



"Ragland, Tracie A."
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om>

To: nrokeec@mail.dnr.state.mo.us
cc: david.hartshorn@gsa.gov, "Gorman J., Eric"
<ejgorman@terracon.com>
Subject: FW: Hardesty

06-05-2003 14:25

Christine,

Per Dave Hartshorn's request, Terracon is responding to issues that you have raised regarding the Additional Environmental Site Investigation Proposal for the Hardesty Federal Complex, prepared by Terracon, Proposal No. E0203109, dated April 21, 2003. Based on a telephone call between Mr. Hartshorn and Tracie Ragland of Terracon on May 6, 2003 at 11:50am, it is Terracon's understanding that these are the issues of concern, with Terracon's responses:

1. Prepare complete soil profiles/boring logs from the ground surface down to bedrock, including soil profile diagrams.

Page 3 of Terracon's Proposal states: "Deep soil borings/monitoring wells for each cluster will be advanced first, continuously collecting soil samples during the installation using core barrels or split spoon samplers to document lithology, color, relative moisture content and visual or olfactory evidence of organics."

A total of five 2-well (one shallow, one deep) cluster soil borings/monitor wells will be installed on-site. The deep soil borings/monitoring wells in each cluster will be installed to a maximum depth of 50 feet below ground surface (bgs) or 2 feet into competent bedrock, whichever is shallower (please see issue #2 below). Terracon will prepare lithology profiles and diagrams from the ground surface down to bedrock for each of the deep soil borings/monitoring wells (for a total of five deep soil boring profiles). These soil profiles/boring logs will be included in the report.

2. Encountering bedrock within 50 feet bgs in reference to Page 3, first paragraph, third and fourth sentences:

"The deep soil borings/monitoring wells in each cluster will be installed to a maximum depth of 50 feet bgs or 2 feet into competent bedrock, whichever is shallower. The proposed total depths will not be exceeded without verbal approval from the United States General Services Administration (GSA)."

In order to determine depth of bedrock prior to monitoring well installation, Terracon proposes to advance the first two deep soil borings/monitoring wells at the site down to bedrock, within 70 feet bgs. Per our telephone call with Mr. Hartshorn, the GSA approves of advancing the extra 20 feet at the site in order to establish the depth to bedrock. If bedrock is not encountered within 70 feet bgs, Terracon will contact Mr. Hartshorn at the GSA for approval to continue boring advancement. The remaining three deep soil borings/monitoring wells will be advanced to 50 feet bgs or 2 feet into competent bedrock, whichever is shallower.

3. Ambiguous wording in the collection of soil samples in reference to Page 5, second paragraph from the bottom:

"Two soil samples will be collected in each of the five (5) deep soil borings based on the field sampling professional's judgement, from zones exhibiting the highest concentration of volatile organic compounds (VOCs) (using visual, olfactory or PID evidence); from the capillary fringe zone; from a change in lithology; or from the bottom of the soil boring."

To clarify, Terracon proposes to collect soil samples based on the zones exhibiting the highest concentration of VOCs (using visual, olfactory or PID evidence) first. If VOCs are not observed, Terracon will collect soil samples from the capillary fringe zone; from a change in lithology; or from the bottom of the soil boring.

4. Project Management and MDNR Project Coordinator Interaction for \$790.

Mr. Hartshorn stated that you indicated that Terracon has not had any interaction with you regarding the preparation of this Proposal. Part of the \$790 includes assisting Mr. Hartshorn with past responses to comments/issues raised by the MDNR regarding the Hardesty PA/SI reports, including responses to this proposal.

We appreciate the opportunity to be of service on this project and look forward to working with you in the future. If there are questions concerning this response or if we may be of further assistance, please call. Thank you!

Tracie Ragland
Environmental Scientist

Eric J. Gorman, CHMM, P.G.
Environmental Due Diligence Manager

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-----Original Message-----

From: david.hartshorn@gsa.gov [mailto:david.hartshorn@gsa.gov]
Sent: Tuesday, May 06, 2003 12:06 PM
To: Ragland, Tracie A.
Subject: Hardesty

Tracie,

Here's Christine's e:Mail address:

nrokeec@mail.dnr.state.mo.us

Pls send your responses to her.

Thx,
Dave