Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

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Ms. Jeri Zene Scott
Compliance Project Manager
Systems Assessment & Facility Siting Division
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, California 95814

Dear Ms. Scott:

Thank you for the opportunity to review the modifications to the Russell City Energy Center (RCEC) Project. DTSC has reviewed the environmental documents contained in Appendix 3.13, along with the applicable sections of the Russell City Energy Center, Hayward, California, (01-AFC-7), Amendment No. 1 submitted by Russell City Energy Company, LLC and dated November 2006. On February 2, 2007, the Applicant provided DTSC with an electronic copy of the *Phase II Environmental Site Assessments at 3810 Depot Road and 3700 Enterprise Avenue, and Additional Soil and Groundwater Sampling Activities at 3862 and 3878 Depot Road, Hayward, California* prepared by LFR Inc. and dated November 20, 2006.

The Applicant and their consultant, LFR Inc., also provided additional information during a conference call with DTSC on February 2, 2007 and on February 27, 2007. To the extent DTSC staff relied upon information provided by the Applicant during these conference calls, this information is summarized within the context of the following comments being provided for the California Energy Commission's consideration on this project.

GENERAL COMMENTS:

1. If contaminants will remain at the Site above levels appropriate for unrestricted use of the Site, then appropriate land use restrictions should be recorded for the property to limit future uses to those evaluated in the risk assessment as being safe. If land use restrictions are recorded, steps should be put in place to ensure that the restrictions will be monitored and any required operation, maintenance and/or monitoring activities are performed. This can include a requirement for financial assurance.

2. The Phase II indicates that soil excavation and offsite disposal is appropriate in some areas. However, the Phase II does not provide specific dimensions or the specific location(s) within these areas where this would be appropriate. It would be useful to modify Mitigation Measure 6 to require the review and approval of the Cleanup Plan or Soil Management Plan by an appropriate environmental oversight Agency such as the Alameda County Environmental Health Department, San Francisco Bay Region, Regional Water Quality Control Board, Department of Toxic Substances Control Board, Alameda County Environmental Health Department or, if the property is annexed into the City of Hayward, the Hayward Fire Department.

   The Cleanup Plan or Soil Management Plan should include the following information:

   a. A requirement that land use controls be executed and recorded and an implementation and enforcement plan be approved by the environmental oversight agency if the site is not cleaned up to standards appropriate for unrestricted use;
   b. The screening levels used to determine when soil must be removed and/or addressed;
   c. The specific locations where soil must be removed based upon existing data;
   d. Plans for handling, storing, stockpiling, profiling and disposing of excavated soil;
   e. Plans and requirements for confirmation sampling and analysis;
   f. Plans for filling existing data gaps in information and in sampling data; and
   g. A contingency plan outlining the steps that shall be taken if additional contamination is discovered during the course of implementing the Cleanup Plan or Soil Management Plan and during development of the property.

   As was noted during the February 27, 2007 conference call, many properties in urban areas contain environmental impacts of a similar nature as those encountered at this site. For sites such as these, and for sites with far more severe impacts, appropriate steps are developed and outlined in a Cleanup Plan or Soil Management Plan, and then implemented for the type of development to be constructed on the impacted property. The Russell Center site exhibits environmental impacts of various types and magnitudes, but they do not appear to be on a scale that cannot be managed with suitable proper planning, adherence to the plan, and proper implementation. Therefore, the development and implementation of a Cleanup Plan or Soil Management Plan is appropriate for the Russell Center site.

