

September 21, 2001

Mr. Andy Young
Alameda County Planning Department
399 Elmhurst, Rm 136
Hayward, CA 94544

Dear Mr. Young:

Enclosed are our comments on the environmental, geotechnical and tree reports prepared by consultants to Delco Builders for the Alcorn Property in Castro Valley. The four reports we reviewed included:

- Phase I Environmental Site Assessment on Proposed Residential Development, 4605, 4611, and 4643 Malabar Avenue, Castro Valley, California for Delco Builders and Developers, by Terrasearch, Inc., September 27, 2000
- Surface and Subsurface Environmental Site Assessment on 4605, 4611, and 4643 Malabar Avenue, Castro Valley, California for Delco Builders and Developers, by Terrasearch, Inc., November 3, 2000
- Geotechnical Investigation on Proposed Residential Development, 4605 and 4611 Malabar Avenue, for Delco Builders and Developers, by Terrasearch, Inc., 21 December 2000
- Tree Report, Alcorn Property, Castro Valley, CA, prepared by HortScience, Inc., February 2001

Our comments highlight areas we identify as errors and important areas we feel were omitted from the consultants work scopes and reports. The concerns we have identified raise serious doubts as to the completeness and quality of the preparatory work conducted at the Alcorn Property to date. We feel additional work is required to fully assess the potential impacts the proposed development will have on the environment and the surrounding community. The additional work should include (but is not limited to):

- Further investigation to identify the location of any existing or former underground storage tanks (USTs), including all associated dispensers and piping. Use of geophysical techniques is warranted.
- Collection of groundwater samples in the vicinity of any identified USTs or former UST locations, and at other potentially impacted areas.
- Collection and analysis of soil samples for the presence of organic compounds in the vicinity of former or existing USTs, using proper chain-of-custody techniques of transport (iced cooler) to preserve the integrity of the samples.
- Documentation on the reported groundwater depth and flow information.
- Investigation into the former use and potential environmental impacts from the building formerly located on the concrete pad identified in the Phase I report.
- Investigation into the location and potential environmental impacts of leach fields on the property. Soil sampling and analyses in these areas is warranted.
- Collection and analyses of soil samples in the vicinity of the former ~~concrete pad~~ northern portion of the site.
- Investigation into the location and potential environmental impacts of ~~former pesticide storage area~~ on the property.
- Collection and analyses of soil samples in the vicinity of the former row crops at appropriate depths, including analysis of ~~organic phosphorus pesticides~~.

- Borehole lithologic logs should be provided for all previously drilled boreholes and any future boreholes.
- Inclusion of a map, to scale, showing all sampling and borehole locations.
- Complete investigation into the construction details and status of the former water well that was reportedly abandoned on the property. Improper destruction may be a cause of concern, as the well may act as a conduit for the introduction of contaminants into groundwater.
- A discussion in the geotech report on how the discovery of hazardous materials or conditions on the project will be handled, including what agencies will be notified and how the surrounding communities will be protected.
- Grading activities should be modified to preserve eight of the fourteen trees proposed for destruction in the tree report.
- A second professional opinion as to tree conditions should be sought.

It is our understanding that the Alameda County Planning Department is basing their evaluation of the potential environmental impacts caused by the proposed development on the investigative work conducted by the developer and consultants hired by the developer. It is our opinion that the level of work conducted to date has not been adequate to assess all the potential environmental impacts because it does not appear the work meets all the current standards of environmental fieldwork and reporting. These deficiencies should be addressed before a determination of potential environmental impacts is completed.

We appreciate this opportunity to inform you of what we believe are some of the remaining issues regarding potential environmental impacts from the proposed development. We reserve the right to comment further on these and other environmental issues we are not aware of at this time. We would appreciate hearing the Planning Department's planned course of action on the issues we have addressed.

Sincerely,



Dave Sadoff
CA Registered Geologist
CA Registered Environmental Assessor



Cindy Barclay
Former Registered Environmental Assessor

cc: James Sorensen, Planning Director
Nate Miley, County Supervisor
MAC Members

Comments on "Phase I Environmental Site Assessment on Proposed Residential Development, 4605, 4611 and 4643 Malabar Avenue, Castro Valley, California, for Delco Builders and Developers" by Terrasearch, Inc., September 27, 2000

Section 2.3

The report states the depth-to-water is approximately 25 feet below ground surface (bgs) based on measurements taken at wells in the vicinity of the site. The location of these wells, their status relative to ground water flow direction, and their distance to the site are not stated. The purpose of these wells is not stated (e.g., monitoring ground water quality due to adverse impact).

Section 2.4

The location of a concrete slab is noted but the purpose for the slab is not identified.

Section 3.1

The report states that three long, rectangular chicken coop buildings were present on the site in 1947. A photograph from 1953 shows four long, rectangular chicken coop buildings on the site.

The report states there were no significant changes to the site until 1969 when the long structures were removed. A photograph from 1959 shows that two of these structures had been removed.

