

N62578.AR.002474  
NCBC DAVISVILLE  
5090.3a

EMAIL REGARDING WEEKLY FIELD INVESTIGATION UPDATE FOR SITE 16 NCBC  
DAVISVILLE RI  
06/25/2010  
TETRA TECH NUS

## Vetere, Stephen

---

**From:** Sinagoga, Lee Ann  
**Sent:** Friday, June 25, 2010 4:55 PM  
**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcri.com'; 'jreiner@northkingstown.org'; pmasson@seafreezeld.com; cfcourtney@verizon.net; bphome1@verizon.net; dreis@crmc.ri.gov  
**Cc:** Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC; Anderson, Scott; David Barney; Barney, David A CIV OASN (I&E) BRAC PMO NE; Clark, Robin; Vetere, Stephen; williams.christine@epamail.epa.gov; brandon.bill@epa.gov; Richard Gottlieb; Alroy, Michael; Ganser, Leanne; Wright, John; Foster, Lauren; Seward, Peter; Logan, Joe; Vetere, Stephen  
**Subject:** Field Investigation Update for Davisville Site 16 - June 25, 2010 (CRMC File No. A2010-05-052)

### **Good Afternoon Folks,**

This week we finished the soil boring tasks for the former Bldg 41 area, completed most of the well installation tasks (in the North Central area and by the SeaFreeze bldg), sampled the temporary wells upgradient of the NORAD and SeaFreeze bldgs, and will complete the Allen Harbor sampling tomorrow.

Based on the work conducted this week... We learned that...

- Based on screening results (Color tec), low-level volatile organic chemical (VOC) concentrations may be present in the groundwater samples from the temp wells located upgradient of the SeaFreeze bldg. However, the screening responses were very weak.
- The potential polycyclic aromatic hydrocarbon (PAH) contamination previously detected in soils (2007 investigation) at one location immediately south of the former Bldg 41 may be very limited in nature. Thus far, screening samples for borings advanced at the suspect location and immediately adjacent are negative.
- The VOC screening results for soils from the borings advanced in the Bldg 41 area are similar to those reported for the 2007 Phase III investigation. No significant new source areas found.

Next week (*the week of the 28<sup>th</sup>*) we will....

- Complete the soil gas sampling program for locations upgradient of the SeaFreeze and NORAD bldgs, and in the Bldg 41 area. ***The drill rig will be used to advance the soil gas borings in these areas. This should be the last week for the drill rigs.***
- Complete the monitoring well installation program.
- Continue well development at locations across Site 16.

***Mr. Miranda, Mr. Goodwin, Mr. Masson, Mr. Adams ..... Please continue to let me know if any of these plans are creating a problem for you.***

Thanks much for your time and support,

Lee Ann  
412-921-8887

---

**From:** Sinagoga, Lee Ann  
**Sent:** Sunday, June 20, 2010 1:44 PM  
**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcri.com'; 'jreiner@northkingstown.org'; pmasson@seafreezeld.com; cfcourtney@verizon.net; bphome1@verizon.net; dreis@crmc.ri.gov

**Cc:** Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC; Anderson, Scott; David Barney; Barney, David A CIV OASN (I&E) BRAC PMO NE; Clark, Robin; Vetere, Stephen; williams.christine@epamail.epa.gov; brandon.bill@epa.gov; Richard Gottlieb; Alroy, Michael; Ganser, Leanne; Wright, John; Foster, Lauren; Seward, Peter; Logan, Joe; Vetere, Stephen  
**Subject:** Field Investigation Update for Davisville Site 16 - June 20, 2010 (CRMC File No. A2010-05-052)

**Good Afternoon Folks,**

We advanced a number of soil borings and temporary wells this past week. The borings/temporary wells planned for the NORAD and Sea Freeze areas were completed. Four borings planned for the eastern end of the former Bldg 41 area were also completed. The deep boring intended to support the selection of screened interval of the intermediate depth well planned for the Sea Freeze areas was completed.

Based on the work we conducted last week...We learned that....

