Message

From: LEE, LILY [LEE.LILY@EPA.GOV]
Sent: 9/22/2018 3:45:30 AM
To: dhirsch1@cruzio.com
CC: Chesnutt, John [Chesnutt.John@epa.gov]; Lane, Jackie [Lane.Jackie@epa.gov]; Yogi, David [Yogi.David@epa.gov]; Herrera, Angeles [Herrera.Angeles@epa.gov]
Subject: RE: Hunters Pt Parcel G Work Plan
Attachments: 2018-9 EPA Comments on draft Five Year Review.pdf

Dear Mr. Hirsch,

Thank you for sharing with us your comments below. As you requested, attached are EPA's comments on the Navy's draft Five Year Review. I apologize for the delay in sending these.

- Lily

From: Herrera, Angeles
Sent: Thursday, September 13, 2018 4:37 PM
To: dhirsch1@cruzio.com
Cc: Chesnutt, John <Chesnutt.John@epa.gov>; LEE, LILY <LEE.LILY@EPA.GOV>; Lane, Jackie <Lane.Jackie@epa.gov>; Yogi, David <Yogi.David@epa.gov>
Subject: RE: Hunters Pt Parcel G Work Plan

Thanks Dan!
I will ask my staff to send you our comments.
Regards,
Angeles

I have asked my staff to send you our comments.

> **From:** "DanielHirsch" <dhirsch1@cruzio.com>
> **To:** "Herrera, Angeles" <Herrera.Angeles@epa.gov>
> **Subject: Re: Hunters Pt Parcel G Work Plan**
>
> Hi Angeles,
>
> Attached please find a copy of our comments on the Navy's Draft Five-Year Review for the Hunters Point Naval Shipyard. I would appreciate it if you could transmit it to the EPA team working on the issue.
>
> And may I ask if you could send me the EPA's comments on the draft Five-Year Review, or give me a link where I could find them.
>
> Also, I would appreciate it if you could transmit to your team the following summary of key points raised in comments on the Navy's draft Retesting Plan for Parcel G. The issues are set forth in various comments submitted to the Navy, which you indicate are being provided directly by the Navy, but I thought it might help to tag a few of the key issues:

1. Rather than focusing on addressing Tetra Tech's fabrication of results to claim areas that were contaminated weren't, the Navy plan makes the extraordinary assertion that 80% of what was cleaned up didn't need to be. Its primary bases for this remarkable stance and revised Conceptual Site Model (CSM) are:

a. That 5-point composite samples of waste bins showed few samples above the release criterion for radium-226. However, EPA in its March 26, 2018 letter to the Navy (p. 3-4) had explained that what was wrong with this interpretation and why the inference of HPNS being therefore less contaminated than thought was erroneous and told the Navy to alter the CSM accordingly. Nonetheless, the Navy ignored the EPA direction (as it has in numerous other matters, including other aspects of this section of the CSM) and kept the CSM and the discussion of the waste bins unaltered. See Parcel G Work Plan p 2-4.

b. The Navy relies heavily on the claim that the onsite laboratory measurements for Ra-226 were skewed high because of the close nearby energy peak for U-235. HOWEVER, U-235 IS ALSO A RADIONUCLIDE OF CONCERN AT HPS (See Historical Radiological Assessment, Table 4-3) and in Parcel G (see Parcel G ROD, p.24 and Table 5). Thus, if the laboratory measurement was picking up U-235 as well as Ra-226, instead of pure radium, that is irrelevant, since U-235 is also a radionuclide of concern and needs to be cleaned up. Indeed, its remediation goal is an order of magnitude lower than radium, so soil with both Ra-226 and U-235 would be more of a cleanup concern than pure Ra-226, not less. (The sum of the fractions rule would apply if there are multiple radionuclides present.)

2. The Navy makes the same mistake when it proposes to use U-238 levels as Ra-226 background levels. U-238 is also a radionuclide of concern at HPS (HRA Table 4-3). Large amounts of U-238 (>2400 pounds; see HRA Table 5-1) were included in the facility licenses, and large amounts would be in the mix of fission products and unfissioned uranium contaminating ships that were decontaminated and in the weapons debris brought back for studying at NRDL (e.g., U-238 used as tamper in the early atomic bombs and as components of two- and three-stage thermonuclear weapons).

