Message

From: Herrera, Angeles [Herrera.Angeles@epa.gov]
Sent: 2/7/2019 11:47:51 PM
To: Sanchez, Yolanda [Sanchez.Yolanda@epa.gov]; Chesnutt, John [Chesnutt.John@epa.gov]; LEE, LILY [LEE.LILY@EPA.GOV]
Subject: Fwd: Hunters Pt

Sent from my iPhone

Begin forwarded message:

> **From:** DanielHirsch <dhirsch1@cruzio.com>
> **Date:** February 7, 2019 at 1:01:41 PM PST
> **To:** "Herrera, Angeles" <Herrera.Angeles@epa.gov>
> **Subject: Re: Hunters Pt**
>
> Thanks. Will get you the list. Could you confirm the location is 75 Hawthorn St., San Francisco?
>
> > On Feb 7, 2019, at 12:12 PM, Herrera, Angeles <Herrera.Angeles@epa.gov> wrote:
> >
> > Thanks Dan!
> >
> > Let's meet next Friday, February 15 from 1:30-3pm in our offices. Please provide a list of the attendees so that we can make the necessary arrangements with our building security.
> > Thanks,
> > Angeles
> >
> > ---
> >
> > **From:** DanielHirsch <dhirsch1@cruzio.com>
> > **Sent:** Wednesday, February 06, 2019 5:05 PM
> > **To:** Herrera, Angeles <Herrera.Angeles@epa.gov>
> > **Cc:** LEE, LILY <LEE.LILY@EPA.GOV>; Yogi, David <Yogi.David@epa.gov>; Chesnutt, John <Chesnutt.John@epa.gov>; Walker, Stuart <Walker.Stuart@epa.gov>; Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Sanchez, Yolanda <Sanchez.Yolanda@epa.gov>; Benson, Michele <Benson.Michele@epa.gov>
> > **Subject:** Re: Hunters Pt
> >
> > Hi Angeles,
> >
> > Thanks for the suggested meeting times.
> >
> > Friday at 1:30 works best for us. We would come to your offices in San Francisco. We would hope you could have your headquarters PRG expert, Stuart Walker, on by phone, and if possible, any other key technical people working on the PRG calculation issues who might be based other than in SF (e.g. Las Vegas).
> >
> > We do not think a joint meeting with Mr. Castleman and his client would be appropriate. He doesn't represent us, and the matters he and his client presumably

want to discuss are not the technical details of the PRG calculations, retesting plans, and other issues we wish to inform EPA about. A joint meeting would leave us—your team and ours—with very little time to delve into those details. For those reasons, we believe there should be separate meetings.

Additionally, if at all possible, at least an hour and a half would be useful for our meeting. There is a lot of technical material to go over; the EPA has had extensive conversations with the Navy; we believe the Navy has not been entirely candid with EPA and we would like to provide EPA with information critical to its HPS CERCLA oversight role; and it will be hard to present our information and EPA to have a chance to discuss it and ask questions if limited to one hour. A great deal hangs in the balance for public health and the environment; EPA doesn't want to have to approve or disapprove Navy plans and claims on the basis of incomplete information from the Navy.

Lastly, we must reiterate that we have not seen the Navy PRG calculations and are basing our present concerns on what the Navy has said publicly it is doing to change the EPA defaults, Navy assumptions we will show are questionable. We repeat that we believe EPA should make clear to the Navy that there needs to be a formal public comment period on the revised draft Five Year Review and associated PRG claims, and that EPA should not decide whether to approve them until it has been able to review those comments.

Thanks,

Dan

> On Feb 5, 2019, at 5:40 PM, Herrera, Angeles <Herrera.Angeles@epa.gov> wrote:
>
> Hi Dan,
>
> I hope this email finds you well.
>
> Here are some dates and times that work for us next week:
>
> Wednesday, February 13, 2019 1:30-2:30pm
> Thursday, February 14, 2019 1:30-2:30pm
>
> Friday, February 15, 2019 10:30 -11:30 am or
> 1:30-2:30 pm
>
> As we discussed, Mr. Steven Castleman also wants to meet with us. It would be the best use of all of our time to combine the meetings. Michele Benson, our acting site attorney will be contacting him.
>
> Best Regards,
> Angeles

From: Herrera, Angeles
Sent: Wednesday, January 30, 2019 10:14 PM
To: DanielHirsch <dhirsch1@cruzio.com>
Cc: LEE, LILY <LEE.LILY@EPA.GOV>; Lane, Jackie <Lane.Jackie@epa.gov>; Yogi, David <Yogi.David@epa.gov>; Chesnutt, John <Chesnutt.John@epa.gov>; Walker, Stuart <Walker.Stuart@epa.gov>; Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Sanchez, Yolanda <Sanchez.Yolanda@epa.gov>
Subject: Re: Hunters Pt

Thanks Dan!