- Based on screening results (PID, jar-head-space PID, and Color tec), low-level volatile organic chemicals (VOCs) may be present in subsurface soils in the areas upgradient of the NORAD and SeaFreeze bldgs. The screening hits upgradient of the SeaFreeze were associated with locations closest to the eastern arm of the VOC plume underlying Site 16. However, Color tec screening hits were not reported for the locations closest to the SeaFreeze bldg. No Color tec screening hits upgradient of the NORAD bldg.
- Low level contamination (VOCs) may also be present in the deep subsurface soils associated with location of the planned intermediate depth well near the Sea Freeze bldg (out near the piers).
- Low-level screening detections (VOCs) were also reported for soils from borings advanced at the eastern end of Bldg 41. (So far, the readings are similar to those reported for samples collected in 2007.)

Next week (*the week of the 21<sup>st</sup>*) we will....

- Continue *the soil boring program in the Bldg 41 area*.... Hope to complete all soil borings scheduled for the Bldg 41 area the week of the 21<sup>st</sup> with *the exception of the two soil gas borings planned for the week of the 28<sup>th</sup>*.
- *Monitoring wells will be installed in the North Central Area and by the SeaFreeze building area.*
- The *Allen Harbor sampling (i.e., the boat work)* will be completed. We do not think any boats will need to be moved to access sampling locations.

*Soil gas sampling* (the NORAD bldg area, the SeaFreeze bldg area, and the Bldg 41 area) is tentatively scheduled for the week of *June 28<sup>th</sup>*.

***Mr. Miranda, Mr. Goodwin, Mr. Masson, Mr. Adams ..... Please continue to let me know if any of these plans are creating a problem for you.***

Thanks much for your time and support,

Lee Ann  
X8887

---

**From:** Sinagoga, Lee Ann

**Sent:** Saturday, June 12, 2010 11:04 AM

**To:** Sinagoga, Lee Ann; 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcricri.com'; 'jreiner@northkingstown.org'; pmasson@seafreezeld.com; cfcourtney@verizon.net; bphome1@verizon.net; dreis@crmc.ri.gov

**Cc:** Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC; Anderson, Scott; David Barney; Barney, David A CIV OASN (I&E) BRAC PMO NE; Clark, Robin; Vetere, Stephen; williams.christine@epamail.epa.gov; brandon.bill@epa.gov; Richard Gottlieb;

Alroy, Michael; Ganser, Leanne; Wright, John; Foster, Lauren; Seward, Peter; Logan, Joe; Vetere, Stephen  
**Subject:** Field Investigation Update for Davisville Site 16 - June 12, 2010

**Good Morning Folks,**

We have completed the test pits for the North Central Area (NCA) and moved onto the soil boring (SB) program. (All the planned test pit locations are plotted on Figures 17-1 and 17-2 of the Sampling and Analysis Plan [SAP]). Ten additional test pits were advanced based on field observations and screening samples. One soil boring was advanced within the "BTEX hot spot" area for purposes of collecting information to properly select the screened interval for the shallow/intermediate depth wells to be installed in that area. Two borings were advanced in the SeaFreeze area.

Based on the work conducted last week.... We learned that...

- There is evidence of subsurface debris throughout a large portion of the NCA except little (if any) noted at locations along the western, southwestern, and eastern boundaries, and at locations within the southeastern corner of the NCA. However, the debris is most distinct at locations in the northern and western portions of the NCA and somewhat less so in the remainder of the NCA.
- Some petroleum odor noted in subsurface soils at location 40 (northeast corner of NCA). Metal debris noted at location 35 (also in the northeast corner of the NCA). (See Figure 17-2.)

Next week we will....

- Continue the soil boring program.... Hope to complete those borings scheduled in the vicinity of the SeaFreeze and NORAD buildings, and possibly move onto the borings in the Bldg 41 area.

**Monitoring well installation (in the NCA and by the SeaFreeze building) is tentatively schedule for the week of June 21.**

The **Allen Harbor sampling (i.e., the boat work)** is tentatively scheduled for the week of **June 21.** We do not think any boats will need to be moved to access sampling locations.

