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LETTER AND THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS AND TH3E U S NAVY RESPONSE ON THE DRAFT FOCUSED FEASIBILITY STUDY SITES 1, 2, 3, AND 4 NCBC DAVISVILLE RI
11/09/2015
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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9 November 2015

Mr. Jeffrey Dale, RPM
U.S. Department of the Navy
BRAC PMO, Northeast
4911 South Broad Street
Building 679, PNBC
Philadelphia, PA 19112

RE: NCBC Sites 1, 2, 3 & 4
Draft Focused Feasibility Study
Navy Response to RIDEM 14 August 2015 Comments
Naval Construction Battalion Center
Davisville, Rhode Island
Submitted 6 November 2015, Dated 6 November 2015

Dear Mr. Dale:

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has reviewed the above referenced document and has the following comment to offer:

1. Page 1-11, Section 1.2.5.2, Fate and Transport, Paragraph 3, Sentence 1 – Please change "The average naphthalene concentration in the groundwater sample and duplicate collected from MW02-10S was 2.7 micrograms per liter (ug/l)…" to "The naphthalene concentration in groundwater collected from well MW02-10S ranged from 2.6 to 2.8 micrograms per liter (ug/l)…" RIDEM does not accept averaging of results.

   Navy Response: The text will be revised to include the range of the results.

   RIDEM Comment – Navy response is acceptable.

2. Page 1-12, Section 1.2.6, Summary of Risks, Paragraph 1, Sentence 2 – Please change "one-in-one hundred thousand" to "one-in-one million". 1×10^{-6} is one-in-one million.

   Navy Response: Agree. The text will be revised.

RIDEM Comment – Navy response is acceptable.

3. Page 1-12, Section 1.2.6, Summary of Risks, Paragraph 4, Sentence 1 – This sentence notes that there is an unacceptable risk if groundwater is used for residential purposes. In addition to the groundwater being used for residential purposes it should also be noted there would be a concern with vapor intrusion, which could also be a concern under recreational, industrial and commercial land uses.

   Navy Response: The subject paragraph summarizes the results of the human health risk assessment. The risk estimate associated with vapor intrusion is included in Appendix C, and the conclusion is that there is no unacceptable risk associated with the *shallow* groundwater via the vapor intrusion pathway. Although VOC concentrations in the intermediate and deeper groundwater exceed vapor intrusion criteria, it is the *shallow* groundwater that is most critical from a vapor intrusion pathway and site conceptual model perspective because it is the contamination in the *shallow* groundwater that migrates to the vadose zone. So while there may be a concern about vapor intrusion should the deeper contamination migrate to the shallow zone, there is no current unacceptable risk. Monitoring would also verify whether groundwater migration has created a vapor intrusion problem.

   RIDEM Comment – RIDEM agrees that currently the risk for vapor intrusion is acceptable, however, that could change over time. Whatever long term monitoring plan is developed for this site will surely include the sampling of shallow groundwater to insure the risks from vapor intrusion remain acceptable. Therefore, there is a concern with regard to vapor intrusion and this should be noted in this paragraph.

4. Page 1-13, Section 1.2.6, Summary of Risks, Paragraph 2, Sentence 1 – Please change "During the 2014 sampling event, naphthalene was detected in one well (MW02-10S) at a concentration (2.7 ug/l) greater than its USEPA tap water RSL (0.17 ug/l)." to "During the 2014 sampling event two samples (one of which was a duplicate) were collected from well MW02-10S and ranged from 2.6 to 2.8 ug/l which is greater than the USEPA tap water RSL of 0.17 ug/l." RIDEM does not accept averaging of results, see comment #1.

   Navy Response: The text will be revised to include the range of the results.

   RIDEM Comment – Navy response is acceptable.

5. Table 2-1, Federal and State Chemical Specific ARARs, Page 3 of 3 – For the RIDEM Remediation Regulations, 2011 (DEM_DSR-01-93, Section 8.02(A)(i) and Table 1 citation please also include Table 2 (Leachability Criteria) as there is a GB leachability groundwater standard for PCBs.

   Navy Response: The leachability criteria was excluded because none of the concentrations exceeded the leachability criteria. Therefore, the subject criteria will not be included.

RIDEM Comment – Exceeding or not, PCBs are a contaminate of concern. The ARAR (Table 2, referenced above) provides guidance should exceedances be found during the remedial action and/or long term monitoring phase of this site.

6. Table 2-4, Summary of RIDEM DEC Exceedances and Rule 8.10 Analysis – For Site 01 subsurface manganese under residential the "No" for meeting Rule 8.10 should be changed to "Yes" as only one sample (1-B12A-S2-2-3) of 29 exceeded the RDEC of 390 at 535 mg/kg. In addition, the Action needed column should be changed from "Yes" to "No". For residential purposes RIDEM combines surface and sub-surface soils above the water table as noted in section 8.02(A)(i)(2) of the RIDEM Remediation Regulations, 2011.

