UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Via Electronic Mail and U.S. Postal Service Mail

July 15, 2011

Ken Riesz, Plant Manager
El Segundo Power, LLC
301 Vista Del Mar Boulevard
El Segundo, CA 90245

George Piantka, P.E., Director Environmental
NRG Energy, West
5790 Fleet Street, Suite 200
Carlsbad, CA 92008

Re: Polychlorinated Biphenyls (PCBs) Under Toxic Substances Control Act – USEPA Conditional Approval Under 40 CFR 761.61(c) of "Proposed Change to Cleanup", Former Units 1&2 Powerblock Foundation, El Segundo Generating Station, El Segundo, California

Dear Mr. Riesz and Mr. Piantka:

We have reviewed the attached AECOM letter dated June 29, 2011 (Subject: "...Proposed Change to Cleanup") notifying the U.S. Environmental Protection Agency (USEPA) of contamination by polychlorinated biphenyls (PCBs) discovered in concrete foundations below ground surface, soils at a depth of 10 to 18 feet below ground surface, and in ground water. This discovery was made during soil cleanup and cleanup verification sampling in the southwest portion of the El Segundo Generating Station (ESGS) Site in accordance with the PCB Notification that we approved with conditions on April 1, 2011. On behalf of NRG and El Segundo Power, LLC (ESP), AECOM's letter proposes changes to the PCB cleanup plan included in the approved Notification.

This letter approves the proposed changes to the Notification with the conditions and modifications established below. This approval excludes issues related to the finding of PCBs in ground water at the Site and USEPA will address those issues in a separate letter within the next two weeks.

ESP's Proposed Changes to the March 2, 2011 PCB Notification – USEPA Conditions of Approval

USEPA approved ESP's PCB Notification on April 1, 2011 with conditions under 40 CFR 761.61(a) and (c). USEPA is approving AECON's proposed changes to the Notification with the conditions established below. This letter also modifies USEPA's April 1, 2011 approval of the ESP PCB Notification. USEPA is open to discussing the conditions below with NRG, ESP, and AECOM.

1. **PCB cleanup level for soils.** For the areas in the southwest portion of the Site where PCB-contaminated soils were detected at depths of 10 to 18 feet below ground surface (bgs), USEPA is requiring a cleanup level of less than or equal to 0.3 mg/kg for PCB contaminated soils impacting ground water in the southwest portion of the Site. Based on AECOM's preliminary analytical data, PCBs were detected in soils at depth at concentrations ranging from 0.006 mg/kg to 3,760 mg/kg.

2. **Dewatering of excavated soils.** After excavated, soils will be dewatered in dewatering bins before sending to offsite disposal. The concentration of PCBs in soils to determine offsite disposal must be the in-situ PCB concentration in the soils before excavation. The PCB analytical results for soils must be corrected for percent moisture. Dewatered soils with PCB concentrations equal to or above 50 mg/ kg must be disposed in

accordance with 40 CFR 761.61(a)(5)(i)(B), (B)(2)(iii), and (B)(2)(iv). Soils with PCB concentrations below 50 mg/kg must be disposed offsite in accordance with 40 CFR 761.61(a)(5)(i)(B), (B)(2)(ii), and (B)(2)(iv). Water from soils that are being dewatered for offsite disposal must be disposed offsite in accordance with 40 CFR 761.61(a)(5)(B)(1) and 40 CFR 761.61(b).

3. **Progress reports and additional information.** Within 10 days after the date of this letter, submit a progress report and final analytical results for soils and ground water tested in the southwest portion of the Site.

4. **USEPA April 1, 2011 conditions of approval.** The conditions of approval in USEPA's April 1, 2011 letter remain in force. The conditions of approval herein are incorporated by reference into USEPA's April 1, 2011 approval of the Notification.

We look forward to being of assistance during ESP's and NRG's implementation of the June 29, 2011 proposed changes to the Notification as modified by USEPA herein. Please call Carmen D. Santos at 415.972.3360 if you have any questions concerning this conditional approval.

Sincerely,

for

Jeff Scott, Director
Waste Management Division

Enclosures (1)

Cc: Marybeth Hayes, AECOM
Steve Williams, AECOM
Nick LaPorte, NRG Energy, Inc.
Christine Bucklin, DTSC
Henry Jones, LA RWQCB
Steve Armann, USEPA R9
Carmen Santos, USEPA R9

AECOM

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June 29, 2011

Ms. Carmen Santos
USEPA Region 9
75 Hawthorne Street,
Mail Code: CMD-4
San Francisco, CA 94105

Subject: El Segundo Generating Station, 301 Vista de Mar Boulevard, El Segundo California, Proposed Change to Cleanup

Dear Ms. Santos,

On behalf of NRG and El Segundo Power, LLC, AECOM submitted a letter of notification on March 2, 2011 to the EPA regarding the proposed characterization and remediation of the El Segundo Generating Station (ESGS) site in accordance with the Toxic Substances Control Act (TSCA) regulations. EPA responded to the letter of notification with a Conditional Approval letter on April 1, 2011. As required by the Conditional Approval letter, we provided several follow-up submittals, including the *"PCB Sampling and Analysis Plan, El Segundo Generating Station, El Segundo, California (SAP)"* (submitted on April 14, 2011). EPA responded with a second conditional approval letter dated June 6, 2011, which was a modification to EPA's April 1, 2011 Approval Letter.

