RESPONSE TO EPA COMMENTS ON DRAFT DECISION DOCUMENT FOR RIA 55B FORMER SOUTH WEYMOUTH NAVAL AIR STATION MAY 16, 2001

General Comments

1. *The selection of ecological COPCs in surface soil, surface water, and sediments is sound and uses appropriate screening benchmarks.*

Noted.

2. *To fully evaluate the risks at RIA 55B, some aspects of the report should be enhanced and clarified:*

   - *The figures provided in the document do not show the originally proposed RIA 55 area, or the subdivided areas 55A and 55B. The text also lacks a description of how RIA 55B is subdivided from the original 65 acres included in RIA 55. It is not clear how the samples identified in the work plan are divided between 55A and 55B. Finally, an acreage estimate of 55B is not provided. This information is needed to verify the adequacy of the sampling conducted compared to the work plan.*

   A site walk is planned with the regulators to address this issue. The information obtained and conclusions drawn will be added to the Decision Document.

   - *The figures lack virtually all the features mentioned in the text including: French Stream, Perimeter Road and the Radio Transmitter Building (Building No. 78). These features should be included and clearly labeled on Figures 1 and 2. The location of RIA 55A should also be shown.*

   Agreed. Figures will be enhanced.

   - *Without a clear description in the text and the figures of the locations, areas, and connectedness of wetlands on the site, the adequacy of sampling in wetlands cannot be determined. The work plan proposed sampling a feeder swale to French's Stream, but this sample (SD15-030) was not collected, as noted on Page 5. Please explain why this sample was not collected. Presumably, the sample in the feeder swale was proposed to provide information on potential migration of chemicals into the stream. It is unclear that results from the substituted locations (SD15-11 and SD15-12) provide the same information. It is agreed, as stated on Page 16, that further sampling is required at this RIA. Further sampling should address this potential data gap.*

   A swampy area within RIA 55B that contained tires and other trash was sampled in place of the swale located near French Stream. The work plan targeted the swale for sampling because it was down gradient of RIA 55B and COPCs in surface water would presumably collect there. Because the swampy area was observed to have obvious signs of contamination prior to sampling, including a sewage / swamp gas odor, in contrast to the swale area which did not did not exhibit similar signs of contamination, the field team

decided to relocate the sediment and surface water samples to the swampy area. This information will be added to the Decision Document. The Navy notes that the signs of contamination that prompted the sample location change were present during 2 subsequent site walkovers at RIA 55B, including the October 15, 1998 walkover with DEP and EPA. The RIA 55B Work Plan will address additional sampling requirements.

Specific Comments

1. *Page 11, Section 4.1.3: The paragraph following the table of analytes whose laboratory reporting limit exceeds the human health benchmark states, "All these QAPP-identified analytes were found to be non-detect at reporting limits in samples MW15-021, MW15-022, MW15-024, MW15-027, MW15-028, and MW15-029." The phrase "non-detect at reporting limits" is somewhat ambiguous, in that it could be taken to mean that these analytes were not detected in the analyses. However, it appears that it is intended to mean that the analytes were not detected at or above the reporting limits. This would include cases in which the method detection limit achieved in a particular analysis was lower than the laboratory reporting limit, and where the analyte was actually detected, but at a concentration below the reporting limit. An example is arsenic in MW15-029, which was detected at 2.7 J µg/L (previous table, p. 10), below the reporting limit, below the MDL (3.1 µg/L), and above the human health benchmark (0.045 ug/L). Please clarify.*

Agreed. The text will be clarified.

2. *Page 6, Section 3.0: Several of the conclusions made in the text of this section need to be further supported. For example, if a compound is rejected due MS/MSD recoveries it is likely that this compound will not be detected in any samples most likely because of matrix interference, not because the compound is not present. The accuracy (and possibly the precision have been affected). The LCS recovery for this compound will help to determine if it is more likely to be matrix interference or a sensitivity problem. If the LCS is also low for this compound then the sensitivity of the instrument for this compound has been affected. Either way, there is a potential data gap.*

The Navy notes that 3,3' dichlorobenzidine was not detected in other surface soil samples from RIA 55B, including surface soil samples not associated with the MS/MSD study performed on sample SS15-016. This analyte was successfully reported to concentrations below benchmark in these samples. The LSC associated with sample SS15-016 was within validation requirements for 3,3' dichlorobenzidine.

When a LCS has 0 percent recovery for a compound (a LCS should be free of any matrix effects), it should come as no surprise that there would not be any detections of that compound for the samples associated with that LCS. Again, the sensitivity of the instrument for that compound has changed significantly.

The Navy notes that 4,6 dinitro-2-methylphenol was not detected in other, unrejected, surface soil samples from RIA 55B, and was reported to a concentration below benchmark. The LCS associated with the remaining surface soil samples from RIA 55D was within validation requirements for 4,6 dinitro-2-methylphenol.

MS/MSD recoveries for C9-C18 aliphatic hydrocarbons were also rejected, which means there is no way to determine the accuracy for these results in the groundwater samples. Without additional information, there is no way to conclude that the other groundwater samples were not also effected in the same way.

Although not detected in other groundwater samples at RIA 55B, the low percent recoveries for C9-C18 aliphatic hydrocarbons (33% / 8%) indicate that the true PQL may be 12 times higher than what is reported. The PQL reported for C9-C18 aliphatic hydrocarbons is 60 µg/L, and the GW-1 / GW-2 standard is 1000 µg/L. The Navy notes that even if the true PQL were 12 times higher than reported due to poor matrix recovery, the result would indicate that further action is not required.

The conclusions made in Section 3.0 related to analytes or compounds not considered COPCs are not supported by the text.

Text clarifying the validation status of the remaining surface soil samples at RIA 55B and the effect of the low C9-C18 aliphatic hydrocarbon recovery will be added to Section 3.0. Additional sampling issues will be addressed in the RIA 55B work plan.

3. *Page 22, Section 6.0: The second table (bottom of page) lists analytes whose detection limits exceed benchmarks and that "may cause concern at this RIA)." Does this table list only additional analytes beyond those already listed in the first table (i.e., identified by exceedances of benchmarks and/or background)? Analytes such as arsenic have detection limits well in excess of the human health benchmark concentration. Arsenic is included in the first table in Section 6.0, but not the second. The text should clarify the manner in which analytes were identified for the second table.*

Agreed. Text will be modified.