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RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT RESPONSE TO U S
NAVY COMMENTS TO DRAFT FINAL SUPPLEMENTAL REMEDIAL INVESTIGATION SITE 8
WITH TRANSMITTAL NS NEWPORT RI

08/03/2011

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

3 August 2011

Maritza Montegross
NAVFAC MIDLANT (Code OPTE3)
Environmental Restoration
Building Z 144, Room 109
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Draft Final Supplemental Remedial Investigation
Site 08, NUSC Disposal Area
Naval Station Newport, Newport, Rhode Island

Dear Ms. Montegross,

The Office of Waste Management at the Rhode Island Department of Environmental Management has conducted a review of the Navy's Response dated July 13, 2011 to RIDEM's Comments on the *Draft Final Supplemental Remedial Investigation (SRI)* for Site 08 – NUSC Disposal Area, Naval Station Newport, located in Newport, RI. As a result of this review, this Office has generated the attached responses to comments.

If you have any questions, in regards to this letter, please contact me at (401) 222-2797, extension 7020 or by e-mail at pamela.crump@dem.ri.gov.

Sincerely,

Pamela E. Crump, Sanitary Engineer
Office of Waste Management

cc: Matthew DeStefano, RIDEM
Gary Jablonski, RIDEM
Richard Gottlieb, RIDEM
Ginny Lombardo, USEPA Region I
Deborah Moore, NETC, Newport, RI
James Ropp, Tetra Tech

RIDEM's Responses to Navy Responses (dated July 13, 2011)
to RIDEM Comments (dated June 16, 2011)
on the Draft Final Supplemental Remedial Investigation (dated May 13, 2011) for
Site 08 – Naval Undersea Systems Center (NUSC) Disposal Area
Naval Station Newport, Newport, Rhode Island

Comment 3 – *In response to RIDEM's comments 11 and 21, the Navy provided Attachment A in regards to eliminating Arsenic in type "Se" soil. After review of the Navy's response to comments and Attachment A, this Office does not concur with the Navy's proposal to eliminate Arsenic in type "Se" soil onsite. Please update the text in this draft final document to keep Arsenic as a COC in both types of soil for this site. [On 6/23/11, RIDEM provided further clarification that it is concerned that the site soil may be better classified as "UD" rather than "Se" due to the presence of buildings, pavement, and fill material.]*

Navy's Response:

The Feasibility Study (FS) will indicate that arsenic in type "Se" soil on-site is greater than background levels in surface soil and is within background levels in subsurface soil. This is consistent with the geostatistical evaluation presented in Appendix F.6 of the final Remedial Investigation (RI) report (Tetra Tech 2010). In the SRI, Table 6-2 (residential exposure scenario) and Table 6-6 also have been updated accordingly for the identification of arsenic as a chemical of concern (COC) in soil (see attached replacement pages). The classification of the soil as type "Se" (rather than "UD") is being maintained because it is consistent with the completed background assessments in 2006 and 2008 as well as the RI.

RIDEM's Response:

Based on the similarities in concentrations of arsenic found in type Se soil for both surface and subsurface soils at the Site (as shown below), please include arsenic as a COC for subsurface soil as well as surface soil for type Se soil. Since the Feasibility Study has already been issued, please provide any revised pages necessary to this document.

Four highest arsenic concentrations in surface soil:

Concentration (mg/kg)	Sample location	Area	Soil Type	Depth (ft)	Exposed/Unexposed	RI/SRI	Date
90	TP-13	north meadow	PmB	0-1	exposed	RI	8/15/03
45.8	SB-118	paved gated storage area	Se	0-2	exposed	RI	3/4/08
41 J	SB-04	paved gated storage area	Se	1-2	paved	RI	8/18/03
32.7	SB-150	paved gated storage area	Se	0-2	paved	RI	3/5/08

Four highest arsenic concentrations in subsurface soil:

Concentration (mg/kg)	Sample location	Area	Soil Type	Depth (ft)	Exposed/Unexposed	RI/SRI	Date
122	SB-113	paved open storage area	Se	4-6	paved	RI	3/3/08
40	TP-13	north meadow	PmB	2-3	exposed	RI	8/15/03
35	SB-03	paved gated storage area	Se	3-4	exposed	RI	8/19/03
33	SB-05	paved open storage area	Se	2-3	paved	RI	8/19/03

In regards to the soil type, please refer to the attached Figure 1-6 from the NUSC RI of the fill areas determined from aerial photos. RIDEM does not agree with classification of the soil as type Se for the

majority of the Site since much of this area contains fill material. Please be advised that RIDEM, to date, has not accepted the "Basewide Background Study Report". Levels of arsenic in the 30-40 mg/kg range are not acceptable background levels.

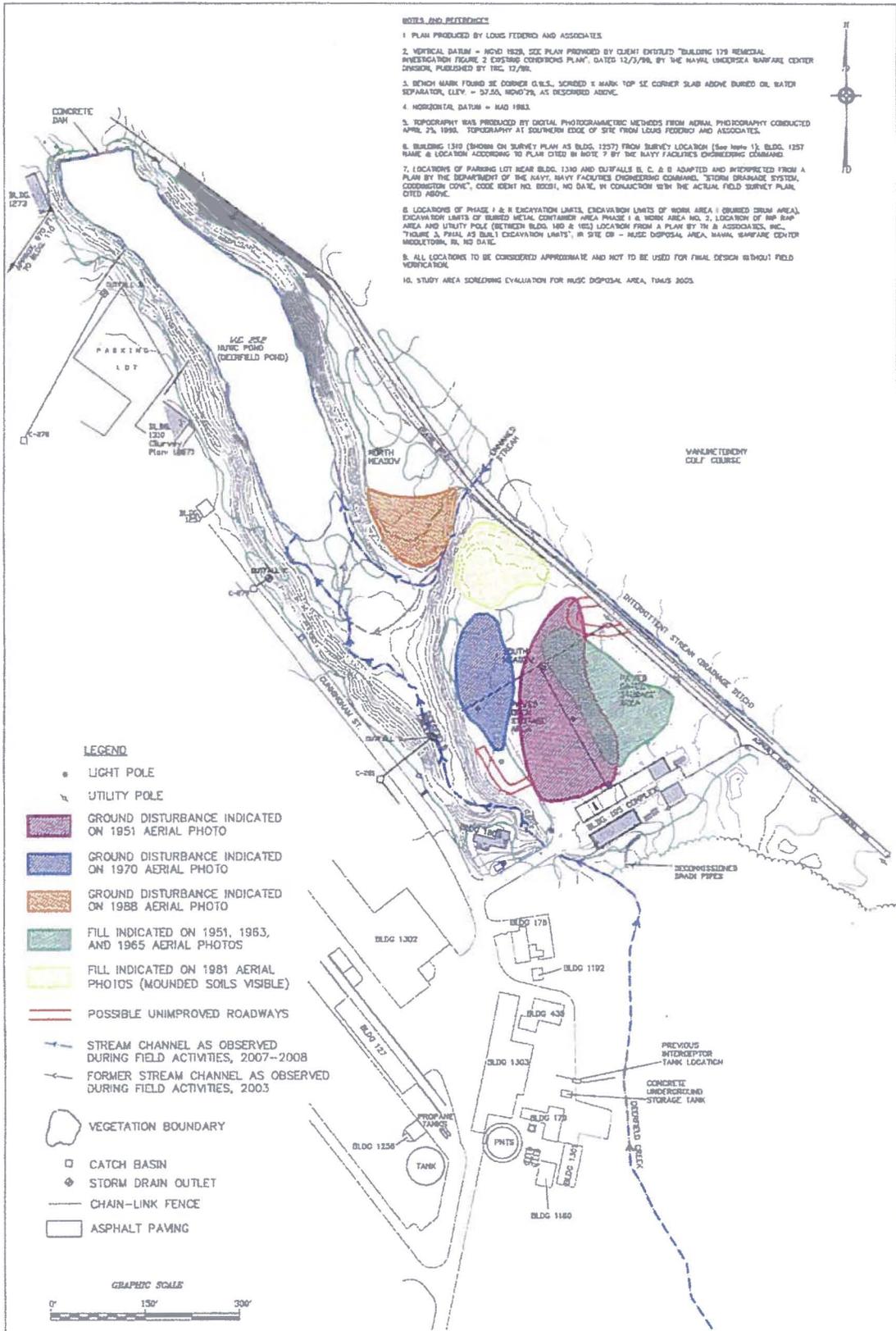
Comment 4 – *In regards to moving forward to the Feasibility Study process, please be advised that according to RIDEM's Remediation Regulations each carcinogenic substance can not exceed a 1×10^{-6} excess lifetime cancer risk level and the cumulative excess lifetime cancer risk posed by the Contaminated-Site can not exceed 1×10^{-5} . In addition, each non-carcinogenic substance can not exceed a Hazard Index of 1 and the cumulative Hazard Index posed by the Contaminated-Site can not exceed 1 for any target organ for each carcinogenic. Pursuant to the FFA and CERCLA, if any carcinogenic and/or non-carcinogenic substance concentration exceeds RIDEM's risk levels, than that substance will be considered a contaminant of concern and a preliminary remediation goal will need to be developed in the Feasibility Study process.*

Navy's Response:

Comment noted for the FS. The groundwater Preliminary Remediation Goals (PRGs) being developed in the FS are based on EPA Maximum Contaminant Levels (MCLs) (which are equivalent to the RIDEM GA Groundwater Objectives for the site COCs), or if an MCL was not available, then a risk based concentration corresponding to a cancer risk of 1×10^{-6} or a hazard index of 1 was used as the PRG. For soil, the COCs are arsenic and carcinogenic polycyclic aromatic hydrocarbons (cPAHs). The soil PRGs being developed in the FS are based on background levels for arsenic and a 1×10^{-5} risk level for the combined cPAHs, expressed as benzo(a)pyrene equivalents.