In accordance with the approved Notification and the approved SAP, El Segundo Power, LLC has conducted in-place characterization sampling; excavated PCB-impacted concrete, soil and debris; disposed of this impacted material; and collected post-excavation verification samples. The remediation is approximately 90% complete at this time. The PCB-impacted concrete has been characterized and all concrete which was a *PCB Remediation Waste* (i.e., ≥ 1 ppm PCBs) has been disposed of off-site. PCB-impacted soil has been substantially characterized, with the exception of one area. The PCB-impacted soil which was a *PCB Remediation Waste* has also been disposed of off-site.

In accordance with §761.61(a)(3)(ii), El Segundo Power, LLC is informing the EPA about new conditions discovered during verification sampling and the proposed changes to the remediation plan.

On June 16, 2011, several post-excavation soil samples were collected from the exterior of the southwest corner of the Power Units 1 and 2 building foundation. At this corner, a concrete trench which housed oil lines was observed coming into the foundation. These lines terminated near the exterior of the southwest side of the former power plant. Purple staining was observed on the concrete at approximately seven feet below ground surface (bgs). This staining was indicative of PCB impacts at other hot spots on the foundation. Several deeper samples were collected in this grid and in surrounding grids. PCBs were detected at depths of 10 ft, 15 ft and 18 ft bgs, at greater depths than had previously been detected beneath the foundation. The depth to groundwater in this area is approximately 15 ft bgs. Therefore, PCB-impacted soil was found at the soil groundwater interface in this area. PCB concentrations in soil samples ranged from 0.006 parts per million (ppm) to 3,760 ppm at 10 ft bgs. The presence of PCBs in soil at the water table represents a new site condition.

Based on this finding, and to determine if groundwater was impacted by PCBs in this area, temporary piezometers were installed in 17 locations in this area and across the site to a depth of approximately 18 feet. Groundwater samples were collected from a depth of approximately 16 to 17 ft bgs. Groundwater samples were collected within the former power block foundation, and to the west, north and east of the foundation. These groundwater samples reported no detectable PCBs above the method detection limit of 0.25 to 2.0 ug/L (the limit varied depending upon the Aroclor). Groundwater samples collected near the southwest side of the foundation reported PCB concentrations from 2.30 to 10.1 ug/L. These samples were field filtered; therefore, the PCBs were dissolved in groundwater and not adhered to sediment or particulates in the groundwater.

PCBs have not been detected in previous groundwater sampling conducted as part of the RCRA Remedial Investigation activities, and PCBS were not detected in historical samples collected as part of site-wide groundwater monitoring program.

In order to address this new condition, El Segundo Power, LLC proposes to conduct the following activities:

1. AECOM will continue in-place delineation of PCBs in soil and groundwater in the southwest corner of the site. Additional vertical and lateral soil samples will be collected and additional groundwater samples will be collected to define the extent of PCBs. The current extent of PCB impacts in soil above the cleanup level of 1 ppm in the southwest area is approximately 50 feet by 50 feet.

2. Soil sampling and analyses will be conducted in accordance with the existing approved SAP.

3. Groundwater sampling will be conducted in accordance with the DTSC-approved RFI work plan for groundwater sampling, with one change: groundwater samples will be filtered to determine the extent of dissolved PCBs in groundwater. Groundwater samples will be extracted and analyzed using the same method as provided for equipment blanks (aqueous samples) in the approved SAP.

4. Once the extent of PCBs has been determined in soil, El Segundo Power, LLC will install shoring and dewater the excavation in order to remove PCB-impacted soil beneath the water table.

5. Groundwater removed from the excavation will be pumped into an onsite storage tank for temporary storage. AECOM will determine if it is feasible to utilize the current NPDES permit (NPDES No. CAG994004, CI-9628), issued on September 22, 2010 for the management of groundwater generated by dewatering activities. If this is not feasible or cost-effective, then El Segundo Power, LLC will dispose of the PCB-impacted groundwater at an offsite facility, in accordance with §761.79(b)(1)(ii), *water discharged to treatment works.*

6. Groundwater extracted from the excavation is expected to contain dissolved VOCs (primarily BTEX from a known offsite hydrocarbon source) and may contain metals sorbed to suspended solids. An existing on-site treatment system was designed to manage groundwater generated by dewatering activities. The treatment system includes GAC and ion exchange resins to remove these constituents in groundwater to the NPDES permit limits.

7. The equipment used to pump and store the groundwater will be decontaminated in accordance with TSCA regulatory requirements (§761.79(c)(2), §761.79(e) and §761.79(g). Records of decontamination will be maintained in accordance with §761.79(f)(2).

The information provided above includes preliminary data which will undergo further data validation and review. Our assumptions are preliminary and subject to further data collection. It is our intent to provide this notice of change in site conditions and change in cleanup as timely as possible. If you have any questions or require additional information, please do not hesitate to contact the undersigned. Thank you very much for your time and assistance with this project.

Sincerely,

Steven Williams. P.G.
AECOM Project Manager

Mary Beth Hayes
AECOM Project Manager

cc: Ken Riesz, El Segundo Power, LLC
George Piantka, NRG Energy
Christine Bucklin, DTSC
Stephen Rounds, DTSC Chatsworth