It was good to see you too. I really appreciate yours and your students efforts. I will check with my team and get back to you in the next few days with some proposed dates for our meeting.
Regards,
Angeles

Sent from my iPhone

On Jan 30, 2019, at 4:40 PM, DanielHirsch <dhirsch1@cruzio.com> wrote:

> Hi Angeles,
>
> It was good to see you at the CAC Hunters Point meeting Monday and to speak with you after it. I have attached fyi my presentation slides. Please note that they don't contain the detailed concerns we wish to share with EPA about the Navy's PRG claims.
>
> Statements made by Navy representatives at the meeting reinforced our concerns that the Navy has been less than forthcoming with EPA regarding key facts material to the PRG issue, and that it is trying hard to get EPA to sign off on the Navy's PRG calculations before the public can review and comment on them and before EPA can be apprised of, through those public comments, potential misrepresentations by the Navy. We were struck by the Navy's insistence on getting "EPA buy-in" on the Navy's PRG calculations before making them available to the public. The Navy seems intent on preventing EPA from getting information about what is wrong with the calculations prior to having signed off on them.
>
> **As we discussed Monday:**
>
> 1. It would be useful to set up a meeting between our team and the EPA team, as soon as possible, to pass on to you information that contradicts what we currently know the Navy appears to have claimed for its PRG

changes, and a number of other critical issues related to the Parcel G retesting plan, Five Year Review etc. Please let us know when might be possible for this meeting. We would be pleased to come to your offices in SF.

2. We believe it appropriate for EPA to communicate to the Navy that the revised draft Five Year Review, containing for the first time the PRG calculations, should be released for an official public comment period, and for EPA to not sign off on the PRG calculations until that happens and it can review those comments.

3. If the Navy declines to provide an official comment period, we believe it would be appropriate for EPA to not sign off on the Navy's PRG calculations until they have been at least released publicly and EPA has had a chance to review what comments the public may have.

4. In the meantime, we ask that EPA provide us with the Navy's changes to the EPA's defaults in the PRG (and DCC) calculators and the Navy's rationale for the changes.

This is all important because the appropriateness of the cleanup standards used at HPS is central to protecting public health. If the Navy hasn't been forthcoming, and EPA acts to approve the PRG calculations before being able to learn that which the Navy has not disclosed, the potential impacts to the public health and agency trust are self-evident.

A few examples of misrepresentations that the Navy has apparently made to EPA can be gleaned from the minimal information revealed in the Navy's presentations Monday:

1. The Navy stated that EPA's standard for Superfund sites is 12 millirem/year, and the Navy used EPA's Dose Calculator to come up with PRGs (with key default inputs improperly turned off). One Navy slide stated expressly: "EPA Standard: 12 mrem/yr." A second slide showed their only PRG calculations, which it stated were the "2019 EPA Dose Compliance Concentration at 12 mrem/yr."

However, EPA's CERCLA standard is NOT 12 millirem/year, and one is NOT supposed to use the Dose Compliance Calculator to come up with PRGs.

EPA's CERCLA cleanup requirements are based on risk, not dose. As you well know, one is to aim for 10^-6 risk;

if one can't for some reason meet that level, one can request approval to fall back, based on the 9 balancing and other requirements, but no more than 10^-4, and aiming still to be as close to 10^-6 as possible. But the EPA cleanup standard simply is not 12 millirem/year.

12 millirem/year is only used to determine whether some other agency's standard (e.g., a state decommissioning rule) can be considered as an ARAR. EPA has determined that any such rule that is greater than 12 millirem/year is automatically barred from being considered as an ARAR as it clearly non-protective. (To the best of my knowledge, there is only one such rule from another agency that is not thus automatically barred from consideration as an ARAR, that of the State of Maine, which is less than 12 millirem/year. Of course, Hunters Point is not in Maine.)

