Message

From: LEE, LILY [LEE.LILY@EPA.GOV]
Sent: 12/1/2016 3:49:48 PM
To: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO [derek.j.robinson1@navy.mil]
Subject: Re: EPA PRG calculator risk estimates - spreadsheets and map

Sorry I must have remembered incorrectly. I'll look more closely and get back to you.

Sent from my iPhone

> On Dec 1, 2016, at 7:42 AM, Robinson, Derek J CIV NAVFAC HQ, BRAC PMO <derek.j.robinson1@navy.mil> wrote:
>
> Thank you for the quick response.
>
> 1.91 pCi/G and 0.65 pCi/g were calculated by the PRG Calculator and correspond to Radium concentrations that would cause a 1x10-4 risk in your two scenarios for realistic and conservative, respectively.
>
> The 8 pCi/g was used to calculate current site risk for the two scenarios, 4.2 x10-4 and 1.3 x 10-3, respectively.
>
> My question is why 8 pCi/g is being used to predict current site risk? Is this a maximum value? If so, we remediated areas with values over 1+ background. If not a maximum, how was the value calculated?
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> -----Original Message-----
> From: LEE, LILY [mailto:LEE.LILY@EPA.GOV]
> Sent: Thursday, December 01, 2016 7:08 AM
> To: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO
> Subject: [Non-DoD Source] Re: EPA PRG calculator risk estimates - spreadsheets and map
>
> Dear Derek,
>
> 8 corresponds to the 10-4 risk.
>
> The map shows values before remediation as well as after. You are right, it shows the potential for what theoretically could have been missed. I put the other maps into the share drive last night. Did you get the large-format maps hardcopy in the mail? I can also bring extras next Wednesday. Let me know how many copies you want me to bring.
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> Sent from my iPhone
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>> On Dec 1, 2016, at 6:59 AM, Robinson, Derek J CIV NAVFAC HQ, BRAC PMO <derek.j.robinson1@navy.mil> wrote:
>>
>> Hi lily,
>>
>> Two questions -
>>
>> In the site specific residential risk spreadsheet (in the pdf), why is 8 pCi/g being used as the radium concentration?
>>
>> In your map of exceedances, did you remove sample results that were prior to remediation (i.e., only keep final confirmation samples)? Or are you trying to show the potential of what could be left behind?
>>
>> Thanks, Derek
>>
>>
>> -----Original Message-----
>> From: LEE, LILY [mailto:LEE.LILY@EPA.GOV]
>> Sent: Wednesday, November 30, 2016 10:34 PM
>> To: Brooks, George P CIV; Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV; Edwards, Zachary L CIV SEA 04 04N; Slack, Matthew L CIV SEA 04 04N
>> Subject: [Non-DoD Source] FW: EPA PRG calculator risk estimates - spreadsheets and map
>>
>> I'm sorry I am overdue to send you spreadsheets and maps related to this previous email.
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>> Attached is a map showing locations of samples > 10^-4 using a realistic scenario for all depths. The other files (e.g. for subset of previous with only shallow samples <2 ft bgs) are so large, my email system would not send them. I'll put them into the OneDrive folder I sent you a link to earlier. I hope this information helps.
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>> I have mailed large format hard copies of maps to Derek.
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>> Lily Lee
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>> Cleanup Project Manager
>>
>> Superfund Division
>>
>> U.S. Environmental Protection Agency, Region 9
>>
>> 75 Hawthorne St. (SFD-8-3)
>>
>> San Francisco, CA 94105
>>
>> Tel: 415-947-4187, Fax: 415-947-3518
>>
>> www.epa.gov/region9/superfund
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>> From: LEE, LILY
>> Sent: Monday, November 28, 2016 10:01 AM
>> To: 'Brooks, George P CIV NAVFAC SW, PACO' <george.brooks@navy.mil>
>> Cc: Derek Robinson (derek.j.robinson1@navy.mil) <derek.j.robinson1@navy.mil>; Janda, Danielle L CIV <danielle.janda@navy.mil>
>> Subject: FW: EPA PRG calculator risk estimates - let's talk
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>> Lily Lee
>>
>> Cleanup Project Manager
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>> Superfund Division
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>> U.S. Environmental Protection Agency, Region 9
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>> www.epa.gov/region9/superfund
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>> From: LEE, LILY
>> Sent: Tuesday, November 1, 2016 11:50 AM
>> To: zachary.edwards@navy.mil; matthew.slack@navy.mil
>> Cc: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO <derek.j.robinson1@navy.mil>; Janda, Danielle L CIV <danielle.janda@navy.mil>; Nguyen, Lyndsey <Nguyen.Lyndsey@epa.gov>; Chesnutt, John <Chesnutt.John@epa.gov>
>> Subject: EPA PRG calculator risk estimates - let's talk
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>> Dear Zach and Matt,
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>>
>> It was good to talk with you Oct. 3. As you requested, we are working on using the EPA PRG calculator to evaluate potential risks from radiation at the Shipyard. Thank you for your offer to discuss what parameters are appropriate based on your detailed knowledge of the site conditions. These facts will help make the estimates technically sound. For example, the questions below that I sent last Monday will help us see if we're understanding the situation correctly.
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>> As a starting point, EPA headquarters Health Physicist Lyndsey Nguyen was interested in the highest concentrations that have been documented at the site historically as a potential indicator of risk of missing areas of contamination. (Of course, the sample locations where levels exceeded release criteria should have been removed long ago.) Lyndsey prepared the attached calculations based on the highest concentrations that appeared in the NIRIS spreadsheet that Danielle provided last spring that included 225,000 results since 1990. Attached are printouts of the assumptions that she used for a conservative and for a realistic scenario. The realistic scenario assumes 60 cm soil cover, no inhalation, no ingestion, and no consumption of homegrown produce. Of course we expect to refine PRG calculations based on your knowledge about the facts of the site. As you see below the highest concentrations exceed a 10^-4 risk for 6 radionuclides in the conservative scenario and 3
> r
>> adionuclides in the realistic scenario. Looking at the Ra-226 spreadsheet I sent you earlier with shallow samples (<=2 ft bgs), 182 locations exceed 10^-4 risk in the realistic scenario.
>>
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>>
>> We'd be interested in finding out how you are estimating risk using the Navy's approaches.
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>> Let's talk soon about your thoughts on potential health risk. What would be a convenient date/time for you? Lyndsey and I will try to give you a call soon to follow up. In the mean time, feel free to call either of us at the numbers below.
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>> Thanks!
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>> - Lily
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>> Note: This email contains predecisional, intra-agency communication, so FOIA exemption 5 could apply
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>>
>> Lyndsey Nguyen
>>
>> Environmental Response Team-Las Vegas
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>> Phone: 702.784.8018
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>> Cell: 702-373-3756
>>
>> Email: Nguyen.Lyndsey@EPA.gov
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>> Lily Lee
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>> From: Nguyen, Lyndsey
>> Sent: Tuesday, November 01, 2016 10:28 AM
>> To: LEE, LILY <LEE.LILY@EPA.GOV>
>> Subject: PRG Runs 1x10-4 risk
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>> I took a look at the highest data for each radionuclide and ran two PRGs based off of the highest data from the excel spreadsheet:
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>> 1. Conservative Approach-I ran the PRG with the highest data for each radionuclide with zero cover. I kept inhalation and ingestion rates to default values. For a risk value, I went with EPA's achievable risk when determining if remediation is needed (i.e. 1x10-4).
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>> 2. Realistic Approach-I ran the PRG with the highest data for each radionuclide with 60 cm of soil (that's roughly 2ft) and I zero-ed out inhalation and ingestion due to the durable cover. Again, I ran the PRG with EPA's achievable risk of 1x10-4. My results are:
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>> Lyndsey
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>> Lyndsey Nguyen
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>> Environmental Response Team-Las Vegas
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>> Phone: 702.784.8018
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>> Cell: 702-373-3756
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>> Email: Nguyen.Lyndsey@EPA.gov
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>> From: LEE, LILY
>> Sent: Monday, October 24, 2016 10:56 AM
>> To: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO <derek.j.robinson1@navy.mil>
>> Subject: Clarifying questions re EPA's comments on Tech Memo outline
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>> Dear Derek and Danielle,
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>>
>> I'm sorry for the delay getting comments to you on the Tech Memo outline. I've had trouble getting feedback from 2 final reviewers. But I haven't gotten any major new issues since the last time we talked in San Diego. But in our review, our technical staff have some clarifying questions that could help ensure we understand what the data mean, so that our recommendations can be prioritized based on facts. I appreciate your help!
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>>
>> 1. Thank you Danielle for sending the NIRIS spreadsheet (as a reminder below I cut & pasted the "Search Criteria")
>>
>> a. In the field "Site Name" What does Site 00001, Site 000002, Site 000014, and Site 000038 mean?
>>
>> b. What does a blank in that field mean?
>>
>> c. In "Analyte Value" did you subtract out background? Did you include daughter products?
>>
>> d. In "Location Type Desc" what does "Radiation Test Station" mean? Could these be check samples?
>>
>> 2. Do you still have tuna cans with original soil samples available? I thought I had heard that RASO had requested them or could request them.
>>

