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ENVIRONMENTAL ENGINEERING, INC

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Dr. Ravi Arulanantham Regional Water Quality Control Board 2101 Webster Street, Suite 500 Oakland, California 94612

Subject:

Status of Former Westinghouse Electric Corporation Property Located at

5899 Pedaleau Street, Emeryville, California

Dear Dr. Arulanantham:

The following is a brief description of the remedial investigations conducted at the Former Westinghouse Electric Corporation (WEC) facility located at 5899 Pedaleau Street, Emeryville, California:

Since 1981, a series of investigations have been conducted to assess surface and subsurface environmental conditions at the site. These investigations identified concentrations of various chemicals in soil and groundwater resulting from past activities at the site. WEC built a slurry wall in 1985 in response to an order from USEPA Region IX, which encloses the northwest corner of the site and encircles soil containing PCBs above 50 parts per million (ppm), see Figure 1. An engineered-cap consisting of three inches of asphalt over 6 inches of aggregate base, and 12 inches of compacted clay was placed over the area enclosed by the slurry wall. Semi-annual groundwater monitoring wells continued to monitor groundwater quality. In 1997, based on the WEC request and in connection with the results of the groundwater flow and chemical transport modeling conducted by SOMA, USEPA agreed to change the groundwater monitoring schedule from a semi-annual to annual basis. Subsequently, in April 1997, ALTA conducted the annual groundwater monitoring. The groundwater monitoring program is required by the Second Amendment to the Consent Agreement and Final Order between Westinghouse and USEPA Region IX, dated August 16, 1985. The results of recent groundwater monitoring program using the low-flow sampling technique have indicated that no detectable level of PCBs is present in groundwater beneath the site.

Based on a WEC request, under certain conditions, USEPA through the letter dated October 23, 1995 to Mr. Gordon Taylor of WEC approved using the engineering-capped area for parking lot purposes. A copy of USEPA letter is enclosed.

In early 1995, WEC retained SOMA Environmental Engineering, Inc. (SOMA) to conduct a baseline health risk assessment to evaluate the impact of residual soil and groundwater contamination on the current and future site's occupants. SOMA conducted extensive groundwater flow and chemical transport modeling and indoor and outdoor air dispersion modeling to evaluate the adverse impact of soil and groundwater contamination on the site's future occupants under residential and industrial/commercial scenarios. SOMA's report entitled "Baseline Human Health Risk Assessment for the Former WEC Facility", dated March 15, 1996, concluded that groundwater beneath the site is not a potential drinking water source and therefore, it does not pose any adverse health effect to the future or current site occupants. Furthermore, SOMA's report indicated that due to the presence of the slurry wall and cap and low hydraulic

conductivity of the saturated sediments beneath the site, the chemicals found in the groundwater would not migrate to off-site areas in the foreseeable future. This calculated risk is entirely attributable to the residual PCB's in soil. A small portion of the property located at the northeast corner of the site, adjacent to the engineered-cap area was identified as the source of the PCB's beneath the site, see attached Figure 1. SOMA recommended removal of PCB impacted soil extending to a two-foot depth at the WEC site. Based on SOMA's recommendations, the 95% upper confidence level (95% UCL) of the residual PCB's concentration in the surficial soils should not exceed the following levels:

Land Use Type	Recommended Soil PCB's Cleanup Levels (ppm)
Residential	0.5
Industrial/Commercial	2.89
Apartment Dwelling	59.3

In 1996, WEC retained ALTA Geosciences, Inc. (ALTA) and Westinghouse Remediation Services, Inc. to conduct soil remediation at the site. The remediation was conducted based on soil cleanup levels established in the baseline risk assessment prepared by SOMA. Although the proposed future use of the property was to be industrial/commercial WEC conservatively chose a cleanup level of 0.5 mg/kg for the upper two feet of soil. A maintenance or utility worker was conservatively assumed to be exposed to soil from two to four feet below the ground surface (bgs). WEC also conservatively chose a cleanup level of 50.0 mg/kg for soils residing at two to four feet bgs.

Soil remediation was accomplished within the subject area excavation and offsite disposal of soils having PCB concentrations greater than 0.5 mg/kg in the top two feet of soil. To meet this cleanup goal, a minimum of two feet of soil was removed and disposed of. Within two to four feet bgs, a cleanup goal of 50 mg/kg was used. Remediation was not required to address soils deeper than four feet or below the level of groundwater saturation (approximately four to five feet bgs).

In order to ensure that the cleanup levels were adequately met, the confirmatory soil samples collected at the bottom of the excavation (Table 3-2 from the completion Report prepared by ALTA in 1996) were statistically evaluated. The adequacy of soil remediation can be determined from the following summary statistics:

MINIMUM PCB CONCENTRATION	0.25 MG/KG
Maximum PCB Concentration	46.0 mg/kg
5 th -Percentile PCB Concentration	0.25 mg/kg
10 th -Percentile PCB Concentration	0.25 mg/kg
25 th -Percentile PCB Concentration	0.25 mg/kg
75th-Percentile PCB Concentration	5.1 mg/kg
90 th -Percentile PCB Concentration	18.1 mg/kg
95 th -Percentile PCB Concentration	29.8 mg/kg

The majority of confirmatory PCB samples have a concentration below 30 mg/kg, with the highest detected soil concentration of 46 mg/kg, below the established cleanup goal of 50 mg/kg. Almost 50 percent of the confirmatory soil samples were non-detected values (<0.5 mg/kg). Therefore, based on the confirmatory samples collected from the bottom of the excavation, the established cleanup goals were achieved.

Some samples collected from the excavation sidewalls exceeded the residential, industrial/commercial and utility worker cleanup levels of 0.5, 2.85 and 59.3 mg/kg, respectively. On the west sidewall, excavation could not continue without extending into the TSCA containment cell. To the north and east, continued excavation would have destroyed the concrete curbing and wrought iron fencing. However, the off-site properties to the north and east are ongoing commercial operations and are completely covered with asphalt and concrete foundations, thereby eliminating any exposure pathway. Therefore, soil cleanup goals for the on-site were achieved up to the point where further remediation was physically impossible at the extreme boundaries of the property.

Based on the current status of the site, WEC requests that the Regional Water Quality Control Board, upon approval of work plan for off-site investigation, issue a site closure letter so that the City of Emeryville and the purchaser can proceed with the development activities as planned. Within 30 days of the date of this letter, WEC will submit a sampling and analysis plan for confirmatory sampling along the northeastern boundaries of the property. Specifically, this plan will propose, sample locations and depths from certain grids located on the adjacent property. If this proposal is acceptable please notify me at your earliest convenience.

Sincerely,

Mansour Sepehr, Ph.D., P.E.

Principal

cc: Mr. Gordon Taylor of CBS

Ms. Susan Hugo, Alameda County Environmental Health Agency

Enclosures: