RETURN TO TABLE OF CONTENTS

Appendix C

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June 2, 2004

Mr. Mark Hirth
Barry Swenson Builder
777 North First Street, Fifth Floor
San Jose, California 95112

Re: Phase II Environmental Site Assessment Report
905 Los Coches Street
Milpitas, California

Dear Mr. Hirth,

This document reports the methods and findings of investigations into soil and groundwater conditions beneath the subject property (Figure 1) recently performed by RRM, Inc. (RRM), at your request. The investigations were intended to address due diligence concerns regarding current environmental contamination at the northerly adjacent Shell Service station, past environmental contamination at the former Cook Paint and Varnish Company previously located on the south side of Los Coches Street opposite the subject property, and regarding the past use of the subject property itself. A brief background and summary of previous investigations are presented below, followed by the scope of work of the most recent phase of investigation. The investigation findings are then presented and discussed, along with our conclusions. We recommend no further soil or groundwater environmental investigations of the property at this time.

BACKGROUND AND PREVIOUS INVESTIGATIONS

Prior to 1976, the subject property was either undeveloped, or in use for agricultural purposes. The current property improvements, including a large commercial building and surrounding paved storage and parking areas, were constructed in 1976, and the property was in use from that time until recently as a lumber yard, hardware store, and home improvement center. In 1997, the property owner ordered a Phase 1 Environmental Site Assessment (ESA), in anticipation of redeveloping the property. The Phase 1 ESA was performed by Secor International, Inc.'s San Francisco office and documented in a December 22, 1997 report. Initial redevelopment plans considered construction of a two-story medical office building, and a foundation investigation was ordered in early 1998. The foundation investigation was performed by Donald E. Banta & Associates, of San Jose, and documented in a February 11, 1998 report.

The Phase 1 ESA identified no recognized environmental conditions in connection with the property other than the suspected presence of asbestos-containing materials within the building. The foundation investigation detailed soil conditions at the property and documented the depth to groundwater at less than 8 feet below the land surface.

The property is now being considered for redevelopment by Barry Swenson Builder (Swenson), and as part of the latest redevelopment plans, an underground parking structure is anticipated. Due to the shallow occurrence of groundwater in the area, the need to either seal the underground parking structure against the infiltration of groundwater, or provide it with a drainage and pumping system, is anticipated.

Because the underground parking structure is proposed to be constructed near the northerly adjacent Shell Oil Company service station, concerns over the known groundwater contamination beneath the Shell station were raised. To address these concerns, Swenson project staff requested that RRM perform a limited investigation into the current groundwater quality beneath the property.

The initial groundwater investigation consisted of the collection and laboratory analysis of three groundwater samples from two soil borings located in the area proposed for excavation nearest the Shell station, and an additional groundwater sample in the upgradient direction (southeast) to provide a comparison of background water quality away from the Shell station. All samples were analyzed for the presence of petroleum hydrocarbons as gasoline, and selected fuel constituents including benzene, toluene, ethyl benzene, xylenes, and methyl tert-butyl ether. The location for the third boring was situated within the former lumber storage yard. Therefore, the water sample collected from this boring was additionally analyzed for the presence of selected toxic wood preservative chemicals including arsenic, hexavalent chromium, and pentachlorophenol.

Two water samples were collected from boring SB-1 (Figure 1), at 8 feet below ground surface (bgs) and at 25 feet bgs. One water sample was collected from boring SB-2 at about 12.5 feet bgs, and one water sample was collected from boring SB-3 at 13 feet bgs. Only a trace of fuel hydrocarbons, less than 1 part per billion (ppb) of toluene, was detected in one of the four water samples. The only other chemical detected was 54 ppb of hexavalent chromium in the water sample collected from boring SB-3. The text, table, and figure from the initial groundwater investigation report are included in Attachment A.

Since State law limits chromium in drinking water to 50 ppb, and because there were several possible explanations for the presence of hexavalent chromium in the sample, additional sampling and laboratory analyses were requested.

SCOPE OF WORK

The second phase of subsurface investigation included the following tasks:

- Identify and mark two boring locations for soil and groundwater sampling, and clear boring locations with regard to known subsurface utilities using Underground Services Alert.
- Observe and document soil types encountered in borings.
- Collect two soil samples and one groundwater sample from each of the two borings.

- Laboratory-analyze one soil sample[1] and the groundwater sample from each boring.
- Prepare this report documenting project scope, field and laboratory methods, findings, and conclusions.