This is set forth in Radiation Risk Assessment at CERCLA Sites: Q&A, issued by EPA's OSRTI, May 2014, EPA 540-R-012-13 https://semspub.epa.gov/work/HQ/176329.pdf, and its 1999 predecessor https://semspub.epa.gov/work/HQ/175420.pdf, referenced in the 2014 document. See p. 2 of the cover memo to the 2014 guidance, and p. 28 in the Q&A. See also the 1999 document, which states at p. 2 of the cover memo:

> This Risk Q&A clarifies that, in general, dose assessments should only be conducted under CERCLA where necessary to demonstrate ARAR compliance. Further, dose recommendations (e.g., guidance such as DOE Orders and NRC Regulatory Guides) should generally not be used as to-be-considered material (TBCs). Although in other statutes EPA has used dose as a surrogate for risk, the selection of cleanup levels for carcinogens for a CERCLA remedy is based on the risk range when ARARs are not available or are not sufficiently protective. Thus, in general, site decision-makers should not use dose-based guidance rather than the CERCLA risk range in developing cleanup levels. This is because for several reasons, using dose-based guidance would result in unnecessary inconsistency regarding how radiological and non-radiological (chemical) contaminants are addressed at CERCLA sites. These reasons include: (1) estimates of risk from a given dose estimate may vary by an order of magnitude or more for a particular radionuclide, and; (2) dose based guidance generally begins an analysis for determining a site-specific cleanup level at a minimally acceptable risk level rather than the 10^{-6} point of departure set out in the NCP."

Pages 13-14 of that Q&A states (note the reference to 15 millirem/year for ARARs has been modified in the 2014 Q&A to 12 millirem/year):

OSWER Directive 9200.4- 18(US. EPA 1997a) specifies that cleanup levels for radioactive contamination at CERCLA sites should be established as they would for any chemical that poses an unacceptable risk and the risks should be characterizedin standard Agency risk language consistent with CERCLA guidance. **Cleanup levels not based on an ARAR should be based on the carcinogenic risk range (generally 10^-4 to 10^-6 with 10^-6 as the point of departure and 1 x 10^-6 used for PRGs) and expressed in terms of risk (# x 10^-#.)** While the upper end of the risk range is not a discrete line at 1 x 104, EPA generally uses 1x 10"' in making risk management decisions.
***
Please note that the references to 15 mremlyr in OSWER Directive 9200.4-18 are intended as guidance for the evaluation of potential ARARs and TBCs, and should not be used as a TBC for establishing 15 mrem/yr cleanup levels at CERCLA sites. **At CERCLA sites dose assessments should generally not be performed to assess risks or to establish cleanup levels** except to show compliance with an ARAR that requires a dose assessment....

(emphases in original)

So, the Navy assertion that the EPA's Superfund standard is 12 millirem/year is false, and the use of the EPA Dose Compliance Calculator is also erroneous for establishing cleanup levels at Hunters Point Shipyard. Those are the only PRG calculations disclosed to date by the Navy, and they are fundamentally wrong on just this basis alone.

2. The Navy Monday night claimed that it was supposed to alter the EPA defaults and that the reason the Navy results were so much more lax than the EPA PRG default values was for two supposed reasons.

a. The first reason given was that the Navy substituted San Francisco weather for the default weather in the calculator. Running the calculator with the default weather versus San Francisco weather makes no difference. Raising that matter to explain how they had such dramatically weaker results than the EPA default PRGs was misdirection.

b. The Navy on Monday night also indicated that it had turned off the garden pathway entirely in the EPA calculator, asserting directly that one is prohibited from growing vegetables at Hunters Point. That statement is

directly false, and any such modification to the PRG calculator would be fundamentally wrong. One is not prohibited from growing vegetables in soil. Furthermore, when we meet we will present you with the HPS documents about the restrictions or lack thereof and USDA data showing commonly grown produce has roots that go far deeper than the 2 feet of cover soil.

We look forward to meeting and discussing these and other matters in more detail, and hope EPA can find a way to not sign off on the PRG calculations and related matters until the public has had an opportunity to review and comment on them and EPA can have the opportunity to review the information contained in those comments.

Best wishes,

Daniel Hirsch

On Jan 28, 2019, at 2:14 PM, Herrera, Angeles <Herrera.Angeles@epa.gov> wrote:

Thanks Dan!

I plan to attend tonight's meeting and I will follow up with you afterwards.

