Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health

Sent: Tuesday, September 18, 2018 2:53 PM **To:** 'sbittman@stellar-environmental.com'

Subject: RE: RO0002742 et al

Hi Steve.

That reference (which you highlighted in yellow) to hardscape is for the potential that the entire site might be characterized to a shallower depth so that the installation of hardscaping could be undertaken to prevent contact with subsurface soil, rather than full incremental sampling to characterize current landscaped areas to 3 feet bgs (which allows landscapers not to be HAZWOPR trained). It would allow some flexibility in the approach for the site.

Taking the thinking a bit further, the entire site could be hardscaped, and above grade planters could be installed, using clean imported soil so as to provide some landscaping with a solid bottom (and the separation from potentially impacted uncharacterized soil).

Contaminated soil may not need to be removed, if hardscape is installed over the soil (similar to undetermined areas under the building or under current hardscape), but a Long-Term Site Management Plan would be needed to manage subsurface incursions for utility repair, etc., an annual inspection after closure that the hardscape is functioning as intended, and a Land Use Covenant (LUC) to document the condition for future owners, etc.

Let me know if I got your question, or if others develop. Regards,

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PDF Copies of case files can be downloaded at: http://www.acgov.org/aceh/lop/ust.htm

From: sbittman@stellar-environmental.com [mailto:sbittman@stellar-environmental.com]

Sent: Tuesday, September 18, 2018 12:01 PM

To: Detterman, Mark, Env. Health < Mark. Detterman@acgov.org>

Subject: RO0002742 et al

Hi Mark-

We are conducting a Phase I for Emerystation I for Wareham development.

I came across some language in your July 26 letter that is unclear to me.

I understand that in general, you are trying to protect the people who might come into contact with the soil out there.

However.

Can you explain what you mean by the hardscape part of the paragraph? Do they have to remove impacted soil before they put hardscape over it?

How about the landscaped areas? If they find soil exceeding criteria does it have to be removed?

"Adequately characterize soil with respect to Total Maximum Daily Load (TMDL) goals and human health risks by undertaking an incremental sampling program within all landscaped areas on both parcels. The depth of the samples must be sufficient to characterize soil in association with the continued use of these areas as landscaped areas, or with removal of soil and offsite disposal at a permitted landfill, if the landscaped areas are proposed to be capped with hardscape. For continued use as landscaped areas, a minimum sample depth of three feet bgs is required. Deeper sampling must be conducted in areas where large tree root balls, irrigation lines, and/or utility lines are present. These depth requirements are needed to characterize soil to the depth the landscaped areas have the potential to be brought to the surface due to churning of soil during landscape maintenance activities."

Thanks Mark-

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