From:	Carl J. Michelsen
To:	Wicher, Frances
Cc:	Mike Field; Chris Baldassari; Bill Frizzell
Subject:	Answers to your questions Re: 837 Industrial Road, San Carlos
Date:	Thursday, May 28, 2015 2:14:50 PM
Attachments:	image001.png J64297-1 UDS Level 2 Report Final Report.pdf

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Hi Frances – following up on our conversation last week, see below for answers to the questions that you posed.

Regards,
Carl Michelsen

Question 1: Please provide information regarding when the PCBs were disposed and where they came from.

Information regarding potential PCB source, excerpted from GEI's October 2014 Final Removal Action Workplan (RAW):

> Page 4: "The land for Tanklage Square was filled originally by contractor Charles Harney when they excavated for Candlestick Park in the late 1950's. When Tanklage purchased the property in 1976 an additional 3 to 5 feet of fill was brought in by the previous owner Pimbo/Western Gear."

Because the PCBs (Aroclor 1260) are found at a depth of about 7.5 feet bgs and deeper, the Aroclor 1260-containing tar materials have been placed prior to 1976, the date of the 3-5 feet of additional fill and certainly before 1979, the date when the building was constructed.

> Page 5: "The source of the tar-like substance has not been confirmed. However, the WSP *Work Plan* states that a 2007 investigation at a nearby site, 977 Bransten Road, "prompted Tanklage to consider further investigation as to the possible source of the tar-like substance beneath Building 837." According to the reported history of 977 Bransten Road, as provided by Conor-Pacific/EFW (July 14, 2000), the 977 Bransten Road site had been used to re-refine or recycle oil as early as the 1930s. Reportedly, the site was first operated using an acid clay process to recycle/re-refine oil. A reported by-product of the acid-clay oil refining process is acid tars. Information on acid tars is provided in a 2005 paper titled *Acid tar lagoons: risks and sustainable remediation in an urban context* (Catney et. al., March 1, 2005). Acid tars are described as "acidic (pH often <2) and viscous with black color and oily smell, and of greater density than water." The Catney paper also states that common disposal routes have historically included dumping the tars in clay or gravel pits. Based on analysis of the tar-like substance found on the *subject property* (see Section 2.0), the proximity of the

977 Bransten Road site to the *subject property*, and the fact that the *subject property* was undeveloped land for much of the operational history of the oil recycling/rerefining facility at 977 Bransten Road, GEI believes it is possible that the tar-like substance discovered on the *subject property* is acid tar, a by-product of the oil recycling process once employed at 977 Bransten Road."

Additionally, the singular PCB detected at the subject property (Aroclor 1260) is the same as the one PCB compound detected at the 977 Bransten Road site. Presumably, the 977 Bransten Road site is the source of the Aroclor 1260-containing tar-like materials. Given how far back in time these events occurred, further investigation into when the Aroclor 1260-containing tar materials where disposed of and where they came from is likely to be difficult/expensive and will not change the selected remedy of capping in place.

Question 2: Has any more recent testing been conducted on the tar?

A sample of the tar-like substance was collected by PES on April 20, 2015. One PCB was detected, Aroclor 1260, at a concentration of 11 ppm. The material also had a pH of 0.76. A copy of the laboratory analytical results is attached. Note that these results are consistent with prior analysis of the collected tar material that was previously reported in the RAW (e.g., Aroclor-1260 was detected at 13 ppm) and do not change the selected remedy of capping in place.

Question 3: Do you have a copy of the Aerial photographs from Appendix D of GEIs Expanded Site Investigation Report?

Unfortunately, PES does not have a copy of Appendix D from the *Expanded Site Investigation Report*.

Question 4: Please provide information about the occupancy and frequency of usage at site and preferential pathway inspections:

The electrical room (the location of the sump) is considered a low-occupancy area where a worker would be expected to only spend a very small amount of time per year. Additionally, the sump access is covered by a concrete lidded box to protect against direct exposure to the tar-like substance, and allow for safe sampling and/or periodic removal of the tar-like substance.

Tenants at 837 Industrial Road include:

- Suite A: Leased to a martial arts studio (anticipated high occupancy);
- Suite B: Leased to an individual using the space for warehousing (anticipated low occupancy);

- Suite C: Vacant (anticipated low occupancy);
- Suite D: Leased by a building maintenance contractor who uses the space for equipment warehousing purposes (anticipated low occupancy);
- Suite E: Leased to a medical device distributor who uses the space for warehousing and office (anticipated high occupancy);
- Suite F: Leased to a aerospace parts distributor who uses the space for warehousing and office (anticipated high occupancy);
- Suite G: Leased to a company using the space for warehousing (anticipated low occupancy); and
- Suite H: leased to a cabinet retailer utilizing the space for warehousing, showroom, and office purposes (anticipated high occupancy).

Regardless of these occupancy considerations, for each of the tenants the building/parking lot acts as a complete barrier to exposure to subsurface PCBs. Although the self-implementing cleanup guidance is concerned with high and low occupancy, the selected remedy of capping in place described in the DTSC-approved RAW represents a risk-based scenario for remediation of the site in that there is no actual or potential risk to human health. At Suites C and D, where the recovery trench and inspection ports are located, there is no evidence of a surface expression of tar or and no complete exposure pathways. Additionally, the trench, sump, and access ports are covered. Quarterly O & M inspections continue to look for any potential exposure pathways, including inspecting the restrooms.

Carl J. Michelsen, P.G., C.HG.
Principal Geochemist

PES Environmental, Inc.
Engineering & Environmental Services
1682 Novato Blvd., Suite 100
Novato, CA 94947
Ph: (415) 899-1600
Fax: (415) 899-1601
cmichelsen@pesenv.com