   Navy Response: The "No" is triggered because there are less than 20 samples. (There are 9 subsurface samples, not 29.) As shown on Figure 2-1 of the FFS and Table 3-12A of the HHRE, there are two samples with a manganese concentration greater than the RIDEM criterion, so more than 10% of the samples are greater than the RIDEM DEC. Regarding the second part of the comment, the analysis of the data will remain as-is because combining the surface and subsurface data sets does not affect the final conclusions and action of some type is needed at the Sites.

   RIDEM Comment – Navy response is acceptable.

7. Table 2-2, Federal and State Location Specific ARARs – Please include DEM-DSR-01-93, Section 8.08(B)(i) & (ii) Points of Compliance for Groundwater – This establishes how and where points of compliance will be determined for both GA and GB groundwater. While OU-7 is wholly located in a GB designated area, a portion of the groundwater flows from a GB groundwater area to a GA groundwater area.

   Navy Response: Disagree. This citation has not been included before, such as at Site 16. The monitoring well network, including points of compliance will be determined at a later date. The specifics of long-term monitoring will also be influenced by the final remedy at the former Nike Site.

   RIDEM Comment – With respect to ARARs what has been done at one site has no bearing on what is being done at this site. At this site groundwater has the potential to flow from GB to GA groundwater classifications and the ARAR provides guidance on the location of monitoring wells so that one can be notified if remedial action needs to be taken. Please include the ARAR.

8. Table 2-2, Federal and State Location Specific ARARs – In the OU9 ROD DEM_DSR_01-93, Section 8.09 (Institutional Controls) is located in the Action Specific ARARs, not the Location Specific ARARs as done for this Operable Unit. Please explain the rationale for this change.

   Navy Response: Agree. The subject ARAR will be moved from the location-specific table to the action-specific table. (The CED FFS ARAR tables used the Site 16 FS Addendum

ARAR tables as a starting point. The subject ARAR was transferred from the location-specific table to the action-specific table per an EPA comment on the Site 16 Draft ROD.)

RIDEM Comment – Navy response is acceptable.

9. Page 2-8, Section 2.6.1, General Response Actions, Ex-Situ Treatment – It should be noted that if this alternative is selected the substantive requirements of a RCRA Corrective Action permit may be required.

Navy Response: Disagree with the inclusion of this text. Section 2 only identifies the General Response Actions, not alternatives. Individual processes and ARARs are described and evaluated in Sections 3 and 4. Please note that in order to avoid the creation of a long list of ARARs with irrelevant entries, the ARAR tables in Section 2 are the result of the analysis of the alternatives in Section 4. While it is true that the substantive requirements of a RCRA Corrective Action permit may be required, it is also true that the substantive requirements of an NPDES permit or a RCRA storage permit may be required. However, such statements are premature at this stage of the analysis.

RIDEM Comment – Given that ARARs can change from the feasibility study to the proposed plan and final ROD the response is acceptable.

10. Page 2-9, Section 2.7.1, Volume of Contaminated Soil , Paragraph 1, Sentence 1- Please change "…. COC concentrations are greater than PRGs is shown on Figures 2-1 thru 2-4, which identifies…" to

Navy Response: The comment is incomplete, but is interpreted to mean to change "Figure 2-1.." to "Figures 2-1 through 2-4..". If that is the intent of the comment then, it is agreed that the revision will be made.

RIDEM Comment – RIDEM apologizes for not properly proof reading the comment. The Navy response is acceptable or alternatively, one could note that Figure 2-5 summarizes all the RDEC exceedances at the four sites.

11. Page 3-2, Section 3.1, Preliminary Screening of Soil Technologies and Process Options – Please explain why In-Situ and Ex-Situ treatment (treatment alternatives) of Soils is not carried forth in this section of the study as well as Section 3.2, Detailed Screening of Soil Treatment Technologies and Process Options.

Navy Response: Table 3-1 is used to screen technologies and processes. The processes that were retained for additional evaluation are listed at the end of Section 3.1 and are further discussed and evaluated in Section 3.2. In-situ and ex-situ processes were screened out in Table 3-1.

RIDEM Comment – Navy response is acceptable.

12. Page 3-5, Section 3.2.3, Containment, Effectiveness - Since it is intended to develop this site perhaps a sentence or two should be added that would indicate that a soil management plan would be part of this alternative which would allow for the

development of this site and insure that soils are handled and addressed properly to minimize risks when exposing contaminated soils below the cover.

Navy Response: The primary objective of Section 3 is to develop an appropriate range of remedial technologies and process options. The details of the processes, including a soil management plan, are provided in the development of the alternatives in Section 4. Therefore, no changes to the text are proposed.

RIDEM Comment – Response is acceptable provided the discussion is included in Section 4.

13. Sections 3.2.4 (Removal) and 3.2.5 (Disposal) – These two options should be combined because if one is removing the soil, clearly is must be disposed of somewhere, i.e. if there is removal then there is disposal, conversely if there is no disposal then there is no removal.

Navy Response: The discussion of disposal was separated from the discussion of excavation because there are multiple disposal options as noted in Table 3-1. Therefore, no changes to the text are proposed.

RIDEM Comment – Navy response is acceptable.