3. As EPA pointed out in its letter on the Parcel G Workplan, the Workplan attempts to impermissibly weaken the Remediation Goals set forth in the ROD. The issue is somewhat more stark, however:

a. The ROD identifies 8 radionuclides of concern and their remediation goals (Table 5). The Workplan (Table 3-4) shrinks the radionuclides of concern to 3 or 4, thus allowing unlimited concentrations for the remainder. One cannot change the radionuclides of concern that are in the ROD by throwing them out in the Work Plan; one cannot use a Work Plan to eliminate cleanup levels set forth in the ROD. (We note that the HRA identifies about 100 radionuclides used at HPS, of which 33 are long-lived radionuclides of concern. HRA Tables 4-2, 4-3. No rationale has been given for failing to include all the HRA radionuclides of concern, and most would generally be present when others are, as they are part of the mix of fission products and unfissioned plutonium and uranium from the weapons tests; but in any case, one can't weaken the ROD further via a subsequent retesting plan.)

b. Critically, the Work Plan changes the very definition of remediation goals to weaken them further from those in the ROD. The ROD (Table 5)—and EPA policy—set remediation goals as the full value measured, not the increment above background. In the ROD, an exception is made for one and only one radionuclide, Ra-226. By footnote c in the ROD, that remediation goal alone is identified as being the value above background. In the Workplan, however this is changed; the footnote is moved, so as to apply to all radionuclides, not just radium-226. By a footnote change in a Workplan, the cleanup goals in the ROD are magically weakened, which is not permissible.

4. Background locations are chosen that are potentially contaminated, violating the fundamental rules of determining background, that they can't be potentially affected by the contamination one is trying to compare them against. The building chosen for background is a building identified in the Work Plan and the ROD as impacted (Figures 3-1 and 8 respectively). Four of the five locations chosen for determining

soil background are in the midst of the HPS Superfund site and thus potentially impacted as well. This biasing of background locations can result in inflating background values and improperly reducing cleanup.

5. At the heart of the problem is the failure, in both the Work Plan and the Five-Year Review, to follow EPA's direction that the cleanup goals be assessed via EPA's PRG Calculator and Building PRG Calculator and revised accordingly. The building cleanup levels come from AEC Reg. Guide 1.86 from 1974, which is not risk-based. EPA BPRG values are thousands of times lower (more protective), showing the 1.86 levels to be far above the risk goal of 10^-6 and substantially above even the upper limit of the risk range. Similarly, the soil cleanup levels employed are far weaker than those derived from the current soil PRGs. EPA has apparently repeatedly told the Navy to perform such an analysis in the Five Year Review and revise the cleanup levels in the Work Plan accordingly as necessary, but the Navy has ignored the direction. This refusal, along with others, places the integrity of the entire cleanup at risk.

Thank you.

Dan Hirsch

On Aug 21, 2018, at 10:00 AM, Herrera, Angeles <Herrera.Angeles@epa.gov> wrote:

Good morning Mr. Hirsch,

Thank you for reaching out. Yes. You are correct. The Navy is sharing the Parcel G public comments received with the regulatory agencies. I already have my staff monitoring the comments received so there is no need to send them directly. Thanks for asking.

Sincerely,

Angeles

From: DanielHirsch [mailto:dhirsch1@cruzio.com]
Sent: Friday, August 17, 2018 1:49 PM
To: Herrera, Angeles <Herrera.Angeles@epa.gov>
Subject: Hunters Pt Parcel G Work Plan

Ms. Herrera,

I note in the EPA comments on the Navy Work Plan for retesting Parcel G that you say in your cover letter, "We may supplement our comments after evaluating any public comments received by the Navy on the draft Work Plan."

I presume the Navy will provide with you with copies of all comments received, for EPA review. But if that is not the case, please let me know and I can transmit to you our detailed critique and that of several others. The critiques raise some issues EPA touched on in its comments, but also some others that impact whether the plan is inconsistent with EPA CERCLA guidance or otherwise is flawed in fundamental ways.

Sincerely,

Daniel Hirsch