Because the former paint factory located to the south of Los Coches Street had been the site of a fairly large cleanup of chromium and lead impacted soils, the submitted soil and groundwater samples were analyzed for lead in addition to total chromium and hexavalent chromium.

SOIL BORINGS. Following project approval and receipt of authorization to access the property, RRM staff marked 2 soil boring locations using white paint. The locations of borings SB-4 and SB-5 were positioned up and down gradient (northwest and southeast, respectively) from the location of the previous boring containing hexavalent chromium, boring SB-3. See Figure 1 for boring locations. Boring SB-4 was selected to coincide with the location of the proposed sub-grade garage structure, positioned in between earlier borings SB-1 and SB-2. Boring SB-5 was positioned as close to the up-gradient (southeast) side of the property as feasible, given access conditions at the time of drilling. Prior to initiating soil borings and sample collection, all known underground utility lines near sample collection areas were identified and marked by Underground Services Alert (USA).

SOIL BORINGS AND SOIL SAMPLES. On April 26, 2004, RRM staff supervised Environmental Control Associates, Inc. of Aptos, a Geoprobe® drilling services vendor, as they advanced the soil borings for this project. The Geoprobe® methodology involves direct push via hydraulics and/or pneumatic hammering of a 1-inch diameter boring rod, which holds a soil-coring device. As the drilling rods are advanced, the soil sample is captured and retained within a clear, acetate core tube inside the soil coring device. Upon recovery of the soil sample from the borehole, selected portions were preserved for laboratory analysis by cleanly cutting through the liner and soil core to obtain a sub-sample, and then covering the cut liner ends with Teflon sheeting and plastic end-caps, labeling and sealing the capped sample in plastic a baggy, and storing it in an iced cooler pending transport to the laboratory. Soil sample material not preserved for laboratory analysis was described and logged to document sub-grade soil conditions. Preserved soil samples were obtained at 5 and 10 feet below grade from each borehole. Final boring depths were determined based on conditions encountered during drilling.

GROUNDWATER SAMPLES. Grab groundwater samples were collected from each boring either by extending the Geoprobe® sampling tool fitted with a perforated tip section, down to shallowest groundwater, or by removing the drilling tool from the borehole upon encountering groundwater and installing a factory-slotted temporary casing tube. The groundwater samples were collected either by lowering a clean inert plastic bailer down the probe pipe or temporary casing, or by lowering new plastic tubing, fitted with a check-valve on the end, into the water at depth, and then rapidly raising and lowering the tubing to pump the water to the surface. The water samples were then transferred to appropriate sample containers provided by the laboratory. The groundwater sample containers were then sealed, labeled, logged onto a chain-of-custody document, and stored in an iced cooler pending transport to the laboratory. Prior to, and upon completion of groundwater sampling, and prior to

[1] The deeper soil sample from each boring was held at the laboratory pending receipt of results of analysis of the shallower soil samples. Upon evaluation of the results, analysis of the deeper soil sample collected from each boring was not deemed warranted.

backfilling, the depth to water was measured in all boreholes. Upon completion of all sampling and data collection activities, the boreholes were backfilled using neat cement grout.

LABORATORY ANALYSIS. All samples were submitted to Entech Analytical Laboratories of Santa Clara, for analyses of dissolved total chromium and lead by EPA Method 200.7, and hexavalent chromium by EPA Method 7196A.

FINDINGS

SUBSURFACE CONDITIONS. Subsurface soils were consistent with findings from earlier soil borings and consisted of imported fill beneath the surface asphalt or concrete covering to a depth of one to two feet bgs. The fill is underlain by clays bearing varying amounts of sand to the total explored depth of 12 feet bgs in boring SB-4, and 16 feet bgs in borings SB-5. Logs of the soil borings are included in Attachment B. No visual evidence of chemical impact, or occurrence of unusual odors, was noted during drilling and sampling. Groundwater was encountered at a depth of 12 feet bgs in boring SB-4 and 13 feet bgs in boring SB-5, but stabilized at about 8 feet bgs in each borehole. This confirms findings from the initial groundwater investigation indicating that the shallow saturated zone is under hydraulic pressure, and is therefore confined or semi-confined.

SOIL ANALYTICAL RESULTS. Soil samples collected from 5 feet bgs were submitted for analysis of total chromium, hexavalent chromium, and lead. Hexavalent chromium and lead were not detected above laboratory reporting limits in either sample. Both soil samples contained chromium (total) at concentrations of 52 milligrams per kilogram (or parts per million; ppm) in the sample from boring SB-4 and 47 ppm in the sample from boring SB-5. Laboratory analytical reports are included in Attachment C; soil and groundwater analytical results are summarized on Table 1.

