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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION II
290 BROADWAY
NEW YORK, NEW YORK 10007-1866

MAY 17 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

S. J. Pena
Commander, CEC, U.S. Navy
Public Works Officer
U.S. Naval Station Roosevelt Roads
TSC 1008 Box 3001
Code NO
FPO AA 34051-3001

Re: Quarterly RFI Report November 1, 1995 - January 31, 1996
U.S. Naval Station Roosevelt Roads
RCRA/HSWA Permit No. PR2170027203

Dear Commander Pena:

The United States Environmental Protection Agency (EPA) Region II has completed its review of the Quarterly RFI Report November 1, 1995 - January 31, 1996, transmitted to EPA on behalf of the Navy by Baker Environmental, Inc., your consultant.

Relative Risk Ranking

EPA has the following comments on the Relative Risk Ranking evaluation submitted with the report. This relative risk ranking is not a complete risk assessment since:

a) full characterization of the sites has not been completed, and

b) it does not quantify risk based on actual field measured concentration data and actual or potential exposure scenarios.

Rather, the relative risk ranking submitted with the RFI Quarterly report does attempt to evaluate two important criteria required to be present in order to demonstrate a potential risk exists, i.e., whether a migration pathway exists, and whether receptors are present to be impacted by any release. Such criteria must be evaluated as part of any complete risk assessment.

However, EPA does not agree with all the interpretations/rankings made in the Relative Risk Ranking regarding whether a migration pathway exists and whether receptors are present. EPA's specific disagreements with the interpretations/rankings, as given in Table 5-1 of the report, are discussed below.

The Receptor Factors (RFs) for [fresh] surface water-ecological fresh (SW-EF) at SWMUs #1, #2, and #3 should all be 2, not 3 as shown in Table 5-1, since any ponded or drainage ditch fresh water impacted by releases from these large SWMUs could be consumed by animals, such as birds, mammals, etc. (a potential migration pathway is acknowledged for SW-EF at these 3 SWMUs, as the assigned migration pathway factor [MPF] is 2 [pathway seems to be present but is not certain]). For SWMU 3, a RF of 2 (receptor may be present or is indicated) is already assigned to the [fresh water] sediments-ecological fresh (Sed-EF), making the RF of 3 for the surface water-ecological fresh seem even more inappropriate.

For SWMUs #1 & #2 it does not seem appropriate to assign an RF of 3 (receptor is precluded from exposure to site) for human health impacts from sediments (Sed-HH). Human consumption of bottom feeding bio-receptors (certain shell fish and fish) must also be considered in the risk ranking, as some casual fishing, crabbing, etc. cannot be ruled-out. Also, section 3 of the text for these SWMUs which states that potential receptors are "limited to mainly marine aquatic life", should be modified to acknowledge potential human consumption of bio-receptors.

EPA feels that for all SWMUs shown on Table 5-1, it is not appropriate to assign RFs of 3 to either [marine] surface water-ecological marine (SW-EM) or [marine] sediments-ecological marine (Sed-EM), since potential bio-receptors, including bottom feeders for sediments, are very likely present in the marine environment at Roosevelt Roads. This is especially relevant for those SWMUs where the potential for marine impact/pathway from the SWMU is acknowledged by assigning an MPF of 2 to either SW-EM or Sed-EM for that SWMU. This applies to SWMUs 13, 23, 24, 25, 26, 31, 32, 37, 39, 46, 51, and AOC C.

Likewise, it is not appropriate to assign RFs of 3 to any SWMUs for sediments-human health (Sed-HH), since potential human consumption of bottom feeding bio-receptors (certain shell fish or fish) must also be considered in the risk ranking, as some casual fishing, crabbing, etc. cannot be ruled-out. Besides SWMUs #1 & #2 discussed above, this applies to SWMUs 10, 23, 24, 26, 32, 37, 39, and 51.

For SWMU 10, the RF of 3 for groundwater is not appropriate. During the Interim Measures (IM) conducted at this SWMU, PCB contaminated soils extended several feet below ground surface; therefore, an impact on the groundwater is quite possible.

Though groundwater has not yet been investigated at this SWMU, an RF of 2 should be assigned, as the receptor potential for groundwater at this SWMU should be identical to the other Roosevelt Roads SWMUs (#1, 2, 3, 7, 11, 23, 24, 25, 26, 30, 31, 46, and AOC 2) where an RF of 2 is assigned (receptor may be present or is indicated). The same RF should apply at SWMU 10; only the MPF should vary between SWMUs.

Likewise, the groundwater RF for SWMU 13, where releases to groundwater have already been demonstrated by previous Installation Restoration (IR) program sampling, should be changed to 2, not 3 as presently listed in Table 5-1. Like SWMU 10, the receptor potential for groundwater at this SWMU should be identical to that for any other Roosevelt Roads SWMU where groundwater impact is deemed possible (i.e. MPF of 2), and RFs of 2 are assigned (as SWMUs #1, 2, 3, 7, 11, 30, etc.).

For SWMUs 10, 26, 37, 39, and 51 it is not logical/consistent to assign an MPF of 3 for marine sediments (Sed-EM) when the MPF assigned to marine surface water (SW-EM) is 2. As the marine surface water pathway is recognized (MPF of 2) this would also indicate a migration pathway to the marine sediments; therefore, an MPF of 2 (potential pathway seems present) seems warranted for both marine sediments (Sed-EM) and marine surface water (SW-EM) at these SWMUs.

In addition, it should be noted that the investigation results included with this RFI Quarterly report do not complete the investigation requirements contained in the September 1995 approved RFI work plan, as amended.

If the Navy disagrees with any of the above comments regarding migration pathway factors or receptor factors, please submit a written response to my office within 35 days of your receipt of this letter. Otherwise, in the future, risk assessment evaluations submitted for these SWMUs/AOCs should incorporate the above modifications.

Please contact Mr. Tim Gordon of my staff, at (212) 637-4167 if there are any questions.

Sincerely yours,

Andrew Bellina, P.E.
Chief, Hazardous Waste Facilities Branch

cc: Mr. Sindulfo Castillo, NAVSTA Roosevelt Roads
Mr. Israel Torres, EQB
Mr. Art Wells, LANTDIV Code 1823