



California Regional Water Quality Control Board

Los Angeles Region



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May 8, 2007

Mr. Doug Moreland
Hollywood Park Land Company, LLC
100 Wilshire Boulevard, Suite 940
Santa Monica, CA 90401

CONDITIONAL APPROVAL OF SOIL VAPOR EXTRACTION WORK PLAN – FORMER DRY CLEANING AREA IN HOLLYWOOD PARK RACETRACK AND CASINO, 1050 SOUTH PRAIRIE AVENUE, INGLEWOOD, CALIFORNIA (SITE ID NO. 2040271, SLIC NO. 1207)

Dear Mr. Moreland:

The Los Angeles Regional Water Quality Control Board (Regional Board) staff received and reviewed, *Property-Wide Subsurface Investigation Report and Soil Vapor Extraction Work Plan for Former Dry Cleaning Area* (Report), dated October 30, 2006, prepared by Erler & Kalinowski, Inc. (EKI) for the above-referenced site. This Report summarized the data collected for Phase II environmental site assessment and associated screening-level subsurface investigation for several selected areas of potential environmental concern at the site. This Report also contains a Soil Vapor Extraction (SVE) Work Plan for installation of extraction wells and operation of the SVE system in the Former Dry Cleaning Area.

Please note that in this letter, the Regional Board is only addressing the SVE Work Plan for installation of extraction wells and operation of the SVE system at the Former Dry Cleaning Area. The Regional Board will be responding to the other subsurface and groundwater investigations on a reminder of the project site in a separate letter(s) upon completion of the review.

Hollywood Park Racetrack and Casino (Property) is approximately 238 acres and includes a main horse racetrack, Grandstand building and clubhouse, the Pavilion/Casino building, horse training or practice track, horse stable area, equine hospital, track and vehicle maintenance facilities, and associated paved parking and landscaped areas. The Property is currently owned by Hollywood Park Land Company, LLC. Prior to a horse racetrack facility in 1938, the Property was part agricultural use in western portion and part oil field use including oil wells and oil field-related facilities in eastern portion.

The Former Dry Cleaning Area is located in northern end of the Grandstand Building (northwest area of the Property). The operations in the Former Dry Cleaning occurred for several decades and were discontinued in 1999. Subsequently in 1999, a limited soil investigation was conducted and found tetrachloroethene (PCE) concentrations up to 8,800 micrograms per kilograms ($\mu\text{g/kg}$) in soil.

In 2005, additional soil, soil gas, and groundwater samples were collected in and around the Former Dry Cleaning Area: total of 25 soil samples from 4 boreholes (PS-SB-15 through PS-SB-18) in the interior of the Former Dry Cleaning Area up to 10 to 15 feet below ground surface (ft. bgs); eight soil vapor samples (five were within the Former Dry Cleaning Area, one along the sanitary sewer line, and two were outdoors north of the Grandstand Building, depths of 2.5 and 5.0 ft. bgs.); and two grab

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groundwater samples, PS-GW-1 and PS-GW-6 (groundwater encountered at 120.5 ft. bgs with total depth of 135 ft. bgs, soil samples were collected to 50 ft. bgs).

Results of the additional soil, soil gas, and groundwater sampling were summarized in the 2005 report. PCE concentration was detected in soil samples from PS-GW-1 up to 20 µg/kg at 50 ft. bgs; no additional soil samples were collected below 50 ft. bgs. PCE concentrations in soil samples were detected at a maximum of 2,100 µg/kg (at 10 ft. bgs) in PS-SB-18, which was collected in 2005, and 8,800 µg/kg (at 1 ft. bgs) in B-2R, which was collected in 1999; no additional soil samples were collected below 15 ft bgs due to difficult drilling conditions and limitations of the limited access. PCE concentration in groundwater sample collected from PS-GW-1 was detected at 5.8 micrograms per liter (µg/L). In addition, tributyl alcohol (TBA) was detected in groundwater sample collected from PS-GW-6; however, TBA was also detected at 18 µg/L in field blank, a quality assurance and quality control sample. Therefore, present of TBA found in the PS-GW-6 is in question.

Based on the subsurface investigation data collected to date, the Work Plan proposes to install a SVE system to reduce residual concentrations of PCE in the subsurface in the Former Dry Cleaning Area. The proposed SVE system includes the installation of four shallow SVE wells (screened 5 to 16 ft. bgs), one deeper SVE well (screened 15 to 50 ft. bgs), and five SVE vapor monitoring probes (VMP) (at 5 ft. bgs). The deeper SVE well will be installed north of the Boiler Room at no greater than 35 degrees of slant from vertical extending to a depth of approximately 45 feet below the floor surface of the Grandstand building. The proposed SVE system is designed using estimated radius of SVE influence of 100 ft. The SVE system is proposed to operate until the average PCE concentration in soil vapor to less than the commercial/industrial CHHSL at the vapor porbes and SVE wells, or to a point where soil vapor data indicate mass removal rates for PCE have reached low, asymptotic levels in extracted soil vapor followed by a rebound test.

On April 4, 2007, the Regional Board staff met with you and your consultant from EKI to discuss our following concerns and comments for the SVE Work Plan:

- A. Extents of the volatile organic compounds (VOCs) impacted soil and groundwater at the Former Dry Cleaning Area are not fully delineated both vertically and laterally.
- B. The SVE system is proposed without conducting a SVE pilot test which provides data necessary to design the full scale SVE system effectively and adequately. The proposed SVE is considered interim remedial measure.
- C. Groundwater gradient is not fully defined at the property, including the Former Dry Cleaning Area.
- D. In addition to soil vapor samples form the SVE wells and monitoring probes, soil samples at 5 ft. intervals must be collected to verify and confirm that the remediation is complete.
- E. "No further Action" from the Regional Board for the impacted soil area at the Former Dry Cleaning Area will not be issued until the data indicates the remediation is effective and complete.