Thanks. Angeles

-----Original Message-----
From: DanielHirsch <dhirsch1@cruzio.com>
Sent: Monday, January 28, 2019 2:10 PM

To: Herrera, Angeles <Herrera.Angeles@epa.gov>; LEE, LILY <LEE.LILY@EPA.GOV>; Lane, Jackie <Lane.Jackie@epa.gov>; Yogi, David <Yogi.David@epa.gov>; Chesnutt, John <Chesnutt.John@epa.gov>; Walker, Stuart <Walker.Stuart@epa.gov>; Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>
Subject: Hunters Pt - Time Urgent

We have reason to believe that the Navy may have been less than candid with EPA—and the public—on a matter of some importance related to the cleanup of Hunters Point Shipyard. We want to give EPA an opportunity to learn about the information that it may not have been provided by the Navy before EPA makes its decision whether to sign off on the Navy's requests on this issue.

We are making a presentation tonight at 6:00 pm at the Hunters Point Citizens Advisory Committee meeting, 451 Galvez Ave, Suite 100, San Francisco, and will be summarizing some of the information we believe the Navy has not provided EPA. We understand EPA often attends those meetings; if so, we wanted to make ourselves available briefly after the meeting to provide a bit more detail about these matters that the Navy may not have full disclosed and which are central to the decision EPA may shortly have to make whether to sign off on Navy claims key to the adequacy of cleanup decisions. [We recognize that this is the first day EPA is re-opened after the government shutdown.]

Whether you attend or not, we also want to try to arrange for EPA to consider our forthcoming detailed written report on these issues before EPA makes any sign-off decision on the Navy's requests, and an opportunity to discuss with us the implications once you have reviewed the report. Finalization of our report, fourth in the series, awaits release and

our review of the Navy's PRG claims, as discussed below.

EPA—and we—have for a year been telling the Navy that it needs to include in its draft Five Year Review (and draft Parcel G retesting plan) a thorough analysis of the old cleanup standards it has been using at HPS by running EPA's current Preliminary Remediation Goal (PRG) calculators. The Navy refused to do this in its draft retesting plan and its revised draft retesting plan, and most importantly, in its draft Five Year Review issued for public and agency review and comment in July. In response to the criticism, we understand the Navy says it will include its claims about PRG calculations in a revised draft Five Year Review. It said it would release that months ago; the date kept slipping; and as of today, it has still not been made public.

Furthermore, the Navy has refused repeated requests that the revised draft Five Year Review be subject to formal public comment. EPA CERCLA procedures—and the particular heightened concerns related to HPS in the wake of recent events—require the opportunity for thorough independent assessment. We are concerned that the Navy is trying to bypass those requirements and get EPA to sign off on what we have reason to believe will be highly erroneous PRG calculations, based on misrepresentations by the Navy to the EPA about its rationale for turning off key defaults in the EPA calculators.

To date, the Navy has only released a few sketchy numbers it claims are the result of its PRG runs, without disclosing how it changed the default inputs to get those values. Those outputs for contaminated soil are orders of magnitude less protective than the EPA default PRGs. We will not know for sure how they came up with such extraordinarily weak figures until the full calculations are released, but we

have some indications. The changes the Navy appears to have made to EPA's defaults are technically inappropriate, and EPA could sign off on them only if certain key facts about the Navy's Hunters Point remediation plans were not fully disclosed to EPA.

We therefore respectfully suggest:

1. Attend our CAC presentation tonight, if possible, where we will summarize briefly some of this missing information.
2. Ask the Navy to publish with a formal comment period its revised draft Five Year Review, which will contain for the first time its PRG calculations. Those should have been in the earlier draft released for comment, but weren't, so there must be a formal opportunity for independent review.
3. Do not approve the Navy's PRG calculations until EPA has had an opportunity to review thoroughly those comments.
4. If there is no formal comment period, we will nonetheless finalize our report and get it to EPA. We ask that EPA review it—and discuss it with us—prior to any decision whether to sign off on the Navy's PRG claims.

This is critical because if the cleanup standards employed at HPS are not appropriate, substantial risk could be imposed.

Furthermore, because of the Tetra Tech and related scandals, there is significant media and public scrutiny. It is, frankly, both in the public interest of terms of public health protections and the institutional interests of EPA for EPA to have fully considered these key matters, including the accuracy of Navy representations, before signing off on the Navy claims.

With best wishes,

Daniel Hirsch

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