**Soil gas sampling** is tentatively scheduled for the week of **June 28.**

**Mr. Miranda, Mr. Goodwin, Mr. Masson, Mr. Adams ..... Please continue to let me know if any of these plans are creating a problem for you.**

Thanks much for your time and support,

Lee Ann  
X8887

---

**From:** Sinagoga, Lee Ann  
**Sent:** Saturday, June 05, 2010 10:23 AM  
**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcri.com'; 'jreiner@northkingstown.org'; 'pmasson@seafreezeld.com'; 'cfcourtney@verizon.net'; 'bphome1@verizon.net'; 'dreis@crmc.ri.gov'  
**Cc:** 'Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC'; Anderson, Scott; 'David Barney'; 'Barney, David A CIV OASN (I&E) BRAC PMO NE'; Clark, Robin; Vetere, Stephen; 'williams.christine@epamail.epa.gov'; 'brandon.bill@epa.gov'; 'Richard Gottlieb'; Alroy, Michael; Ganser, Leanne; Wright, John; Foster, Lauren; Seward, Peter; Logan, Joe; Vetere, Stephen  
**Subject:** Field Investigation Update for Davisville Site 16 - June 5, 2010

**Good Morning Folks,**

The second week of our Site 16 field work (week of May 31) continued to focus on test pit work in the North Central Area (NCA) of Site 16 and well re-development for upgradient wells and wells selected for natural attenuation

monitoring. With one exception (Location No. 31), all of the test pits depicted in Figure 17-1 of the Sampling and Analysis Plan have been completed. We are currently working on the test pits depicted in Figure 17-2.

Based on the work conducted last week... We learned that...

- The “BTEX Hot Spot” may extend further to the south than previously known (based on metals [XRF] and PAH [Mitkem screening samples]).
- The debris field in the area currently designated as the “Extended Boundary of the Creosote Dip Tank Area” (see Figure 17-1 of the Sampling and Analysis Plan) extends further south than previously understood. But, minimal debris (if any) was detected in the southern most (Test Pits [TP] 50, 51, and 52) and western most [TP 57] locations excavated.
- A few interesting PID readings (30 to 50) were reported for the top soil intervals at locations 53 and 55 (southwest portion of North Central Area). Please note that these are screening results only.... subject to the results received from the fixed-base analytical labs. (Note: Our background PID readings have been approximately 5 or less.)

Next week we will....

- Complete the test pitting for locations depicted on Figure 17-2 (all in the NCA). We will also excavate test pits at approximately 6 locations not currently depicted on Figure 17-1 in an effort to further characterize the north west portion of the NCA. These “step-out” test pits will be located based on the screening results we have collected over the past 2 weeks.
- Start the soil boring program.... Hope to complete at least some of the borings scheduled for the NCA portion of Site 16.

The first set of **soil borings** scheduled to be completed **in the vicinity of the NORAD and SeaFreeze buildings** will likely be advanced the week of **June 14<sup>th</sup>**.

We will also likely be advancing **soil borings in Bldg 41 area during the week of June 14<sup>th</sup>**.

**Monitoring well installation (in the NCA and by the SeaFreeze building) is tentatively schedule for the week of June 21.**

The **Allen Harbor sampling (i.e., the boat work)** is tentatively scheduled for the week of **June 21.**

Soil gas sampling is tentatively scheduled for the week of June 21 or June 28.

Thanks much for your time and support,

Lee Ann S.  
412-921-8887

---

**From:** Sinagoga, Lee Ann  
**Sent:** Monday, May 31, 2010 12:50 PM  
**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcricri.com'; 'jreiner@northkingstown.org'; 'pmasson@seafreezeltd.com'; 'cfcourtney@verizon.net'; 'bphome1@verizon.net'; 'dreis@crmc.ri.gov'  
**Cc:** 'Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC'; Anderson, Scott; 'David Barney'; 'Barney, David A CIV OASN (I&E) BRAC PMO NE'; Clark, Robin; Vetere, Stephen; 'williams.christine@epamail.epa.gov'; 'Richard Gottlieb'; Alroy, Michael; Ganser, Leanne; Wright, John; Foster, Lauren; Seward, Peter  
**Subject:** Field Investigation Update for Davisville Site 16 - May 31, 2010

**Good Morning Folks,**

The first week of our Site 16 field work (week of May 24) focused on test pit work in the North Central Area (NCA) of Site 16 and well re-development for upgradient wells and wells selected for natural attenuation monitoring...