In the meeting, you (and the EKI consultant) indicated that you were aware of our concerns and requirements and that you would provide necessary and complete data to show that the SVE system is designed effectively and adequately for the remediation.

Based on the review of the information provided and our discussions during the April 4, 2007, meeting, you are authorized to implement the SVE Work Plan in the Former Dry Cleaning Area provided the following conditions are met:

1. Soil samples shall be collected at five-foot intervals for VOC analysis from the proposed deep/slant SVE well during installation. Indicate in the report if any difficulties that may be encountered during drilling for sample collection.

Initial SVE System Start Up (Prior to Table 17 of SVE Work Plan)

2. You are required to collect and provide the following information prior to SVE system start up from the proposed four shallow and one deep SVE wells and five VMPs:
 - a. Base line vacuum/pressure readings from each SVE well and VMP,
 - b. Using minimum of two different vacuum rates to extract each SVE well until equilibrium is reached, i.e., vacuum responses at SVE wells and VMPs stabilize, collect
 - vacuum responses from all non-extracting SVE wells and VMPs,
 - vapor flow rate (Q) from each extraction SVE well head, and
 - vapor concentration (C) from each extraction SVE well head at beginning and end of each extraction period.(Note: Allow minimum one to two hours rest between each extraction of SVE test.)
3. You are required to submit a report of this initial SVE system start up **four weeks after the initial SVE system start up is complete**. This report shall contain the data aforementioned as above including, but not limited to, (a) radius of influence at each applied vacuum, (b) applied vacuum vs. vacuum response at different monitoring points, (c) concentration vs. time, and (d) vapor flow rate vs. applied vacuum at each extraction well.

SVE System Start Up (Table 17 of SVE Work Plan)

4. Measurement of VOC concentrations must be conducted using Photo Ionization Detector (PID) on each SVE well weekly for first four weeks, and monthly thereafter for each SVE shallow well, at a minimum.
5. Vapor samples must be collected for TO-15 analysis using Summa® Canister from each SVE (both shallow and deep) well monthly, at a minimum.
6. Following SVE wells construction and system development, you are required to perform system monitoring at a frequency that is indicated in Table 17 of the SVE Work Plan with a

modification indicated above. The quarterly SVE monitoring report must be submitted by the fifteenth day following the end of each quarter, as shown in the following schedule:

<u>Report Period</u>	<u>Report Due Date</u>
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

The first SVE monitoring report for this SVE Work Plan is due on **October 15, 2007**.

7. Prior to the commencement of any field work, a Site-specific Health and Safety Plan (H&SP) shall be developed to include the field activities in accordance with Section 5192 of the California Code of Regulations (CCR), Title 8. The jurisdictional agency, California Occupational Safety and Health Administration (Cal-OSHA), may inspect the field investigation and remediation activities and find non-complaint issues, if the H&SP is not prepared and implemented in accordance with the referenced regulation. A copy of approved and signed H&SP shall be submitted to the Regional Board by **June 30, 2007**.
8. As required for all technical work performed at the site, all work must be performed by or under the direction of a California registered professional geologist, registered certified specialty geologist, or registered civil engineer, per California Business and Professions Code Sections 6735, 7835, and 7835.1. All technical submittals must contain a wet ink signature and seal by one of the registered professionals.
9. Prior to start of work, all necessary permits shall be obtained from appropriate agencies. Copies of the agency-approved permits must be included in the final report submitted to the Regional Board.
10. Contaminated soil and water generated, if any, during drilling and soil sampling shall be managed in accordance with appropriate regulations.
11. Properly manifest and dispose of all wastes generated during field activities in conformation with the State and Federal regulations.
12. All samples must be collected and analyzed with quality assurance and quality control samples and comply in accordance with the SW-846 Methods and Toxic Organics Method TO-15 for VOCs.
13. Please notify Regional Board staff at least one week before you start the proposed fieldwork.
14. A work plan for rebound testing and confirmation soil matrix sampling shall be submitted when asymptotic level is reached. The Regional Board will consider for a determination of a SVE system decommission when the analytical results demonstrate that the VOCs concentrations in the vapor stream from each well have been reduced to asymptotic levels after the rebound test is performed. Further soil remediation by other alternative technologies/methods will be required

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until VOC concentrations in shallow and deep soil in the Former Dry Cleaning Area do not exceed the required Soil Screening Levels (SSLs) for protection of both the public health and groundwater resource.

In addition, as we discussed in the April 4, 2007, meeting, the extent of the VOC impacted groundwater plume (including TBA) and groundwater gradient must be defined with the installation of groundwater monitoring wells after existing buildings are demolished and before the new proposed construction begins at the Former Dry Cleaning Area. Hollywood Park Land Company, LLC shall comply with the Regional Board requirements for additional groundwater assessment, monitoring, and cleanup deemed necessary for the groundwater plume originating from the Former Dry Cleaning Area in the future.

Should you have any questions, please contact Thizar Tintut-Williams at (213) 576-6723 or me at (213) 576-6735.

Sincerely,



Su Han, PG, CHG
Senior Engineering Geologist
Site Cleanup I Unit Chief

cc: Ms. Jami A. Striegel Orloff, Erler & Kalinowski, Inc.

/ttw

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