be located 60-100 feet from Phase I MW-3 and MW-4.

Please explain more thoroughly the 25 foot concentric grid pattern to be implemented.

- a. Is this 4-25 foot intervals out to 100 feet with 15 soil gas points within each ?
- b. Or is this just one 25 foot interval around each "hot spot" with 15 soil gas points within the pattern ?

*Response: The Final Work Plan will be modified to indicate that a series of soil gas points (approximately 5 to 7) will be completed within a ten foot radius of the well. A second series of soil gas points (approximately 8 to 10) will then be completed within a 25 foot radius of the well. In addition, the results from the soil gas survey will be used to the extent practicable to assess the planned locations of site borings and monitoring wells.*

30. **Volume III, Page 3-2:  
Section 3.4, Paragraph 1**

"The soil gas survey will be conducted on the 25 foot concentric grid pattern around Phase I well nests MW-3 and MW-4."

Sufficient information has been gathered from the Phase I RI report to meet the criteria presented in Sec. 3.2 of Appendix B for determining soil gas sampling depths. Specifically, in Sec. 3.2 of Appendix B it is stated that "The sampling depth will be determined by evaluating the depth to water, potential contamination sources and overburden material." Therefore the Work Plan should indicate the proposed sampling depth for the soil gas survey. The State recommends that, if possible, a minimum of two soil gas samples should be taken at each sample location. The first sample should be collected near the surface to investigate subsurface contamination. The second sample should be collected within five feet of the water table in order to investigate groundwater contamination.

*Response: The Final Work Plan will be modified to note that in general, as site specific conditions allow, two soil gas samples will be collected per sample location. The first sample will be collected near the surface and the second sample will be collected within approximately five feet of the water table. However, if less than six feet of vadose zone material is present, a single soil gas sample will be collected from the mid point of the unsaturated zone.*

**31. Volume III, Page 3-2:  
Section 3.4, Paragraph 1**

"As is necessary, additional soil gas survey points will be completed around points indicating elevated concentration of soil gas to locate "hot spots"."

A soil gas survey over the entire site would optimize the location of proposed monitoring wells and borings and identify "hot spots" in areas away from MW 3 and MW 4. At a minimum the soil gas survey should be extended to include the test pit area, the area in the vicinity of boring B-12 and potentially the oil soak pile area.

*Response: The findings of the Phase I RI indicate the two primary areas of subsurface soil VOC contamination to be around monitoring wells MW-3 and MW-4. The test pit areas and boring B-12 are located in the areas of MW-3 which is being investigated. The "oil-soaked pile area" is being investigated with borings and wells.*

**32. Volume III, Page 3-2:  
Section 3.5.1, Paragraphs 1 and 2**

"Surface soil samples will be collected from eight (8) locations on the site. The planned locations of the surface soil samples are shown on Figure 6... In addition, two (2) 'background' surface soil samples will be collected from two locations east of the site across Defense Highway."

Figure 6 shows ten (10) surface soil sample locations on the site, and two (2) 'background' surface soil samples. Please explain this discrepancy. Also, the surface sampling numbering system is not in sequence. Surface samples SS-21 and SS-26 are missing from the plan. Finally, the report should indicate that in the absence of visible signs of contamination a OVA readings will be taken in the proposed surface soil locations prior to the collection of the surface soil sample.

*Response: The Final Work Plan will be revised and clarifications added as requested. The requested OVA/Hnu readings will be added to the Work Plan.*

**33. Volume III, Page 3-3:  
Section 3.5.2, Paragraphs 1 and 2**

"Split spoon samples will be screened with an OVA and Hnu immediately upon being opened."

In order to optimize sample selection for laboratory analysis the following procedures should be employed for all split spoon samples:

The samples chosen for analytical analysis should be based on field observations as well as headspace readings. Two samples should be collected for each split spoon and a headspace analysis run on one of the samples collected. The other sample should be held for possible laboratory analysis. The Division is confident that the implementation of the above headspace procedure will not significantly increase project expense or cause any appreciable project delays.

*Response: Modification of soil sample screening procedures is not planned in Phase II. It is believed that the planned visual inspections and OVA/HNu screenings of the split spoons provides sufficient information for selecting representative soil samples for laboratory analysis. In general, soil quality within even a single split spoon is variable and collection of two duplicate samples (one for screening, one for analysis) from the same spoon is often difficult to achieve given the limitations posed by low recoveries, the presence of "wash material" at the top of the spoon, and the non-homogeneity of the soil in the spoon. The surface soil samples will be analyzed at an EPA Contract Laboratory Program laboratory according to established EPA protocols.*

**34. Volume III, Page 3-4:  
Section 3.5.2, Paragraph 2**

"If signs of potential contamination (e.g., oil, stains, odors) are observed in a boring, a third sample will also be collected from the depth of greatest observed contamination (i.e., most oily, highest OVA/Hnu readings)."