RIDEM's Response:

As stated in the previous comment, RIDEM does not accept the levels of arsenic documented in the background study. PRGs should also be developed for individual PAHs based on a 1×10^{-6} risk level for each contaminant. Please be advised that any contaminant that exceeded a risk level of 1×10^{-6} in the RI or the SRI must be carried forth into the FS.



- NOTES AND REFERENCES**
1. PLAN PRODUCED BY LOUIS FEDERIO AND ASSOCIATES
 2. VERTICAL DATUM = MVD 1928. SEE PLAN PROVIDED BY CLIENT ENTITLED "BUILDING 179 REMEDIAL INVESTIGATION FIGURE 2 EXISTING CONDITIONS PLAN", DATED 12/3/99, BY THE NAVAL UNDERSEA WARFARE CENTER DIVISION, PUBLISHED BY TRC, 12/99.
 3. BENCH MARK FOUND SE CORNER C.U.S., SCHEDULE 1 MARK TOP SE CORNER SLAB ABOVE BURIED OIL WATER SEPARATOR, ULEV = 32.54, MON 79, AS DESCRIBED ABOVE.
 4. HORIZONTAL DATUM = MVD 1983.
 5. TOPOGRAPHY WAS PRODUCED BY DIGITAL PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY CONDUCTED APRIL 24, 1998. TOPOGRAPHY AT SOUTHERN EDGE OF SITE FROM LOUIS FEDERIO AND ASSOCIATES.
 6. BUILDING 1319 (SHOWN ON SURVEY PLAN AS BLDG. 1257) FROM SURVEY LOCATION (See Note 1); BLDG. 1257 NAME & LOCATION ACCORDING TO PLAN CITED IN NOTE 7 BY THE NAVY FACILITIES ENGINEERING COMMAND.
 7. LOCATIONS OF PARKING LOT NEAR BLDG. 1310 AND CUFFFALLS B. C. & B ADAPTED AND INTERPRETED FROM A PLAN BY THE DEPARTMENT OF THE NAVY, NAVY FACILITIES ENGINEERING COMMAND, "STORM BRAGRADE SYSTEM, COORDINATION CONIC", CODE IDENT NO. 80081, NO DATE, IN CONJUNCTION WITH THE AERIAL FIELD SURVEY PLAN, CITED ABOVE.
 8. LOCATIONS OF PHASE I & II EXCAVATION LIMITS, EXCAVATION LIMITS OF WORK AREA 1 (BURIED DRUM AREA), EXCAVATION LIMITS OF BURIED METAL CONTAINER AREA PHASE I & II, WORK AREA NO. 2, LOCATION OF HSP RAP AREA AND UTILITY POLE (BETWEEN BLDG. 140 & 102) LOCATION FROM A PLAN BY TRC & ASSOCIATES, INC., "FIGURE 3, FINAL AS BUILT EXCAVATION LIMITS", IN SITE DR - HUSC DISPOSAL AREA, NAVAL WARFARE CENTER MODDETCON, RI, NO DATE.
 9. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE AND NOT TO BE USED FOR FINAL DESIGN WITHOUT FIELD VERIFICATION.
 10. STUDY AREA SCREENING EVALUATION FOR HUSC DISPOSAL AREA, TMS 2003.

- LEGEND**
- LIGHT POLE
 - UTILITY POLE
 - GROUND DISTURBANCE INDICATED ON 1951 AERIAL PHOTO
 - GROUND DISTURBANCE INDICATED ON 1970 AERIAL PHOTO
 - GROUND DISTURBANCE INDICATED ON 1988 AERIAL PHOTO
 - FILL INDICATED ON 1951, 1963, AND 1965 AERIAL PHOTOS
 - FILL INDICATED ON 1981 AERIAL PHOTOS (MOUNDED SOILS VISIBLE)
 - POSSIBLE UNIMPROVED ROADWAYS
 - STREAM CHANNEL AS OBSERVED DURING FIELD ACTIVITIES, 2007-2008
 - FORMER STREAM CHANNEL AS OBSERVED DURING FIELD ACTIVITIES, 2003
 - VEGETATION BOUNDARY
 - CATCH BASIN
 - ◇ STORM DRAIN OUTLET
 - CHAIN-LINK FENCE
 - ▭ ASPHALT PAVING
- GRAPHIC SCALE
0' 150' 300'

FILL AREAS BASED ON AERIAL PHOTOS
SITE 08, NUSC DISPOSAL AREA
REMEDIAL INVESTIGATION REPORT
NAVSTA NEWPORT, RHODE ISLAND

DRAWN BY: D.W. MACDOUGALL	REV: 0
CHECKED BY: J. FORRELLI	DATE: NOVEMBER 20, 2009
SCALE: AS NOTED	FILE NO.: \02124\RLDF\NUSC_FILL_AREAS.DWG

FIGURE 1-6

Tt TETRA TECH NUS, INC.

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Wilmington, MA 01887
(978)658-7899