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EXTERNAL MEMORANDUM

TO:	David Graham
FROM:	Paul Turnham
DATE:	April 14, 2008
PROJECT:	VA10504.000
SUBJECT:	Supplemental response to Emhart's assertion that sample ID CMS-451-F may have been taken in an area used by NECC for incoming drum storage

This memorandum provides additional information regarding the location and past historical uses of the Centredale Manor Superfund site (Site) for the area around sample point CMS-451-F. This is the sample location with the highest concentration found in soils and sediment at the Site of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD, dioxin), the primary risk-driving contaminant. Our initial mapping of this sample's location showed it to be close to or within the footprint of the building formerly used by Metro-Atlantic to manufacture hexachlorophene (HCP building).[1] This memorandum provides further support for that finding.

Dr. J. Ronald Hass, on behalf of Emhart, has attempted to refute our finding that sample CMS-451-F was located in the area of the former HCP building. Initially, he suggested that sample CMS-451 was on the corner of the NECC portion of the site, near the NECC "fire-pit".[2] Subsequently he backed down from this interpretation and suggested instead that the area was one where NECC stockpiled incoming drums.[3]

We recently obtained a 1965 aerial photograph of the site, which we had geo-referenced by Environmental Research, Inc., a reputable firm specializing in environmental imagery. By

[1] Subsurface soils at CMS-451 also indicate the presence of the hexachlorophene process feedstock chemical, 2,4,5-trichlorphenol.

[2] October 19, 2006 report by J. Ronald Hass, Ph.D., "Evaluation and Opinions on the Conceptual Site Model Contained in U.S. EPA's Interim-Final Remedial Investigation Report and Human Health and Ecological Risk Assessment Reports."

[3] July 19, 2007 report by J. Ronald Hass, Ph.D., "Response to the April 4, 2007 Exponent/Limno-Tech External Memorandum regarding EPA's Conceptual Site Model"

mapping the sampling locations onto the geo-referenced image using coordinates in EPA's sampling database (August, 2007), we developed a clearer understanding of the location of the sample with respect to historical features, in particular the HCP building, and this analysis served to confirm our earlier findings.

Figure 1 shows the former HCP building (alongside the east bank of the Wooasquatucket River), NECC to the southeast and the mapped location of CMS-451. As seen in Figure 1, CMS-451 is located close to the northeastern corner of the HCP building. No stored drums or features other than the HCP building drums can be seen in the vicinity of this sampling location. It appears from the figure that the area was a thoroughfare on which drums would not have been stored. These observations strongly dispute Emhart's consultant's contention that CMS-451-F was from an area associated with NECC's operations.

Figure 1. 1965 Aerial Photograph showing EPA RI sampling locations

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April 16, 2008

FOR ADMINISTRATIVE RECORD

Eve Vaudo, Esq.
U.S. EPA, Region I
One Congress Street
Boston MA 02114-2023

RE: Centredale Manor Site

Dear Eve:

Attached is a supplemental response to the contention expressed by Dr. J. Richard Hass, Emhart's consultant, that sample ID CMS-451-F of 2,3,7,8-TCDD (dioxin) may have been taken in an area used by NECC for incoming drum storage. As the attached Figure 1 from a 1965 aerial photograph reveals, this sample is associated with Metro-Atlantic's manufacturing process of hexachlorophene at the HCP building.

If you like a more detailed image than the one attached to the memorandum with coordinates shown on it, let me know. We will be happy to provide it.

Sincerely,

David

David B. Graham

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