1330 S. Bascom Ave., Suite F San Jose, CA 95128

Tel. (408) 559-1248 Fax (408) 559-1224

August 4, 2005

Mr. Eric Freeberg Riverbend Properties, Inc. POB 9440 Rancho Santa Fe, CA 92067-4440 **RECEIVED** 

1:05 pm, Feb 19, 2008

Alameda County
Environmental Health

RE: Summary of Work Performed at

3744 Depot Road Hayward, California ("Property")

Dear Mr. Freeberg:

This letter is in response to your recent telephone conversation with Kay Pannell of PIERS Environmental Services, Inc. ("PIERS"). PIERS understands that you wish us to summarize the environmental investigation work performed at the Property in order to obtain a case closure from Alameda County Environmental Health Services Agency (ACEH).

The following is a brief summary of the work performed for this case:

# Synopsis of Previous Environmental Investigations

A 500-gallon waste oil tank and a 1,000-gallon gasoline tank were apparently excavated and disposed of in the early 1990's by a previous tenant, without a permit. Samples were later collected by an environmental consultant, TAT Environmental, but no report was ever issued, the consultant went out of business, and the owner for whom this work was performed was foreclosed upon.

The Property was acquired by another owner, Riverbend Properties, Inc., who retained PIERS to complete a "Limited Phase II Environmental Assessment" at the Property in August 1995 (dated September 12, 1995). Five exploratory soil borings were installed at the site. Soil samples and grab groundwater samples were collected from borings located down-gradient of the two tank pits. Up to 3,300 parts per million (ppm) of oil and grease and 2,795 parts per billion (ppb) of volatile organic compounds (VOC) were detected in a grab groundwater sample from the boring located down-gradient of the former waste oil tank. The grab groundwater sample collected from the boring located down-gradient from the former gasoline tank contained 43,000 ppb of Total Petroleum Hydrocarbons (TPH) as gasoline and 300 ppb of benzene.

To meet the requirements of the ACEH and the Regional Water Quality Control Board (RWQCB), PIERS performed a Preliminary Site Assessment to delineate and assess the extent of soil and groundwater impact. This work was outlined in a work plan submitted to the ACEH on July 2, 1996. Two exploratory soil borings and two monitoring wells were subsequently installed at the site. Soil samples were obtained from the borings and wells, and groundwater grab samples were obtained from the borings. The newly installed monitoring wells and the on-site existing well were developed and sampled. A report summarizing this work was prepared, entitled "Preliminary Site Assessment, Groundwater Well Installation and 1st Quarterly Report for 3744 Depot Road", dated February 10, 1997.

Soil and groundwater sample results from this investigation indicated little, if any, migration of contaminants outside the immediate vicinities of the former tanks. A second sampling was conducted on April 29, 1997, with laboratory testing per the ACEH. The samples collected from the wells yielded non-detectable results for all analytes.

In a letter to the Property owner dated March 1, 1999, the ACEH requested an additional sampling event be conducted prior to consideration of the site for closure. The two monitoring wells were subsequently sampled on March 30, 1999. The samples collected from the two monitoring wells yielded non-detectable results for all of the analytes requested by the ACEH, except in MW-2, in which metal tertiary butyl ether (MTBE), bromodichloromethane, and dibromo-dichloromethane were detected at concentrations ranging between 5.5 and 9.3 ppb. The two tri-halomethane compounds were considered to be trace amounts not associated with fuels or solvents. A confirmatory analysis from MTBE by EPA method 8240 indicated no detectable concentration in MW-2. Based on all of the sample results obtained to date, PIERS recommended that the site by granted a "no further action" status, and that case closure be granted. PIERS issued a sampling report and request for no further action status in a July 12, 1999 letter to the case worker, Mr. Amir Gholami of the ACEH.

PIERS prepared a "Site Closure Summary and Request for Case Closure for 3744 Depot Road, Hayward, California" in August 2000, and submitted it to the ACEH. The document included the previously requested final groundwater sampling event.

On May 9, 2001, PIERS responded to comments by the ACEH on five remaining issues and submitted a revised case closure summary that showed "Before" and "After" concentrations of contaminants.

On May 14, 2001, the ACEH caseworker, Mr. Amir Gholami, sent a letter to the Property owner with comments on the May 9, 2001 document provided by PIERS.

A telephone call from PIERS to the ACEH in February 2002, requested the final status of the Property, specifically, asking if the case been closed. The ACEH informed PIERS of the outstanding letter with comments, and that a new case worker, Mr. Scott Seery, had been assigned to the case.

PIERS then responded to the last set of comments by ACEH, and again requested Case Closure on February 10, 2003. PIERS responded to the comments in the following format.

## Response to Comments

### Comment 1:

ACEH: I understand that you have concluded the groundwater flow gradient to be northwest to west due to the several factors, which you indicated within this report even though due to the site and well limitations at the above site, this can not be documented using the water data available at the above site alone.

PIERS: This appears to be a comment, not a request for action. The measured groundwater gradient at the site on March 30, 1999 was 0.0017 ft/ft to the northwest. In general, the gradient is relatively flat and flows towards the nearby San Francisco Bay.

### Comment 2:

ACEH: Some of the concentrations of pollutants indicated in the table exceed the allowed concentrations indicated in Tier 1 look up tables by California Regional Water Quality Control Board (CRWQCB), San Francisco Bay Region. Therefore, use of Tier II and or further remediation might be necessary. To be specific Oil & Grease as well as Chromium levels in soil exceed the "allowed values within this guideline".