The maximum number of samples to be collected will be determined by field observations. Therefore the above should be modified as follows: If signs of potential contamination (e.g., oil, stains, odors) are observed in a boring, additional samples will be collected from the depth of observed contamination (i.e., oily deposits, high OVA/Hnu readings).

*Response: Given the limited unsaturated zone, and shallow fill depths present at the Melville North Landfill, the collection of more than three samples per location is not anticipated. However, should observed conditions warrant, additional soil samples will be collected for potential laboratory analysis.*

**35. Volume III, Page 3-4:  
Section 3.5.2, Paragraph 2**

"Only the surface interval (0 to 1 foot) sample will be collected for analysis at the three off-site well boring locations."

The report has failed to justify the above deviation from the soil boring sampling scheme (i.e. sample limitation to the 0-1 foot interval). The offsite well borings are designed to address potential offsite contamination. Therefore, the criteria employed for the onsite borings should be used at offsite boring locations.

*Response: The wells are planned to assess upgradient ground water conditions and quality. The surface interval soil samples are planned to provide additional background soil quality information.*

**36. Volume III, Page 3-7:**

This is a duplicate page.

*Response: Noted.*

**37. Volume III, Page 4-1:**

This is a duplicate page.

*Response: Noted.*

**38. Volume III, Table 1: Site 02 - Melville North Landfill Site Investigation Summary**

The scope of work and number of samples for the surface soil activity indicates ten (10) locations. Figure 6 shows twelve (12) locations. Please clarify.

*Response: Samples numbers and locations will be reviewed and corrected as necessary in the Final Work Plan.*

**39. Volume III, Table 1: Site 02 - Melville North Landfill Site Investigation Summary**

This table contains a column entitled "Number of Samples". The exact number of soils gas samples, subsurface samples and groundwater samples has not been finalized and will be affected by field observations (i.e., additional soil gas sampling of recommended areas and potential sampling of "hot spots"; potential for more than three subsurface soil samples; potential for collection of nonaqueous phase liquids, and the possible collection of leachate outbreaks samples). Therefore the report should note that the column refers to the minimum number of samples to be taken.

*Response: Noted. Table 1 will be revised in the Final Work Plan and in some cases (soil gas sample borings) the table will provide a range of anticipated sample numbers.*

**40. Volume III, Table 2: Site 2 - Melville North Landfill Surface Soil Location/Rationale**

Please explain if SS-19, SS-22 and SS-23 are located within areas previously identified as PCB contaminated. If so, the locations should be extended outward so as to define the extent of PCB contamination as stated in the rationale scheme.

*Response: Surface soil samples SS-19, SS-22 and SS-23 are planned at the suspected edges of the areas identified as contaminated with PCBs above 1 ppm (Figure 4-17 Phase I RI).*

**41. Volume III, Table 2: Site 2 - Melville North Landfill Surface Soil Location/Rationale**

"SS-19	Determine extent of PCB contamination of surface soils in the northern end of Site 02.
SS-22	Determine extent of PCB contamination of surface soils in the northern end of Site 02."
SS-23	Determine extent of PCB contamination of surface soils in the northern end of Site 02."

Boring B-17, B-18 and SS-19 are proposed to be located within twenty to sixty feet of Phase I SS-2 and each other. Additional justification is requested for the intensified sampling in this area. The Division recommends moving SS-19 to another location in the site.

Surface soil sample SS-22 is proposed to be located within thirty feet of B-15. The Division recommends moving this sample to a different location in the site.

Surface soil sample 23 is proposed to be located in the immediate vicinity of MW-7S. The Division recommends moving this sample to a different location in the site.

*Response: The rationale for these samples and borings is provided in Tables 2 and 3 of the Work Plan. As stated on these tables, the samples are planned to further investigate the PCB soil contamination detected at this site.*

**42. Volume III, Table 2: Melville North Landfill Surface Soil Location/Rationale**

Sampling location Rationale for SS-28, SS-29 has not been included in the table.

*Response: The rationale for collection of surface soil samples SS-28 and SS-29; further characterize surface soil quality along the western edge of the site, will be added to the Final Work Plan.*

**APPENDIX B: FIELD SAMPLING METHODOLOGY PLAN**

**43. Appendix B, Page 1:  
Section 1.1, Paragraph 2**

In the first sentence, the word "preforming" should be changed to "performing."

