To: Williams, Mike[Mike.Williams@tetratech.com]
From: McCoy, Erin
Sent: Wed 2/15/2017 8:35:37 PM
Subject: RE: Dico Building Alternatives for the Feasibility Study

Let's make the asphalt cover bigger. No hills.

Erin McCoy, P.G. | Remedial Project Manager

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From: Williams, Mike [mailto:Mike.Williams@tetratech.com]
Sent: Wednesday, February 15, 2017 11:13 AM
To: McCoy, Erin <McCoy.Erin@epa.gov>
Subject: FW: Dico Building Alternatives for the Feasibility Study

Erin –

Please see Danielle's email below. We can modify the costs and see if it would be any cheaper, but we need to either make the asphalt cap larger, increase the height of the asphalt cap (it may be a hill at that point), or change to a vegetative cover. What are your thoughts? I can get setup a conference call with the three of us, if you prefer.

Thanks,

Mike

P.S. I did get notification from Ted about the funding. Thanks for checking on that.

Mike Williams | Sr. Project Manager/Hydrogeologist

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Mike.Williams@tetratech.com
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From: Gibson, Danielle
Sent: Wednesday, February 15, 2017 10:47 AM
To: Williams, Mike <Mike.Williams@tetratech.com>
Subject: FW: Dico Building Alternatives for the Feasibility Study

Mike,

We included off-site disposal of the Production and Office Buildings in Alternative 3 based on the bullet highlighted in the e-mail below. It was my understanding that since we are assuming these buildings are non-hazardous, then they can be disposed of off-site. If we choose to leave these buildings on-site, the off-site disposal costs will be reduced; however, a larger asphalt cap will be required.

Currently we are assuming an asphalt cap of 2.3 acres which will cover the foundations of Buildings 1, 2, and 3 and increase the surface elevation by 1.65 to 3.35 feet, depending on the volume of non-hazardous debris (25-75%). If we increase the cap size, this will increase the amount of asphalt pavement required as well as increase operation and maintenance costs associated with repairing the asphalt. We could potentially look at using a vegetative cover, instead of asphalt, which may reduce the cost of the cap and operation and maintenance.

Thanks!

Danielle

Danielle Gibson | Environmental Engineer

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From: McCoy, Erin [mailto:McCoy.Erin@epa.gov]
Sent: Friday, January 27, 2017 11:37 AM
To: Williams, Mike <Mike.Williams@tetratech.com>
Cc: Dorsey, Debra <Dorsey.Debra@epa.gov>; Juett, Lynn <Juett.Lynn@epa.gov>
Subject: Dico Building Alternatives for the Feasibility Study

Mike, we've looked into the remedy alternatives to evaluate in the building feasibility study and have outlined the modifications below. Per our phone conversation, do not start on the revision. I'll send you a meeting invite so that we can discuss this Monday with Debra. However, I wanted you to have a chance to look these over and see if you saw any potential pitfalls or questions before we talk on Monday. Thanks!

Building Alternative #1 – No action. This remedy will consist of the ongoing remedy selected in the 1997 ROD and require future maintenance of the epoxy coating and asphalt cap, and restriction of exposure.

Building Alternative #2 – Building demolition with off-site disposal. This remedy would be composed of several stages:

•□□□□□□□□ Asbestos removal

•□□□□□□□□ Building demolition and slab removal

o The production building does not contain characteristic haz waste and can be disposed of at a local appropriate landfill (assuming insulation does not have PCBs).

o Building slabs would be removed.

o Metal material would be decontaminated and sent to a local landfill for disposal as non-hazardous waste.

o The insulation would go to a RCRA Subtitle C landfill for disposal due to PCB concentrations.

o The porous building material would be analyzed to determine if it meets the requirements for characteristic hazardous waste based on pesticide contamination. The PCB contamination in the porous building material is not a factor since it is classified as bulk product waste and is less than < 50 ppm.

▪· Characteristic hazardous waste would be sent to a RCRA Subtitle C landfill for disposal, which may include treatment. Go ahead and assume it does.

▪· The remaining material that is not classified as a characteristic hazardous waste would be disposed of at a local appropriate landfill or used on site. Assume that it will go to a landfill.