3. The Hayward Fire Department, Alameda County Environmental Health Department, San Francisco Bay Region, Regional Water Quality Control Board and/or the local water district should be consulted to determine whether groundwater in this area is naturally high in selenium. If the selenium is not the result of natural processes, then additional investigation and cleanup would be appropriate under the jurisdiction of the San Francisco Bay Region, Regional Water Quality Control Board as this contaminant has the potential to impact the nearby salt evaporator ponds and other surface water bodies.
4. Onsite structures (e.g., greenhouse, office buildings, storage structures) could contain potential recognized environmental conditions. For example, lead-based paint, light ballasts, mercury switches and/or asbestos-containing materials could be present. This should be investigated and addressed prior to demolition of structures. Additionally, there could be residual soil contamination from prior pesticide use around or within onsite structures. Sampling rationale and methodology to determine whether these pesticides are present should be included in the Cleanup Plan or Soil Management Plan, along with plans to address contamination, if found.
5. Mr. Lucas Goldstein of LFR Inc. indicated that no floating product was detected at any of the locations where grab groundwater samples were collected. However, it would be useful to collect groundwater samples and analyze them for petroleum hydrocarbons to determine if this contaminant is present and whether it needs to be monitored. Although samples were tested for volatile organic compounds associated with gasoline, these volatile organic compounds are generally not a part of longer carbon chain mixtures of petroleum hydrocarbons such as diesel, motor oil and cutting/lubricating oils.
6. Mr. Lucas Goldstein of LFR Inc. clarified that soil sampling locations were selected at the Eash, City, and Aladdin properties to target low points in the topography where visible staining was evident in an effort to collect samples from areas with the greatest potential for the accumulation of chemical compounds in soil. Mr. Lucas Goldstein of LFR Inc. further clarified that samples designated as 0.5 foot samples were collected from the ground surface to 0.5 feet below the ground surface (bgs) and that one foot samples were collected from 0.5 feet bgs to 1 foot bgs. DTSC staff note that in areas where surface soil samples were collected from 0.5 feet bgs to 1 foot bgs, these samples may not represent a reasonable maximum exposure concentration for risk assessment purposes.

SPECIFIC COMMENTS - ALADDIN PROPERTY

1) To meet the general industry standard, the *Phase I Environmental Site Assessment, 3810 Depot Road, Hayward, California prepared by LFR Levine-Fricke and dated November 20, 2006* should have been prepared in general

conformance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527-05 for Phase I Environmental Site Assessments. Although this reference is noted on page 2, it is only discussed in the context of providing a reference for the 180 day period of reliance.

2) Prior to demolition, the concrete area where automobile dismantling activities occurred should be inspected for cracking or evidence of repairs. If either of these conditions is noted, a soil sample should be collected following removal of the slab below the crack/repaired area(s) and analyzed for chemicals associated with these activities, such as petroleum hydrocarbons, pH and metals. Additionally, if drainage across the concrete area could have resulted in releases to soil, the soil should be sampled in the area where the liquids would have been released.
3) Once the site structures, vehicles and general debris are removed, the facility should be inspected for visual evidence of a release. If staining is noted, the Cleanup Plan or Soil Management Plan should discuss how this soil will be addressed.
4) During demolition activities, if additional hazardous substances storage areas are discovered, the conditions must be evaluated to determine whether soil samples should be collected and analyzed.
5) Surface soil samples should be collected below areas used to store batteries and electrical poles as visual evidence of a release may not be present below these storage areas.
6) The soil stockpile identified in Photograph 17 should be sampled to determine whether this soil can be safely reused onsite or whether it should be disposed of at an appropriate offsite location.
7) The hazardous waste storage shed should be inspected following removal of the drums of hazardous waste and closed in accordance with the local Certified Unified Program Agency requirements.

SPECIFIC COMMENTS - CITY PROPERTY

1. Mr. Lucas Goldstein and Ms. Barbara McBride clarified that the parcel described to the south of the biosolids drying area is not included in the project area. It may be used as a construction laydown area. Therefore, DTSC has not provided comments relevant to this area.
2. Mr. Lucas Goldstein clarified that the biosolids drying area has been graded over time. Therefore, soil samples collected at 0.5 to one foot below ground surface are believed to be representative of conditions within the zone subject to grading.
3. Soil samples should be collected and analyzed for appropriate chemicals of concern following the removal of the biosolids to verify that all of this material

has been removed and that this material did not release hazardous substances into the soil.

4. Mr. Lucas Goldstein and Ms. Barbara McBride clarified that the flow equalization basin, sludge distribution basin and associated piping will be retained for use by the City. Therefore, DTSC has not provided comments relevant to these areas.

SPECIFIC COMMENTS - EASH PROPERTY

1. Polychlorinated biphenyls (PCBs) were detected in several locations. The U.S. Environmental Protection Agency (implementing Agency for the Toxic Substances Control Act) has specific requirements to address releases of PCBs under the Toxic Substances Control Act (TSCA).
    a. TSCA site characterization and verification sampling goals are based upon total PCBs, rather than individual PCB Arochlors. Therefore, additional sampling and analysis will be needed to complete the characterization and cleanup of these areas. Site characterization and waste classification are based upon in-situ sample results.
    b. PCBs were detected at soil samples collected from 0.5 to 1 foot below the ground surface. Therefore, there is the potential for higher concentrations to be present at the ground surface. Therefore, additional surface soil samples should be collected from sampling location 1, 6, 9 and 13 to determine the lateral and vertical extent of PCB contamination.