In the second sentence, the word "preformed" should be changed to "performed."

*Response: Noted.*

**44. Appendix B, Page 8:**

- a. The "3.0" in the section heading should be "4.0".
- b. Surface soil samples should be taken from 0-12" depth.

*Response: Noted.*

**45. Appendix B, Page 8:  
Section 4.2, Paragraph 3**

"Soil samples to be analyzed for VOCs will be collected from a depth of at least six inches below ground surface."

The Division recommends that the following be added to the above. In the absence of obvious signs of contamination composite soil samples will be taken from each soil sample area.

*Response: Composite surface soil samples are not planned for this site. The discrete samples are intended to provide the information necessary to assess the soil quality at the planned sample locations.*

**46. Appendix B, Page 8:  
Section 4.2, Paragraph 3**

"Soil samples to be analyzed for VOCs will be collected from depth of at least six inches below the ground surface."

The vast majority of surface soil samples collected during the Phase I RI were non detect for VOCs or contained low levels of VOCs. The State recommends collecting the soil samples at a greater depth. The Navy may want to consider the use of an appropriate field GC for VOC analysis (Field GC capable of detecting VOC in the low ppb range).

*Response: "Surface soil samples" which will be analyzed for VOCs will be collected as described in Appendix B of the Work Plan. Although surface soil samples will be screened with an OVA or HNu as described in response to Comment #33, the surface soil samples will be analyzed at an EPA Contract Laboratory Program laboratory according to established EPA protocols.*

**47. Appendix B, Page 10:  
Section 5.2, Paragraph 3**

"Split spoon samples will be monitored for the presence of total VOC vapors with a flame or photoionization detector."

The report should elaborate on the procedure to be employed to detect VOCs in the split spoon samples (ie, samples placed in jars for headspace analysis, etc).

*Response: Upon opening, each split spoon soil sample will be immediately screened with an organic vapor analyzer/detector. As discussed previously, headspace readings are not planned for the soil samples.*

**48. Appendix B, Page 12:  
Section 6.2, Paragraph 4**

"Soil samples to be submitted for laboratory analysis will be transferred directly from the split spoon to the sample container with a dedicated decontaminated stainless-steel spoon."

The report should note the criteria to be employed for determining which samples will be sent to the laboratory, ie field observations, odors, readings obtained with the VOC detector, etc.

*Response:* Appendix B provides the general field sampling protocols and standard operating procedures. The site-specific criteria used for determining which samples to send for laboratory analysis is presented in the site-specific Field Sampling Plan provided as Volume III of the Work Plan. As presented in this plan, and consistent with the Phase I RI, such typical criteria includes signs of potential contamination (e.g., oil, stains, odors, field instrument readings), depth of water table, depth of bedrock, depth of fill, etc.

**49. Appendix B, Page 12:  
Section 6.2, Paragraph 1**

This section of the report describes the procedures to be employed during the construction of overburden wells.

The report should also outline the procedures to be employed during the installation of bedrock wells.

*Response:* The procedures and a figure presenting the construction details for the bedrock wells will be added to the revised Work Plan.

**50. Appendix B, Page 13:  
Section 6.3, Paragraph 5**

This section of the report should be modified to meet requirements of the State of Rhode Island Groundwater Regulations. The necessary modifications include but are not limited to the following:

Threaded or press joints only on PVC pipe (no glued joints), all joints shall be fitted with an "O" ring or wrapped with teflon tape.

The well screen slot size shall retain at least 90% of the grain size of a filter pack. A bottom cap and a sump sediment trap shall be installed.

The ground surface seal shall extend to a minimum of 40 inches below the land surface and shall be flared such that the diameter at the top is greater than the diameter at the bottom. The top of the ground surface seal shall be sloped away from the well casing and shall be imprinted with the designation of the monitoring well.

*Response: The above-listed modifications will be added to the revised Work Plan. To ensure that all necessary corrections are made in the final Work Plan, please provide us with a list of any other such well construction details modifications.*

**51. Appendix B, Page 15:  
Section 6.4, Paragraph 1**

"Development will continue until Ph, temperature and specific conductance have stabilized and turbidity is < 10 NTU or has stabilize to + or - 10 % on successive well volumes."

The following should be modified as follows:

Development will continue until Ph, temperature and specific conductance have stabilized and turbidity is < 10 NTU. If the 10 NTU criteria is not achievable, the Parties will determine if a turbidity standard of + or - 10 % of successive well volumes is appropriate on a case by case basis.

*Response: Noted. The above modification will be added to the Final Work Plan.*

**52. Appendix B, Page 15:  
Section 6.4, Paragraph 1**

"Development will continue until Ph, temperature and specific conductance have stabilized and turbidity is < 10 NTU or has stabilize to + or - 10 % on successive well volumes."