>> 3. When did the Navy switch from time & materials to fixed price contracting?
>>
>> 4. When was Anthony Smith working at HPNS?
>>
>> 5. The Cs-137 samples below are marked "No" for "removed." But I know that some work was done in the Triangle 707 area, so I'm wondering if they were later removed. Attached is a spreadsheet that just shows shallow Cs-137 samples, ranked by analyte value.
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>>
>> LOCATION_NAME
>>
>> ANALYTE_VALUE
>>
>> COLLECT_DATE
>>
>> CONTR_NAME
>>
>> 707A1
>>
>> 80.4
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A3
>>
>> 75.7
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A1-A
>>
>> 17.8
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A3-A
>>
>> 13.9
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A1-D
>>
>> 2.12
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A2
>>
>> 1.25
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A1-C
>>
>> 1.04
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A2-C
>>
>> 0.62
>>

>> 7/14/1999
>>
>> TETRA TECH EM, INC.
>>
>> 707A2-G
>>
>> 0.45
>>
>> 7/14/1999
>>
>> TETRA TECH EM, INC.
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>> Search Criteria for NIRIS pull that Danielle sent in spring, 2016:
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>> Regions:
>>
>> SOUTHWEST
>>
>> Installations:
>>
>> HUNTERS_POINT_NS
>>
>> Sample Matrices:
>>
>> Soil, Swab or wipe, Storm drain sediment, Sediment
>>
>> Sample Types:
>>
>> Normal (Regular)
>>
>> Method Groups:
>>
>> Radiation
>>
>> Locations without Sites:
>>
>> No
>>
>> Detected:
>>
>> All
>>
>> Reportable:
>>
>> All
>>
>>
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