

## Friesen, Kent

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**From:** Moore, James T CIV USARMY CENAN (US) <James.T.Moore@usace.army.mil>  
**Sent:** Monday, December 05, 2016 12:34 PM  
**To:** Friesen, Kent; Grill, Cris  
**Cc:** Accorsi, Frank  
**Subject:** FW: Parcel 97 - Bldg 978 questions  
**Attachments:** FTMM\_Parcel 97\_Revised Figure 4 (5DEC2016).pdf; FTMM Parcel 97 Revised Table 3 (5DEC2016).pdf; FTMM Parcel 97 Photo.pdf

FYI

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

**From:** Colvin, William R Jr CIV (US) [mailto:william.r.colvin18.civ@mail.mil]  
**Sent:** Monday, December 05, 2016 12:12 PM  
**To:** Range, Linda <Linda.Range@dep.nj.gov>  
**Cc:** Moore, James T CIV USARMY CENAN (US) <James.T.Moore@usace.army.mil>  
**Subject:** [EXTERNAL] RE: Parcel 97 - Bldg 978 questions

Hi Linda:

Thank you for expediting the review of our 01 November 2016 IRM Letter Report and No Further Action Request. Following are our responses to your request for clarification.

Comment 1:

PCBs in Soil - The review does appear to confirm the PCBs have been adequately addressed in the soil (although sampling intervals were often NOT in accordance with standard - 0.1' intervals, 3' intervals), however, SW033 is somewhat unclear. I would request clarification and/or confirmation as to the actual location of sample SW033. As the contamination at SW033 extended to the 4-4.5' interval, excavation of that location was required to 5' (ND). Figure 4 appears to show SW033 within that area which was excavated only to 3' deep. Please provide clarification as to the location of SW033 on Figure 4 relative to the excavations and their associated depths.

Response:

Figure 4 has been revised (attached). Sample SW033 was collected near the boundary of the 3 ft excavation and the 5 ft excavation (but within the 5 ft excavation). On Revised Figure 4, the outline indicating the excavation areas has been adjusted to include SW033 within the 5 ft excavation area.

Comment 2:

Ground Water - Table 3 indicates all results are below GWQS. The analytical results listed, however, and p 4 of the narrative indicate PCB ground water results at locations S033 (5.5 ppb), S041 (1.4 ppb) and S043 (2.0 ppb) each

exceed the GWQS. No recommendations are provided. As elevated levels of ground water were reported, additional recommendations/actions are necessary. Please clarify.

Response:

Table 3 has been revised (attached). The note now reads "Detected result exceeds the NJ Groundwater Criteria." The reference to vapor intrusion has also been removed.

The three groundwater samples referenced are located in an area of perched groundwater within the 5 ft excavation area discussed above where pre-excavation soil samples exceeded the RSRS values. Sample locations S033 and S041 are within a few feet of one another and sample location S043 is approximately 10 ft east of sample locations S033 and S044. In addition, the remaining four groundwater sample results were non-detect for PCBs, an indication that the impact to the perched groundwater was localized in proximity to the building. The sample locations S048, S055, and S057 are outside of the soil excavation area. Sample location S042 was 1 ft north of sample location S043. The groundwater samples were collected using direct-push methods. As such, the samples were visibly turbid and unfiltered, and groundwater recharge was very slow. These factors when combined with the low solubility of PCBs in water, may indicate that the reported concentrations are attributable to soil particles in the samples, not to PCBs in water. During the July 2016 excavation effort, soils around sample locations S033, S041, and S043 were removed to a depth of 5 ft below ground surface as shown in Revised Figure 4.

Groundwater monitoring wells downgradient and east of Building 978 were monitored for PCBs from 2001 through late 2004. The monitoring wells are 18-20 ft in depth. Analytical results between 2001 and 2004 were non-detect for PCBs. Based on these results, the limited mobility of PCBs, and the source removal action, additional groundwater monitoring is not warranted.

Comment 3:

PAHs - Although EPH samples were further analyzed for PAHs, that sample exhibiting the highest level, S0039-04 - 4-4.5' - 4000 ppm - was not analyzed for PAHs. As this level of EPH was by far the highest exhibited, please indicate why it was not analyzed.

Elevated levels of PAHs, as noted in the submittal, were found. Review indicates they remain at three locations. No recommendations were made to address same. Please clarify.

S001 - 1-1.1' - Bap 0.54 ppm; bbf 0.74 ppm

S031 - 4-4.1 - Bap - 0.24 ppm

S0036 - 1-1.1' - Bap 0.33 ppm

Response:

PAHs were not analyzed at S0039-04 because the results from the EPH sampling were not received from the laboratory before the holding time expired for the PAH sample. However, it is noted that boring S0039 was advanced at, or adjacent to, a buried power pole discovered during the excavation (please see attached photo) which was observed to have creosote on the surface. During the excavation, this pole, which extended to approximately 6 ft below ground surface, was removed along with the upper 3 ft of soil. This action also removed the soil associated with sample location S0039-04.

In accordance with the provisions of N.J.A.C. 7:26E, TECHNICAL REQUIREMENTS FOR SITE REMEDIATION, Subchapter 2, Table 2-1, for areas where releases of Dielectric Fluid, Dielectric Mineral Oil, and/or Transformer Oil has occurred, soil shall be analyzed for EPH and PCBs, and 25 percent of those samples where EPH is detected shall be analyzed for PAHs. In boring S0039, two of the four samples were positive for EPH [S0039-03 (3-3.5 ft) and S0039-04 (4-4.5 ft)], but the shallow (S0039-02) and deep (S0039-05) were non-detect; two of the four samples were also analyzed for PAHs (S0039-02 and S0039-03). In addition, these sample results represent characterization values of areas prior to excavation. In July 2016, the areas of concern were conservatively excavated to depths of 3 to 5 ft as shown on Revised Figure 4. This resulted in the removal of: 1) PCB-contaminated soils that exceeded the NRSRS and RSRS criteria; and 2) EPH-contaminated soils to less than detectable levels.

Please let me know if additional information or clarification is needed.

Thank you,

Bill

William R. Colvin, PMP, CHMM, PG

BRAC Environmental Coordinator

Fort Monmouth, New Jersey

732-380-7064

From: Range, Linda [Linda.Range@dep.nj.gov]  
Sent: Monday, November 21, 2016 14:36  
To: Colvin, William R Jr CIV (US); Moore, James T NAN02 (James.T.Moore@usace.army.mil)  
Cc: Grill, Cris (Cris.Grill@parsons.com)  
Subject: [Non-DoD Source] Parcel 97 - Bldg 978 questions

Hello All,

I've completed my review, but have a few questions. I wasn't sure to who I should address them, but rather than generate a letter, thought an email may be more efficient for this parcel.

#### PCBs in Soil

The review does appear to confirm the PCBs have been adequately addressed in the soil (although sampling intervals were often NOT in accordance with standard - 0.1' intervals, 3' intervals), however, SW033 is somewhat unclear. I would request clarification and/or confirmation as to the actual location of sample SW033. As the contamination at SW033 extended to the 4-4.5' interval, excavation of that location was required to 5' (ND). Figure 4 appears to show SW033 within that area which was excavated only to 3' deep. Please provide clarification as to the location of SW033 on Figure 4 relative to the excavations and their associated depths.

#### Ground Water

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Linda S. Range

Site Remediation Program

Bureau of Case Management

609-984-6606