The State recommends that: All Phase I monitoring wells will be checked to determine if the wells meet the 10 NTU turbidity criteria. Wells which do not meet this criteria should be redeveloped.

*Response: At the time of the development of the Phase II wells, the turbidity of the ground water in the Phase I wells will be checked. Phase I wells will be redeveloped, as necessary, according to the above-stated criteria, or previously accepted well-specific NTU levels.*

**53. Appendix B, Page 15:  
Section 6.5, Paragraph 2**

"Additionally, at those sites where the presence of a non-aqueous phase liquid (NAPL) is anticipated due to previous site information or as potentially indicated by test or monitoring well boring observation, the presence of NAPLs will be assessed (e.g. the thickness of the NAPL will be determined) prior to sampling with an oil/water interface probe."

The Division recommends the following:

Prior to taking water level measurements a head space readings should be collected and recorded for each well using a Hnu or an OVA.

An oil/water interface probe should be used at all well independent of site history. The use of an oil/water interface probe in lieu of an electronic water sensing device will not generate any appreciable delays or cost in sampling the wells.

NAPLs detected in the wells should be sampled prior to well purging.

*Response: As recommended, headspace readings will be measured from the casing of each well just prior to obtaining water level measurements before purging.*

*Oil/water interface probe measurements are not planned at wells observed to be clean during drilling, installation, and development. Examples of such wells include off-site or background wells. Given that oil/water probes have inherently been used to measure petroleum product, it is not good practice to routinely introduce such a probe*

*into a well which could be clean. Although the probes are decontaminated prior to and after each use, there is still a greater potential for introducing low-level organic contamination into a well from oil/water probe. If a NAPL is present in a well, its presence will be identified during either drilling, well installation, development, purging, water level measurements, and/or well headspace measurements. After such identification or if a NAPL is previously known to be present in a well, an oil/water interface probe would then be used in the well.*

*NAPLs known to exist in a well prior to purging, will be sampled prior to purging, if possible.*

**54. Appendix B, Page 15,  
Section 6.5, Paragraph 1.**

"Prior to the initiation of sampling activities, the water level of each monitoring well will be measured to the nearest 0.01 ft with an electronic water sensing device and recorded in a field notebook."

During Phase I activities at McAllister Point Landfill significant tidal influences were observed in bedrock wells at the site. Bedrock wells will be installed at Melville North Landfill during the Phase II investigation. Continuous water and potentially seasonally water level measurements should be employed at the site to monitor tidal influences.

*Response: Noted. The Final Work Plan will be modified to incorporate a continuous water level measurement program at three monitoring well nests (MW-6S/R, MW-10S/R, and MW-13S/R). Water levels will be measured in these wells once per hour for a three month period.*

**APPENDIX C: HEALTH AND SAFETY PLAN**

No comments.

**APPENDIX D: QUALITY ASSURANCE PROJECT PLAN**

No comments.

**APPENDIX E: INVESTIGATION DERIVED WASTE PLAN**

No comments.

*Response: Noted.*

**DATA EVALUATION AND ASSESSMENT PLAN**

**55. Volume IV, Page 3-2:  
Section 3.4, Paragraph 1**

This section outlines the format to be used concerning the extent of contamination at the sites. The State recommends that figures be included which depict the concentrations of contaminants (total VOC, SVOC etc.) at each sample point.

*Response: As in the Phase I RI report, where possible, figures which aid in presenting the detected contamination will be developed for each of the sites. However, given the extensive number of samples and typical amount of analytical data, it is not always feasible to present sample specific data for all media and sample location on figures.*

**56. Volume IV, Table 1: Planned Format For RI Report For NETC-Newport**

Please change the heading to relate to this site investigation.

*Response: Noted.*

**RISK ASSESSMENT PLAN - HUMAN HEALTH EVALUATION**

**57.** Due to the recent submittal of the dioxin and furan analytical results comments concerning the risk assessment will be submitted under a separate cover letter at a latter date.

*Response: Noted.*

**RISK ASSESSMENT PLAN - ECOLOGICAL EVALUATION**

**58. Volume VI, Page 1:  
Section 1.0**

The information presented in this section of the reports indicates that field activities carried out for the ecological risk assessment will consist of a qualitative review of wildlife in the area and the collection of sediment and water samples. Activities of this nature are routinely carried out during Phase I investigations. Therefore, the Work Plan should stipulate that, if required, additional bioassay, bioassessments etc will be carried out at the site prior to the completion of the ecological risk assessment. RIDEM will review any proposals concerning the necessity of said studies.