The report states there is no evidence of agricultural land use until 1981. Photographs from 1953 and 1959 show evidence of orchards in the northern portion of the site.

A reference is again made to a concrete pad located near the existing structures. It is described as the former location of a building but the function of the building is not described. The function of the former building should be determined to assess the potential environmental impact to the property. This building may have been utilized for storage of agricultural chemicals, which may have spilled onto underlying soil.

The report states an historic landslide was observed on the western portion of the property in the 1975 photographs; and a faint trace of an old stream channel. Such features may require mitigation measures.

Section 3.4

The report misidentifies the property owner as Ms. Marie Accorn. The owner's actual name is Mrs. Marie Alcorn. This error is repeated throughout the rest of the report.

The report does not state whether Mrs. Alcorn was asked about past agricultural uses on the property other than the chicken ranching.

The report does not state whether Mrs. Alcorn was asked about the use and location of leach fields on the property. Attempts to identify leach fields on the property should include interviews with the property owner.

Section 4.1

The report discusses the potential use of organochloride and metal pesticides on row crops but does not discuss the potential use of organophosphorus pesticides.

The report does not identify as a primary contamination source the use of pesticides on the former orchard area in the northern portion of the site.

The report identifies the location of the former UST as a primary contamination source. The location and sampling of former product lines and dispenser is not discussed, as is currently standard for UST system removals.

The report does not include a section regarding inquiries to the Alameda County Fire Department. The ACFD may have records of site USTs (installation and/or removal) and fire calls to the site.

The report does not identify as a primary contamination source the presence and location of leach fields on the property, as is standard practice for environmental assessments.

The report discusses the potential presence of asbestos-containing materials (ACM) and states it was "*observed wrapped around the boilers beneath the larger swimming pool.*" No discussion of swimming pools on the property was found previously in the report, and none are known to exist.

Section 4.2

A location of a potential source of secondary contamination was listed as 8410 Pepper Street. No such address exists. The results of the VISTA search were apparently not field verified.

Section 5

The former UST was reportedly removed in the 1960's but no evidence to support that claim was provided in the report.

This section states "*the site was previously used as an orchard....*" This is the first and only reference to an orchard in the report. It is unclear if this reference is to the row crops in the southern portion of the site or the orchard in the northern portion of the site.

This section also references 8410 Pepper Street as a secondary source and states it is "*located in an upgradient direction from the subject site.*" No such address exists, so its direction from the site cannot be determined. Data to support their stated ground water flow direction was not revealed in this report.

Collection of soil samples in the vicinity of the former orchard in the northern portion of the site is not discussed or recommended in the report.

Collection of soil and groundwater samples in the vicinity of the former UST product lines and dispenser is not discussed or recommended in the report.

Collection of soil samples in the vicinity of leach fields on the property is not discussed or recommended in the report.

Collection of soil samples in the vicinity of former pesticide storage areas is not discussed or recommended in the report.

General Comments

Figure 1 – Site Vicinity Map misidentifies the location of the project site and does not provide a scale.

Figure 3B – Site Photographs misidentifies the buildings pictured and the direction being viewed. The picture actually shows the small storage shed and the cabin, viewing to the west.

**Comments Regarding "Surface and Subsurface Environmental Site Assessment,
4605, 4611 and 4643 Malabar Avenue, Castro Valley, California" by Terrasearch,
Inc., November 3, 2000**

Section 1.1

Organophosphorous pesticides may also have been applied to crops. This would necessitate the use of another analytical method to detect these compounds.

The consultant did not identify a pesticide storage area. This area should be positively identified, and surrounding soil should be sampled for pesticide analyses.

The consultant did not identify the location of any former leach fields on the property. Identification and sampling of former leach fields is standard practice for environmental assessments.

It is not uncommon for an unauthorized release of petroleum hydrocarbons to originate at product piping breaches and from dispensers. The former product line and dispenser locations should be positively identified, and soil from these locations should be collected and analyzed for petroleum hydrocarbon content.

Section 1.2

The criterion used by the consultant to locate the previous UST location is not specified. It is unclear if soil samples were actually collected from the (removed?) UST location.

The consultant's 27 September 2000 Phase I ESA (page 11) proposed the drilling of one soil boring in the vicinity of the former gasoline UST to groundwater. This report did not state "if encountered". Collection of groundwater samples in the vicinity of a former UST would be consistent with current standard environmental assessment procedures.

The consultant did not produce evidence of UST removal. It may have been abandoned in place. Concrete evidence of UST removal should be provided. Alternatively, geophysical instrument search methods should be utilized to find an abandoned-in-place UST.

Section 3.1

Collection of soil samples 1 through 4 was not adequate to assess the presence of pesticide residue in site soils. The consultant's report states, ... "*historical evidence (aerial photographs) revealed that the southern portion of the property was utilized for row-crops.*" Aerial photos dated 17 August 1953 and 8 July 1959 show an orchard in the northern third of the property. Soil samples to determine agricultural chemical residue should also have been collected in this area.