2. Outback Systems. Information regarding the operations of Outback Systems and the condition of their building was not obtained during the site inspection conducted as part of the Phase I Environmental Site Assessment due to access constraints. Therefore, this is a data gap in the information provided.
3. All Good Pallets.
    a. Mr. Lucas Goldstein, LFRInc., clarified that All Good Pallets received and resold pallets and did not use wood treatment chemicals as part of its operation.
    b. The painting area and paint storage area (see Phase I, Page 10, Paragraph 5) could be a recognized environmental condition. Therefore, additional information must be provided to clarify why this area is not a recognized environmental condition or this area must be investigated as a recognized environmental condition.
    c. The Phase I (see Page 17, 3862 Depot Road, bullet 5) indicates that a spill was cleaned up. The location of the spill and the evidence used to determine that it had been cleaned up should be provided. If samples were collected and analyzed, this data should be included.

4. Bay Area Lumber. Please clarify whether wood treatment chemicals could be a potential chemical of concern. If so, please clarify whether samples were tested for these chemicals.
5. Metal Masters.
    a. The Phase I Environmental Site Assessment notes that the floor of the Metal Masters building was soaked with cutting and/or lubricating oils. Therefore, this area could be a recognized environmental condition and must be further investigated to determine if cleanup actions are required.
    b. The Phase I (see Page 17, 3862 Depot Road, bullet 2) indicates that a spill was cleaned up. The location of the spill and the evidence used to determine that it had been cleaned up should be provided. If samples were collected and analyzed, this data should be included.
6. Groundwater. As petroleum hydrocarbons were detected in surface soil samples and groundwater was detected at four feet below the ground surface (Location 6), groundwater should be tested for the presence of petroleum hydrocarbons. Only samples collected from the area of the former UST were tested for petroleum hydrocarbons. Although samples were tested for volatile organic compounds associated with gasoline, these volatile organic compounds are generally not a part of heavier mixtures of petroleum hydrocarbons such as diesel, motor oil and cutting/lubricating oils.
7. Please clarify why the 2006 surface soil samples were collected at 1 to 2 feet below the ground surface (bgs) and the 2004 surface soil samples were collected at 0.5 feet bgs. Additionally, as this site is not paved, the rationale for not collecting surficial samples (ground surface to 0.5 feet bgs) and analyzing these samples for non-volatile constituents of concern should be provided.
8. Mr. Lucas Goldstein, LFR Inc., clarified that no evidence was found for the installation of an underground storage tank following the application for a permit in 1989. As this was a historical cleanup, additional samples were collected to evaluate the potential for releases from this tank.
9. The Phase I indicates that a groundwater monitoring well was present at the 3878 Depot Road property and that this well was installed in 2003. The Alameda County Environmental Health Department should be consulted to determine whether they permitted this well and to determine if they have data reports for this parcel. It would also be useful to sound this well to determine its total depth and to sample the well as it was reportedly installed as part of a groundwater investigation.
10. If methylene chloride is a component of a product used or produced at the Site, its presence in soil samples can not be attributed to laboratory contamination unless quality assurance/quality control (QA/QC) samples indicate that it was due to laboratory contamination. In that instance, this should be discussed in the text.

If you have any questions, please contact Janet Naito of my staff at (510) 540-3833 or jnaito@dtsc.ca.gov.

Sincerely,

Barbara J. Cook, P.E., Chief
Northern California
Coastal Cleanup Operations Branch

cc: Mr. Guenther Moskat
CEQA Tracking Center
Office of Environmental Analysis and Regulations
Department of Toxic Substances Control
1001 I street, 22nd Floor
P.O. Box 806
Sacramento, California 95812

Ms. Ellie Townsend-Hough
California Energy Commission
1516 Ninth Street
Sacramento, California 95814-5512

Ms. Barbara McBride
Calpine Corporation
3875 Hopyard Road, Suite 345
Pleasanton, CA 94588

Mr. Lucas Goldstein
LFR Levine-Fricke
1900 Powell Street, 12th Floor
Emeryville, California 94608