14. Page 4-8, Section 4.2.2.1, Alternative S-2:LUCs, Description, Paragraph 1, Last Sentence – "These restrictions include use of the property only for the development or operation of a port facility." Please change to "These environmental restrictions will only allow for the use of the property for industrial/commercial uses. Because of how the Land Reuse Authority is obtaining the land the Navy will place a separate deed restriction on the property (not an ELUR) only allowing for the development or operation of a port facility." RIDEM Remediation Regulations, 2011 does not have standards or a definition for port related facilities, thus it would not be enforceable under an ELUR. In this specific case RIDEM will only make a determination if the proposed use is industrial/commercial or not. The Maritime Administration and possibly the Navy are the entities that need to determine if the proposed activity is port related or not. As noted above, the Navy can place a separate deed restriction on the property limiting it to port related activities.

Navy Response: The last two sentences will be deleted. The subject sentence refers to the existing lease restrictions, not the environmental LUC component of the alternative. The intent of the last two sentences was to note that there are existing restrictions on the land use and that these restrictions would be kept in place.

RIDEM Comment – Navy response is acceptable.

15. Page 4-10, Section 4.2.2.2, Detailed Analysis, Implementability, Paragraph 1, Sentence 2 – Please change "Performance of regular site inspections for LUC enforcement and five-year reviews could readily be accomplished." to "Performance of annual site inspections for LUC enforcement and five-year

reviews could readily be accomplished." The RIDEM ELUR requires annual certifications.

Navy Response: The text will be revised as described.

RIDEM Comment – Navy response is acceptable.

16. Page 4-12, Section 4.2.3.1, Description, Component 2: LUCs, Paragraph 1, last sentence – See Comment 14 regarding restriction on use of the property for port related activities.

Navy Response: See response to Comment No. 14.

RIDEM Comment – Navy response is acceptable.

17. Page 5-3, Early Action for Groundwater, Paragraph 3 – This paragraph discusses particulars of a monitoring program. While RIDEM concurs with a groundwater monitoring program as part of the early action for groundwater it is not prepared at this time to concur with the particulars of said program, i.e. how many wells to be monitored, specific constituents to be monitored and at what frequency the wells will be sampled. It should be noted in this paragraph that the specific parameters of the monitoring program will be worked out at a later date.

Navy Response: Comment acknowledged. In recognition of the uncertainties in the scope of the long-term monitoring program, the second sentence in the subject paragraph begins with "For estimating purposes".

RIDEM Comment – Navy response is acceptable provided that the number of wells to be sampled, specific constituents to be sampled, and frequency of sampling is all estimated at this time and subject to change.

18. Page 5-5, Section 5.5, Short-Term Effectiveness, Paragraph 2, Last Sentence – "The Early Action could be implemented within 1 year of finalization of the OU7-CED Area Proposed Plan in which the Early Action would be presented for public comment." Please state if the Early Action implementation will be finalized within one year of the proposed plan or ROD.

Navy Response: Because of the USEPA recent change in position and new requirement to develop groundwater alternatives (based on their comments on the FFS), this comment is moot. The ELUR will be filed when the property is transferred.

RIDEM Comment – Navy response is acceptable.

19. Page 5-5, Section 5.6, Implemetability, Paragraph 2, Sentence 2 – This sentence states that continuation of the early action controls is dependent on the future landowner filing an ELUR. Please note that the Navy can place an ELUR on the property prior to transfer as the ELUR runs with the land. In this manner

continuation of the early action controls remain in place irrespective to who the future landowner is.

Navy Response: Comment acknowledged.

RIDEM Comment – Based on Navy response to comment 18, please state if the Navy will place the ELUR on the property prior to transfer.

20. General Comment – Preliminarily, ARARs seem acceptable, however, once an alternative is selected RIDEM will provide a more thorough review.

    Navy Response: Comment acknowledged. Please note that ARARs were derived from Site 16 FS and FSA.

    RIDEM Comment – While a number of ARARs from NCBC Site 16 will be the same for the NCBC CED area it is a different site, thus there will be differences in ARARs specific to the site of interest. The development of ARARs are a continuing process from the start of the investigation through the final ROD.

21. Appendix G, Page 1-3, Section 1.2.3, Geology and Hydrogeology, Paragraph 4 – This paragraph states that groundwater flow is generally to the east though a small component flows to the northeast in the Drum Removal Area. Based on Figure 1-3 (Groundwater Flow Direction and Groundwater Classification) groundwater flow in the Drum Removal Area and Site 4 appears to be to the southeast, easterly at Sites 1, 2 and 3 and turns almost northeast immediately to the east off Sites 1 and 2.

    Navy Response: The subject text is a *general* discussion of the groundwater flow and is accurate. No change is proposed.

    RIDEM Comment – Figure 1-3 of Appendix G does not match the description of groundwater flow noted in paragraph 4 of Section 1.2.3 of Appendix G. At least one of the two appears to be incorrect.

RIDEM would like to thank you for the opportunity to comment on this document and looks forward to working with the Navy and USEPA. If you have any questions or require additional information please call me at (401) 222-2797 ext. 7138 or email me at richard.gottlieb@dem.ri.gov.

Sincerely,

Richard Gottlieb, P.E.
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