

From: [Helton, Kelsey](#)
To: ["Manu Sharma"](#); [Rusty Kestle](#); ["osteen.bill@epa.gov"](#); [Scott Miller](#); [John Mousa](#); [Richard E. Jackson](#); [Hutton, Richard H](#); [John Herbert](#); [Stanley Feenstra](#)
Cc: [Meghna Swamy](#); [Wayne Reiber](#); ["Mark A. Taylor"](#); [Chapman Ross](#); ["Carl Elder"](#); [Bernie Kueper](#); [Helton, Kelsey](#)
Subject: RE: DEP Review- Cabot: October 29, 2013 Proposed Hawthorn Group Investigation
Date: Saturday, November 30, 2013 7:09:01 PM

Thank you for the opportunity to review the October 29, 2013 scope of work for additional assessment of Upper Hawthorn contamination. DEP finds the scope acceptable as proposed. We look forward to implementation of the additional assessment.

Kelsey

Kelsey Helton
DEP-Waste Cleanup Program
Waste Site Cleanup Section
Tallahassee, FL
850-245-8969

From: Manu Sharma [mailto:MSHARMA@gradientcorp.com]
Sent: Tuesday, October 29, 2013 3:37 PM
To: Rusty Kestle; 'osteen.bill@epa.gov'; Scott Miller; Helton, Kelsey; John Mousa; Richard E. Jackson; Hutton, Richard H; John Herbert; Stanley Feenstra
Cc: Meghna Swamy; Wayne Reiber; 'Mark A. Taylor'; Chapman Ross; 'Carl Elder'; Bernie Kueper
Subject: Cabot: Hawthorn Group Investigation Meeting Follow-up

All:

This email follows up on the Action Items from the September 26, 2013 meeting with the stakeholders to discuss the findings of the Hawthorn Group investigation being undertaken by Cabot.

1) Proposed Supplemental Upper Hawthorn Groundwater Quality Delineation Program

As discussed during the meeting, Cabot plans to conduct a supplemental investigation to fully delineate the extent of groundwater contamination detected in the Upper Hawthorn Group unit on the Cabot portion of the Site. In particular, the goals of the investigation will be to: 1) further investigate the source of pine tar related groundwater quality impacts detected at boring SB-20; and 2) define the northeastern extent of the Upper Hawthorn groundwater plume associated with the former Cabot operations. The scope of the supplemental investigation includes the advancement of up to six additional delineation borings, SB-25 to SB-30, shown on attached Figure 1.

The rationale for the selected locations of the proposed delineation borings is as follows:

- Proposed borings SB-25, SB-26, and SB-27 will be advanced upgradient of SB-20 in order to evaluate if the pine tar related impacts detected at SB-20 may be attributed to a plume emanating from potential sources south of the former Cabot lagoon area; and
- Proposed borings SB-28, SB-29, and SB-30 will be advanced with the objective of delineating the downgradient and eastern extent of contamination detected in the Upper Hawthorn Group formation, particularly at SB-20.

The upgradient borings, SB-25, SB-26 and SB-27, will be advanced first so that the locations of the downgradient borings can be adjusted, if needed, based on findings at the these borings. In particular, the need for and location of SB-28 will be evaluated based on preliminary findings at upgradient boring SB-27. If boring SB-27 shows no evidence of contamination, boring SB-28 will not be advanced.

As in the prior Hawthorn Group investigation, three groundwater samples (top, middle, and bottom of the Upper Hawthorn Group formation) will be collected at each boring. At borings SB-25, SB-26, and SB-27, a soil boring will be first advanced to define soil lithology; this information will then be utilized to define the depth interval for groundwater sampling, and groundwater samples will be collected from a separate boring to be advanced adjacent to the soil lithology definition boring. At borings, SB-28, SB-29, and SB-30, soil lithology from nearby locations will be utilized to define groundwater sampling depths.

2) HG-29S/D Groundwater Quality

Per EPA's request, also attached is a spreadsheet summarizing the data that was used to develop a concentration-time series plot for well pair HG-29S/D. The phenol time trend plot shows increasing concentrations at HG-29D, potentially associated with a compromised well seal. This hypothesis will be evaluated with the proposed dye test.

3) Dye Test Work Plan

The dye test work plan has been revised to incorporate stakeholder feedback provided at the meeting. The revised work plan will be sent *via* a separate email.

We want to thank everyone for a productive meeting and appreciate the exchange of ideas. If you have questions or need additional information, please let me know.

Regards,

Manu

Manu Sharma, P.E. | Principal
617-395-5515 | msharma@gradientcorp.com

Gradient | 20 University Road | Cambridge, MA 02138 | 617-395-5000 | www.gradientcorp.com

This message contains information which may be confidential or privileged. Unless you are the addressee (or authorized to receive for the addressee), you may not use, copy, or disclose to anyone this message or any information contained in the message. If you have received this message in error, please advise the sender by reply e-mail, and delete all copies of this message and its attachment(s).