▪· For the purposes of costs, it will be assumed that 50 to 100% is hazardous waste to allow for a cost range to be determined.

•□□□□□□□□ An asphalt cap would be placed over the former building foundations to prevent exposure to contaminated soil and fill located under the buildings. Non-hazardous building materials could be spread across the site or in low lying areas to prevent fill from being brought in (if possible – not sure what you need under the asphalt).

•□□□□□□□□ Institutional controls would be put into place to prevent exposure to the contamination remaining on site in the soil and fill below the asphalt cap and exclude residential use.

Building Alternative #3 – Building demolition with onsite containment. This remedy would be composed of several stages:

•□□□□□□□□ Asbestos removal

•□□□□□□□□ Building demolition

o The production building does not contain characteristic haz waste and can be disposed of at a

local appropriate landfill (assuming insulation does not have PCBs).

o Metal material would be decontaminated and sent to a local landfill for disposal as non-hazardous waste.

o The insulation would go to a RCRA Subtitle C landfill for disposal due to PCB concentrations.

▪· The PCB source material would be removed from the site because the concentration is > 50 ppm and it would be impossible to show that leaving the source material on site would not pose unacceptable risk to human health or the environment if contained in place.

o The location of the AOC would be determined. The EPA's policy on AOC is below:

▪· **Area of Contamination Policy**. In what is typically referred to as the area of contamination (AOC) policy, EPA interprets RCRA to allow certain discrete areas of generally dispersed contamination to be considered RCRA units (usually landfills). Because an AOC is equated to a RCRA land-based unit, consolidation and *in situ* treatment of hazardous waste within the AOC do not create a new point of hazardous waste generation for purposes of RCRA. This interpretation allows wastes to be consolidated or treated *in situ* within an AOC without triggering land disposal restrictions or minimum technology requirements. The AOC interpretation may be applied to any hazardous remediation waste (including non-media wastes) that is in or on the land. Note that the AOC policy only covers consolidation and other in situ waste management techniques carried out within an AOC.

o The porous building material would be crushed with onsite equipment (bulldozer, back hoe, etc.) and spread across the AOC. The AOC should include the entire site. Since the AOC would include the former building locations, the foundations would not need to be removed and the building material could be spread over the foundation slabs. Building debris would need to be segregated and tested using TCLP. Non-characteristic waste would be spread across the northern portion of the site. Haz waste would be spread across the southern portion of the site.

▪· There would need to be a discussion in the evaluation showing why leaving the contamination on site would not pose unacceptable risk to human health and the environment.

•□□□□□□□□ The PCBs in the building material, excluding the insulation, is < 50 ppm, which allows for the material to remain on site as bulk product waste.

•□□□□□□□□ The pesticide contamination is unlikely to migrate into the groundwater since the same pesticide contamination in the soil and fill below the buildings has not migrated to the groundwater over the last few decades. [*The vertical mobility of pesticide and inorganic constituents are expected to be significantly less than the VOCs due to their ability to be adsorbed by fine-grained soils. This is supported by the fact that pesticides were not detected in any groundwater samples collected within O.U. 2. Also, none of the soil samples obtained during the RI from the overbank deposits contained individual pesticide concentrations greater than 1.0 ppm. Only one post-flood surficial soil sample collected (the RI Addendum) had a pesticide*

concentration greater than 1.0 ppm (dieldrin at 1.9 ppm at DB 82), and no shallow soil pesticide concentrations exceeded 1.0 ppm (1994 Revised FS, pg 1-14).]

•□□□□□□□□ A RCRA Subtitle C cap would be placed over the southern portion of the AOC (where haz waste is consolidated) to prevent exposure to contamination. An asphalt cap would be placed over the northern portion of the site where non-haz waste is consolidated.

•□□□□□□□□ Institutional controls would be put into place to prevent exposure to the contamination remaining on site in the soil and fill below the asphalt cap and exclude residential use.

•□□□□□□□□ Need to add something stating that the location of onsite disposal may vary due to redevelopment, but that any additional costs associate with changing the location of any of the disposal would be the responsibility of the future developer.

Include the contingency that we discussed about using the building material to fill in the South Pond Area instead of buying fill if we choose those two remedies. Point out the overall cost savings.

Erin McCoy, P.G. | Remedial Project Manager

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