The report says, ... "*all soil samples were collected using clean brass lines (sic) and advanced to approximately 0.5-foot below ground surface ...*" However, Section 1.2 in this report states the samples were collected "*from approximately 0.5 to 1 foot below ground surface.*" At which depth interval were the samples actually collected?

Due to tilling of the soil and percolating rainwater, chemically impacted soil may have migrated downward. Soil samples should be collected and analyzed from depths greater than 1-foot bgs.

The report states, ... "*drilling became very hard at five feet bgs and exploration activities were ceased*". This depth would be shallow for the bottom of a UST.

The consultant did not refer to use of a field ionization or organic vapor detector. The lack of using this instrument is not consistent with standard environmental fieldwork.

The consultant did not indicate if a drilling permit was secured prior to the commencement of fieldwork, as required by the Alameda County Public Works Agency.

Section 4.1

The report says, "*DDT and DDE were the most common and widely used chemicals for controlling insect pests on agricultural crops...*" During which time period? Other pesticides may have been more prevalent during other time periods.

Section 4.2

The consultant's conclusion that "*the surficial soil does not pose an adverse environmental risk to the site and no action is required...*" is erroneous. Soil samples were not analyzed for organophosphorous pesticides; were not collected from deeper intervals to evaluate potential downward leaching potential of compounds of concern; and were not collected from all areas of concern (e.g. pesticide storage areas, leach fields).

Section 4.3

The sample metals concentrations are reported to be "*within background concentrations reported for areas in the San Francisco Bay Area, including data collected in northern Santa Clara County.*" Comparison with background concentrations for Alameda County would be more appropriate and these background concentrations should be included in the report for comparison purposes.

Section 4.4

The (removed?) UST location was not positively identified; therefore, boring B2 and soil sample B2-4 may not be indicative of potential petroleum hydrocarbon impact due to the UST. Piping and dispenser soil samples were not collected, as is currently standard procedure subsequent to UST system removal.

General Comments:

Borehole lithologic logs were not included in the report. They should be furnished per standard environmental reporting practice.

Groundwater samples need to be collected and analyzed to evaluate potential impact from past site uses.

Table 1 lists the site location as 24462 and 24506 Fairview Avenue, Hayward, California. It is not clear if this table summarized data for the Alcorn property or another site.

The Site Plan (Figure 2) is not to scale. Actual sampling locations cannot be determined from this figure.

Sample 3 was diluted by the laboratory due to high organic content. The analyte reporting limits for this sample were raised substantially, raising the possibility that compounds of concern may be present but not reported by the lab.

The chain of custody for sample B2-4 indicates that ice was not present in the ice chest that contained this sample, as recommended in the consultant's Phase I ESA (page 11). The integrity of this sample was compromised and, therefore, the analytical results cannot be considered representative of the organic compound concentrations in the soil.

**Comments Regarding Geotechnical Investigation on Proposed Residential
Development, 4605 and 4611 Malabar Avenue for Delco Builders and Developers,
Terrasearch, Inc., 21 December 2000**

A section of Page 5 of this report states "*a water well was filled in about 1980.*" No mention of its' location, date of installation, permit for destruction, method of destruction, gauging for depth, evaluation for obstructions, screened interval, depth to water, or water quality were noted. Improper destruction may be a cause of concern, as the well may act as a conduit for the introduction of contaminants into groundwater.

On page 7 of this report, the consultant states that "*fractured and weathered sandstone bedrock*" underlies the site, and that "*a Caterpillar 416C backhoe reached excavation refusal using an 18" bucket at depth of 3 feet to 8 feet below grade....*" No mention is made of mitigation of excessive noise and earth vibrations that may be associated with grading in such difficult terrain. Such vibrations may pose a threat to the structural soundness of nearby foundations.

The last paragraph of page 7 refers to the "*removal of tanks in the 1960s.*" This consultant's phase I ESA report refers to a single UST. The number of USTs at the site, removed or remaining, is therefore in question.

The report mentions "*the area of the tank excavation backfill was observed at the surface and does not appear to have settled significantly relative to its surroundings.*" As the exact location and number of USTs is in question, commenting on soil settling at the presumed location is not appropriate.

The consultant states on page 9 that "*considering the current site uses, we anticipate that other areas of fill or debris may be present on the site.*" The consultant does not specify what contingencies should be followed should hazardous fill or conditions be encountered. Such a discovery would be of prime interest to the neighborhood and regulatory agencies.

On page 10 the consultant states "*due to the age of the structures and other structures in the vicinity, septic tanks and leach lines may be present...if any of the following are encountered: concrete, septic tanks, gas and oil tanks...these should also be removed....*" No mention is made of proper public notifications prior to removal of any regulated items. A full geophysical survey of the property is warranted. Results of the survey should be utilized to generate a soil sampling and analyses program in areas of potential adverse impact by compounds of concern.