PIERS: Oil & Grease was found at 390 ppm in soil, and chromium was found at 27 ppm in soil. The original ACEH caseworker, Ms. Amy Leach, in 1997, considered over-excavation of soil not to be warranted, and recommended evaluating the next sampling event to determine if it was even necessary. The next sampling event on April 29, 1997 showed non-detectable concentrations of contaminants in all three wells. In addition, both of the former tank excavation pits were left open after the tanks had been removed, and allowed to aerate for more than two years. Aromatic fuels, VOC's or SVOC's in soil and groundwater in the immediate vicinity would likely have dissipated and/or biologically degraded over this extended period of time. Both tank pits were observed and noted to contain plants and foliage prior to being backfilled, indicating significant biological activity.

The on-site irrigation well is the source of non-potable water for the site, and because the San Francisco Bay is close enough to exert tidal influences, the water in this area is brackish. Tier 1 standards should not apply for this reason.

In the case of chromium, Bradford et al, 1966, states that background levels for chromium in California range from 23 to 1,579 ppm in soil (Bradford et al, Background Concentrations of Trace and Major Elements in California Soils, 1966). Although the chromium level may exceed risk-based screening levels, the level is well within the range of background values. PIERS does not consider that the site requires further remediation on the basis of these two values.

#### Comment 3:

ACEH: The values of the other elements in the table seemed "acceptable and within allowed limits". However, please discuss the high and low groundwater levels versus the sampling events to conclude an accurate picture of the plume and the possibility of "missing" pollutants during the sampling events at the above referenced site.

PIERS: The two monitoring wells were screened from 5 feet to 15 feet, and the irrigation well is screened to 30 feet, in anticipation of high and low groundwater levels. All sampling events, with the exception of the first event in 1995, have shown non-detectable concentrations for all hydrocarbon constituents. There is no "plume".

On December 10, 2003, PIERS sent the ACEH a work plan for additional soil borings and soil and groundwater samples, intended to prove that the constituent concentrations were still non-detected. The work was performed in February 2004, and the report was sent to Mr. Scott Seery on March 1, 2004. The soil samples from borings in the vicinity of the former gasoline UST were non-detectable for all analytes except for MTBE, which was detected in groundwater at concentrations ranging up to 6.0 ppb. These findings are consistent with the predominantly non-detectable results of previous sampling, except for the initial grab groundwater sample (GAS-GWS in 1995). MTBE in the vicinity of the former waste oil UST pit occurred at significantly higher concentrations. The concentrations of MTBE of up to 6.0 ppb in these three borings may be unrelated to the former gasoline tank. No further investigation of the former gasoline tank vicinity appeared warranted.

Elevated concentrations of hydrocarbons, particularly oil and grease, were present in soil in the vicinity of the former waste oil tank pit at depths of between approximately 7.0 (1995 sampling) to 11.5 feet below grade. TPH as gasoline and BTEX constituents are relatively low, and only benzene was detected in excess of the Environmental Screening Levels (ESL). In groundwater, significantly elevated dissolved concentrations of TPH as gasoline, diesel, oil and grease, BTEX constituents, and MTBE were present in the vicinity of the borings, but were largely non-detectable in nearby wells MW-2 and MW-3. In these wells, only MTBE occurred in excess of the ESLs.

Because of the low permeability of the soils and the relatively low mobility of heavy hydrocarbons, the impacts in groundwater appeared to be largely confined to the vicinity of the former waste oil pit; however, additional delineation was proposed to confirm this. PIERS proposed to complete additional borings at a farther distance from the waste oil pit to attempt to define a non-detectable extent of hydrocarbons in groundwater. A soil sample would be obtained from each boring at any obvious evidence of contamination, and at approximately 11.5 feet below grade. Also, grab groundwater samples would be obtained. The soil samples would be analyzed for TPH as gasoline, oil and grease, BTEX, and MTBE. The groundwater samples would be analyzed for all of these constituents plus TPH as diesel and the other fuel oxygenates. Prior to implementing this investigative work, a work plan would be prepared and submitted to the ACEH.

It now appears that the highest concentrations of contaminants are located between 9.5 feet to 11.5 feet below grade in the native material around the former waste oil UST. Because the groundwater has been observed to rise from a depth of approximately 11.5 feet below grade at first water, to a depth of approximately 3.5 to 5.5 feet below grade after stabilization, it is assumed that local groundwater is under semi-confined conditions. The next phase of work should be to install more borings around the former waste oil tank to delineate the lateral and vertical extent of the contamination. If the contamination is determined to be held by the confining conditions of the soil, then the next phase of work may be to remove source material by excavation, or possibly treat the soil for accelerated degradation of contaminants.

On May 19, 2004, Mr. Scott Seery requested a work plan for the recommended work along with a Site Conceptual Model with Preferential Pathway Study. PIERS submitted the work plan on July 19, 2004. In an email in October 2004, Mr. Seery informed PIERS that he had been re-assigned to another program in June 2004, and we would have to contact Ms. Donna Droga to determine the new case worker.

A letter to Ms. Donna Drogas was sent on November 12, 2004 to request a new case worker be assigned to review the work plan.

Aside from a few phone calls between Mr. Joel Greger, PIERS' project manager, and Ms. Droga, and calls between yourself and Ms. Droga, to the best of my knowledge, nothing else has been done.

Please call if you have any further questions.

Respectfully,

Kay Pannell, REP #05800 Chief Operations Officer

Report Review and Summary of Work 3744 Depot Road, Hayward, CA