GROUNDWATER ANALYTICAL RESULTS. Upon initial receipt of the laboratory results, chromium (total) was reported to be present in both water samples, and lead was reported to be present in the sample collected from boring SB-5. Hexavalent chromium was not reported to be present in either sample. Upon questioning the laboratory to determine whether the water samples had been filtered prior to analysis, we learned that the initial analysis was performed on unfiltered samples. Because grab groundwater sampling through Geoprobe® equipment usually produces very turbid (muddy) groundwater samples, these samples contain large fractions by weight of the solid soil matrix from which the groundwater sample was extracted. Consequently, we requested that the laboratory re-run the groundwater samples after filtering them. Standard laboratory procedure calls for the use of a 45 micron filter. After filtering the samples, dissolved chromium and lead were determined to be not present above laboratory reporting limits. Laboratory analytical reports are included in Attachment C.

DISCUSSION AND CONCLUSIONS

The earlier finding of hexavalent chromium in a groundwater sample collected from previous boring SB-3 is inconsistent with the findings from groundwater samples collected up and down gradient from the location of boring SB-3 during the present phase of investigation. Therefore the earlier detection appears to have been random, isolated, or anomalous.

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The presence of total chromium in the property soils is not unexpected, as chromium is common in Bay Area soils. The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) considers a (total) chromium level of 58 milligrams per kilogram to be typical of Bay Area soils, and has set the risk-based environmental screening level for shallow soils in a residential land use scenario at 58 ppm.[2]. The levels reported are typical of background concentrations and are below applicable State environmental screening levels.

The presence of lead in the unfiltered water sample collected from boring SB-5 indicates that lead is present in the soil matrix below a depth of about 13 feet. Although not a one-to-one correlation with a soil analytical result, the level of lead reported in the unfiltered water sample, 0.094 ppm, is significantly lower than the interim-final State environmental screening level of 200 ppm lead in shallow soils in a residential land use scenario. The absence of lead in the shallow soil sample collected from the same boring indicates that either the lead is naturally occurring at depth, or that it migrated historically into the deeper soils with the groundwater. The known lead and chromium impact to soils upgradient (southeast) of the property, at the former Cook Paint and Varnish site[3], may have resulted in leaching of some of these compounds into the groundwater in the past. However, because lead is not currently present in the filtered groundwater, the lead detected in the unfiltered sample appears to be an immobile component of the soil matrix, and therefore not migrating.

From the findings of this investigation, in the context of previous environmental studies of the property, we conclude the following:

- Hexavalent chromium was not detected in either groundwater sample collected. The earlier detection appears to have been random, isolated, or anomalous.
- Total chromium and lead are not present in shallow groundwater above laboratory detection limits.
- Total chromium is present in shallow soils at concentrations considered typical of background levels for the Bay Area, and below applicable State risk-based environmental screening levels.
- Lead is not present in shallow soils above laboratory detection limits, but is present at low concentrations in soils from about 13 feet below ground surface. The lead detected is either naturally occurring or migrated in groundwater historically from an upgradient source. Lead is not currently present in groundwater; therefore, the lead detected is immobile and does not appear to pose a risk.

Based on the findings and conclusions of this Phase 2 Environmental Site Assessment, we recommend no further soil or groundwater environmental investigations of the property at this time.

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[2] *Screening Levels for Environmental Concerns At Sites With Contaminated Soil and Groundwater, Volume 1: Summary Tier 1 Lookup Tables,* and *Volume 2: Background Documentation For The Development of Tier 1 Environmental Screening Levels*, California Regional Water Quality Control Board, San Francisco Bay Region, Interim Final, July 2003, updated February 4, 2004.

[3] Based on environmental cleanup work performed, and on risk-assessment results founded on pre- and post-cleanup soil and groundwater sampling, the RWQCB issued a Remedial Action Completion Certificate for the Cook Paint and Varnish site on January 13, 1997, stating that no further cleanup action would be required and that residual risks posed to future site residents were of no particular concern.

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CERTIFICATION

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Please call if you have any questions regarding the contents of this report.

Sincerely,

RRM, Inc.

Steven D. Clark
Senior Hydrogeologist
CHG 167

Attachments:
- Table 1 - Soil and Groundwater Analytical Data
- Figure 1 - Boring Location Map
- Attachment A - Groundwater Investigation Report, March 5, 2004, Text, Table, and Figure
- Attachment B - Boring Logs, and Field Notes
- Attachment C - Certified Analytical Reports and Chain-of-Custody Documentation

cc: Mr. Herbert Eaton