Based on the work conducted to date.... We learned that....

- The “BTEX Hot Spot” area may extend further to the east than was previously known.
- XRF readings for soils at a few locations between the fire training area and Allen Harbor indicate that lead in soils in this area may exceed the EPA benchmarks for the residential land use scenario (but, not for the industrial land use scenario).
- So far, the character of the debris observed in test pits south of the Fire Training Area tends to be more organic in nature (tree stumps, no Color Tec readings or elevated XRF readings) while debris in test pits between the Fire Training Area and Allen Harbor and in the vicinity of the “BTEX Hot Spot” is more significant (e.g., pieces of creosote treated wood, one Color Tec/BTEX screening hit, PID readings greater than background, potentially significant lead screening hits [as indicated above]). These results are not unexpected given our current understanding of Site 16. Please note that screening results are preliminary data only.... subject to results received from the fixed-base analytical labs.

Next week we will continue the test pitting in the NCA and well re-development.

The soil boring work will likely commence the week of June 7 (mid/late – week). **Robin Clark will coordinate with Lance regarding access to sampling locations.**

The **Allen Harbor sampling (i.e., the boat work)** will likely not be conducted until the week of **June 21.**

Thanks much for your time and support,

Lee Ann  
412-921-8887

---

**From:** Sinagoga, Lee Ann  
**Sent:** Wednesday, May 19, 2010 9:28 AM  
**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcricri.com'; 'jreiner@northkingstown.org'; 'pmasson@seafreezeld.com'  
**Cc:** 'Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC'; Anderson, Scott; 'David Barney'; 'Barney, David A CIV OASN (I&E) BRAC PMO NE'; Clark, Robin; Vetere, Stephen; 'williams.christine@epamail.epa.gov'; 'Richard Gottlieb'; Alroy, Michael; Ganser, Leanne  
**Subject:** Field Investigation Update for Davisville Site 16 - May 19, 2010

**Good Morning Folks,**

We will begin the Site 16 field event on Monday May 24. A rough field schedule is provided below....

Light clearing of the underbrush in the North Central Area (NCA) will be accomplished Thursday and Friday of this week (May 20 and 21). Miki Alroy of our field crew will be working with representatives of Crawford Drilling to complete this task. **Miki's cell is 617-304-4677** if you need to contact him while he is working in the NCA this week.

Test pit excavations (via back hoe) in the NCA and re-development of Site 16 upgradient wells will likely begin Tuesday May 25 and will likely continue through June 4.

**Lance,**

As indicated last week.... The field team will begin well development of certain upgradient wells next week.... See the **attached figure** forwarded last week. **Please let us know if you anticipate any difficulties moving cars as necessary**

**next week to access wells**..... Robin Clark and Miki Alroy will contact you late this week and early next week as necessary.

**Christine, Rich,**

If you would like to visit the site and need specifics regarding the activities occurring on any particular day..... Please call Robin Clark (**Cell = 860-617-3948**) or Scott Anderson (**Cell = 724-513-7059**).

Thanks much for your time and support,

Lee Ann  
412-921-8887

Rough Field Schedule.....

**WEEK 1:**

Field Mobilization	5.24
Upgradient Well Devel	Wk of May 24
Finish Post Test Pit Locations	5.24
Test Pit (TP) Excavations in NCA	Wk of May 24

---

**WEEK 2:**

Complete TP/Start Soil Borings/ Temporary wells (TW)	Wk of June 1
Start MNA Well Sampling	Wk of June 1

---

**WEEK 3: (Including soil gas samples)**

Finish SBs/TWs	Wk of June 7
Finish MNA Wells	Wk of June 7

---

**WEEK 4: (Including boat work)**

Allen Harbor Work	Wk of June 14
Spill-over Work	Wk of June 14

---

**WEEK 5:**

Install New Wells

Wk of June 21

---

**WEEK 6:**

Site 09 LTM Work

Wk of June 28

---

**WEEK 7:**

Sample all Up/New Wells

Wk of July 19

---

**From:** Sinagoga, Lee Ann**Sent:** Wednesday, May 12, 2010 5:01 PM**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcricri.com'; 'jreiner@northkingstown.org'; 'pmasson@seafreezeld.com'**Cc:** 'Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC'; Anderson, Scott; 'David Barney'; 'Barney, David A CIV OASN (I&E) BRAC PMO NE'; Clark, Robin; Vetere, Stephen**Subject:** Field Investigation Update for Davisville Site 16 - May 12, 2010**Good Afternoon Folks,**

FYI..... We are likely to begin the **Site 16 field event** within the next couple of weeks.

