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EMAIL REGARDING U S EPA REGION I FOLLOW UP INFORMATION TO GENERAL QUESTIONS ON DRAFT FEASIBILITY STUDY NETC NEWPORT RI
3/6/2012
U S EPA REGION I

Ropp, Jim

From: Ginny Lombardo <Lombardo.Ginny@epamail.epa.gov>
Sent: Tuesday, March 06, 2012 3:43 PM
To: maritza.montegross@navy.mil; Ropp, Jim
Cc: Pamela Crump; Chau Vu
Subject: Re: Newport NUSC Site 8 FS - Responses to RIDEM Comments

Categories: Newport

Maritza and Jim-

The purpose of this email is to provide follow-up information in response to Navy's 12/8/11 response on EPA General Comment 6 (of EPA's
10/18/10 comments). During the 12/14/11 conference call, Chau indicated that she believed there was standard language related to residual risk based on proposed PRGs. Unfortunately, there is no standard language on residual risk related to PRGs in any of the FF decision documents that I have reviewed. However, the basis for this comment requesting the determination of the residual risk based on the proposed PRGs is supported in the RAGS D Guidance, Chapter 4:

http://www.epa.gov/oswer/riskassessment/ragsd/pdf/chapt4_2001.pdf

See also, example Table 3 of RAGS D, Exhibit 4-1:

http://www.epa.gov/oswer/riskassessment/ragsd/pdf/exhibit4_1.pdf

It is also discussed in RAGS B, Chapter 2, RAGS C, Chapter 2, and the NCP Section 300.430(e)(2)(i)(D).

So, Table 2-4 and 2-5 of the Revised Draft FS (July 2011) should conform to this guidance and example table to present the total residual risk for the PRGs that are based on HH cancer and non-cancer risks.

If the cumulative residual cancer risk exceeds 10-4 or RIDEM's value of
10-5 (e.g., due to background or MCLs) or non-cancer risks for the same target endpoint exceed an HI of 1, the PRGs may need to be adjusted to ensure that the cumulative residual risk would be below 10-4 or 10-5 or adequate reasoning supporting that the PRGs are acceptable will have to be clearly discussed in the FS. EPA would not expect that PRGs based on ARARs (e.g., MCLs, RIDEM DECs) or accepted background values would need to be changed.

If the residual risk criteria are exceeded, EPA will work with Navy and RIDEM to evaluate whether revisions to the PRGs are needed and, if no changes are appropriate, EPA will work with Navy and RIDEM on the language for the FS to address the findings. Proposed language, for example, for soils, would support that residual risk will be lower than that represented by the PRGs, since the remedial alternatives being considered will all eliminate the exposure pathway via a 2 foot cap of clean material. For groundwater, the remedial alternatives will likely achieve lower ultimate cleanup levels for some constituents in order to reach the PRGs for all COC. So, therefore, it is reasonable to believe that the residual risk upon completion of the groundwater cleanup remedial action will be lower than the residual risk criteria. Language similar to these examples can be considered and discussed once the revisions to Tables 2-4 and 2-5 are provided by the Navy.

Also, please note that the following Navy 12/7/11 partial responses to RIDEM comments (dated 9/19/11) - see comment and response 5 and 6 below
- imply that some PRGs will be revised by the Navy using a 10-6 criteria. If this is the case for the PRGs derived from risk-based values, EPA believes that no other revisions to the PRGs would be needed related to cumulative residual risk.

Comment 5 – Page 2-7, Section 2.2.2, Derivation of Preliminary Remediation Goals, Human Health PRGs;
whole section.
This section slates that the cumulative target goal for PRGs is 10 -5. A review of the information provided in
Table 2-4 and 2-5 indicates that this goal will not be achieved if more than one contaminant is present at the
target PRG concentration. To avoid this problem and in order to meet regulatory requirements, please set the
PRGs to the 10-6 criteria. Please ensure that any compound which exceeds RIDEM's risk based criteria was
carried forth in the PRG process.

Response: Tables 2-4 and 2-5 will be revised to show Preliminary Remediation Goals (PRGs)
developed using 10-6 risk-based levels, chemical-specific ARARs, and background levels.
A response to the last sentence of this comment (regarding RIDEM's risk-based criteria) will be
provided following resolution of RIDEM's formal dispute letter dated October 5, 2011.

Comment 6 – Page 2-7, Section 2.2.2, Derivation of Preliminary Remediation Goals, Human Health PRGs;
Table 2-4.
The selected industrial PRG for total carcinogenic PAHs (expressed as benzo(a)pyrene equivalents) is
2.1 mg/kg, which is based on a 10-5 target cancer risk level. This exceeds the RIDEM Direct Exposure Criteria
of 0.8 mg/kg for the industrial scenario. Please revise this table to include the RIDEM DEC of 0.8 mg/kg as
the PRG for total carcinogenic PAHs
Also, please develop PRGs for each individual PAH as listed in Table 6-6 of the NUSC SRI and in
Comment 1 above, which are based on a 10-6 target cancer risk level.

Response: The soil PRGs will be revised to address the individual polycyclic aromatic hydrocarbon
(PAH) COCs [i.e., benzo(a)anthracene, benzo(a)pyrene, benzo (b)fluoranthene, benzo(k)fluoranthene,
dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene], based on the lower of 10-6 risk levels and
RIDEM's Method 1 soil objectives. RIDEM's Direct Exposure Criterion (DEC) of 0.8 mg/kg is applied
to benzo(a)pyrene, not to total carcinogenic PAHs.

It would be very useful if the Navy could quickly complete the revisions to Tables 2-4 and 2-5 to address RIDEM's comments 5 and 6 and EPA's comment on residual risk and submit the revised PRG Tables to EPA and RIDEM prior to the Draft Final FS. In this way, we could all consider the PRGs and reach consensus on PRGs and/or appropriate residual risk language for the Draft Final FS prior to the planned submission (currently scheduled for 4/15/12).

Thanks.

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Date: 12/07/2011 06:28 PM
Subject: Newport NUSC Site 8 FS - Responses to RIDEM Comments

All:
Here are the responses to RIDEM comments on the revised draft FS (attached).
Hardcopies will be sent via U.S. mail.
Responses to EPA comments will be provided soon.
thanks

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[attachment "2011-12-07_Newport NUSC FS RIDEM RTC.PDF" deleted by Ginny Lombardo/R1/USEPA/US]