In addition, since these basic activities were not carried out during Phase I investigations, an interim deliverable should be generated which will include at a minimum, indicator species, exposure scenarios, end points etc. This deliverable must be generated prior to risk assessment calculations.

The State is aware that the offshore sediment and biota sampling will be posted under a separate Work Plan. These analysis are an integral part of an ecological risk assessment. Therefore the State must receive this Work Plan prior to the Spring/Summer sampling window.

*Response: Prior to development of the draft risk assessment Work Plan available information on the site was reviewed and evaluated. Results of this evaluation were used as the basis for preparation of the Work Plan. Inclusion of bioassays, bioassessments were not considered appropriate given our understanding of site conditions. Should information become available which would indicate bioassays or bioassessments would be appropriate these topics will be discussed with EPA and RIDEM prior to implementation.*

*The offshore sediment and biota sampling Work Plan will be presented to RIDEM prior for review and comment prior to initiation of sampling activities.*

**59. Volume VI, Page 4:  
Section 2.0, Paragraph 2**

Remove "to the State of R.I." or clarify who the land was distributed to.

*Response: Noted. The requested modification will be made to the Final Work Plan.*

**60. Volume VI, Page 9:  
Section 3.2.1**

Please explain the status of the proposed "offshore sampling."

*Response: The off-shore sampling is planned for summer/fall 1993. As soon as a more definitive date for this sampling is established, RIDEM will be notified.*

**61. Volume VI, Page 38  
Section 7.2, Paragraph 2**

"This analysis will use information generated from the Exposure and Ecological Effects Assessments and will rely upon the Toxicity Quotient approach as well as on direct observation of conditions in the field to provide an overall weight of evidence concerning the nature of risk."

Information gathered during the Phase I investigations indicates that surficial contamination is present at the sites (Ex McAllister Point Landfill). The report should indicate why quantitative studies, such as bioaccumulation analysis of mammal or invertebrate tissue were not proposed for these sites.

*Response: Bioaccumulation studies are viewed as second tier studies (following the tiered approach to ecological risk assessment developed by EPA in Region 9 studies). Should the initial analysis indicate that such data is necessary to assess risk especially in terms of guidance for remediation, such recommendations will be made in the risk assessment report.*

**TREATABILITY STUDY AND FEASIBILITY STUDY PLAN**

**62. Volume VIII, Page 2-1:  
Section 2.0, Paragraph 3**

The Division reminds the Navy that although "no chemical specific ARAR's have been identified" various other criteria including background levels, ground water classification, proximity to surface water bodies, Phase I RI data and RA data as well as Phase II RI data and RA data will be reviewed in determining if soil remediation is warranted. Also, other ARAR's may be come involved such as Solid Waste regulations.

*Response: Noted. This general information will be added to Section 2.0 of Volume VIII of the Work Plan.*

**63. Volume VIII, Page 3-6:  
Section 3.3.1**

Please explain where the Private Ownership acceptance will be considered in this case.

*Response: Potential future private ownership of the site will be addressed through an evaluation of long-term effectiveness and permanence, reduction of contaminant toxicity, mobility, and volume (TMV), and short-term effectiveness and implementability.*

**64. Volume VIII, Page 3-8:  
Section 3.3.3**

Please insert descriptive paragraphs concerning State and Community acceptance.

*Response: Noted. The requested modification will be made to the Final Work Plan.*

**65. Volume III, Page 3-2:  
Section 3.5.1, Paragraph 1.**

These samples will be collected from the following general locations: Around areas of documented Phase I soil contamination, surface soil areas not sampled in Phase I, and the site boundaries.

*Response: The stated sentence is exactly as is presented in the draft Work Plan. Thus no changes will be made to address this comment.*

**66. Volume III, Table 3: Melville North Landfill Test Boring Location Rationale**

B-24 Determine the extent of soil contamination in the south central portion of the Site 02.

B-25 Determine the extent of soil contamination in the south central portion of the Site 02.

The final location for the above borings and the three additional monitoring wells to be installed in this area will be determined by the results of the soil gas survey. Depending upon the results of the soil gas survey, the Division would consider proposals to locate these borings to different locations at the site.

*Response: Noted.*

**67. Appendix B, Page 8:  
Section 4.2, Paragraph 3.**

"Surface soil samples will be collected directly with a stainless steel spoon."

The Division recommends adding the following to the above.

As warranted (areas of visual surface contamination etc.) a composite surface soil sample will be collected.

*Response: As stated in the response to comment No. 45, composite surface soil samples are not planned within Phase II RI sampling activities.*