We will prepare and send out a rough field schedule shortly.

We are likely to start with well development for the wells depicted in Figure 17-8 (**attached**) of the Sampling and Analysis Plan (SAP) and test pitting in the undeveloped portion of Site 16. You may see Navy contractors performing some light clearing of the underbrush in undeveloped portion of Site 16 as early as next week.

Our field operations lead (**Ms. Robin Clark – Cell = 860-617-3948**) will contact Mr. Miranda (NORAD) regarding the need to move cars to access wells for development and sampling. This task is likely to start the week of May 24.

As always.... Thanks much for your time and support,

Lee Ann  
412-921-8887

---

**From:** Sinagoga, Lee Ann**Sent:** Friday, April 09, 2010 10:51 AM

**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcricri.com'; 'jreiner@northkingstown.org'; 'pmasson@seafreezeld.com'  
**Cc:** 'Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC'; Anderson, Scott; Vetere, Stephen; 'David Barney'; 'Barney, David A CIV OASN (I&E) BRAC PMO NE'; Clark, Robin; Logan, Joe  
**Subject:** RE: Field Investigation Memo No 1 for Davisville Site 16: Invitation to Kick-off Meeting

**Good Morning Folks,**

Just a reminder..... See invitation below.....

We have a kick-off meeting for the upcoming field investigation work at Site 16 on April 14, 2009 at 1 PM.

Please let me know if you cannot make this meeting.

Thanks much for your time and support,

Lee Ann  
412-921-8887

---

**From:** Sinagoga, Lee Ann  
**Sent:** Wednesday, March 24, 2010 4:54 PM  
**To:** 'Luchka, Harold'; 'Reynolds, Brian'; 'Lance Miranda'; 'sking@qdcricri.com'; 'jreiner@northkingstown.org'; 'pmasson@seafreezeld.com'  
**Cc:** Dale, Jeffrey M CIV NAVFAC MIDLANT, PNBC; Anderson, Scott; Vetere, Stephen; David Barney; 'Barney, David A CIV OASN (I&E) BRAC PMO NE'; Clark, Robin; Logan, Joe  
**Subject:** Field Investigation Memo No 1 for Davisville Site 16: Invitation to Kick-off Meeting

Good Afternoon Everyone,

This E-mail is sent to **invite you to a kick-off meeting** for the upcoming field investigation work at NCBC Davisville, Site 16. The kick-off meeting is scheduled for April 14, 2010 (1 PM) in the conference room in the QDC Annex Building at 95 Cripe Street (directions may be found at [www.quonset.com](http://www.quonset.com)).

The planned investigative work for Site 16 will focus on soil sampling in the undeveloped portion of Site 16 (north of Davisville Rd). It will also include the advancement of a limited number of soil borings in the vicinity of the former Building 41 area and the Sea Freeze Building, sampling in Allen Harbor, installation of monitoring wells in the undeveloped area and the Sea Freeze area, and the sampling of several monitoring wells across Site 16. It is anticipated that the field investigation will likely begin in late April 2010 and conclude in early June 2010. The kick-off meeting is intended to:

- Provide you with the relevant details of the upcoming investigation (e.g., sampling locations, tentative schedule), and
- Discuss/resolve logistical concerns regarding sample collection (e.g., utility clearance particularly in the vicinity of buildings).

Please let me know if you have any difficulty with this meeting date and time.

As always.. Thanks for your time and support.... We greatly appreciate your cooperation and the courtesy you always extend to our environmental sampling crews,

Lee Ann Sinagoga

Tetra Tech NUS  
Project Manager – Site 16

412-921-8887