Hazards and Hazardous Materials

The purpose of this section is to disclose and analyze the potential impacts associated with hazards and hazardous materials related to the project site and general vicinity, and to analyze the potential for exposure of people to hazards and hazardous materials as the project is built and operated in the future. This section is based in part on the following technical studies:

- Soil Survey of Yolo County, California (USDA 1972), Site Closure Leaking Underground Storage Tank Y.C. File #: L-36 (Yolo County Department of Public Health 1989),
- Yolo County Comprehensive Airport Land Use Plan (Yolo County Airport Land Use Commission 1999),
- Preliminary Geotechnical Investigation, Hunt-Wesson Facility, Davis California (Lowney Associates 2002),
- Supplemental Geotechnical Investigation Conagra (formerly Hunt-Wesson) (Lowney Associates 2002),
- Phase I Environmental Assessment and Document Review 99-Acre Main Plant Area and 320-Acre Waste Water Disposal Field Former Hunt-Wessen Plant 1111 E. Covell Boulevard/ Road 104 at Road 28H Davis, California (Geotrans 2004),
- Screening Level Phase II Soil and Groundwater Assessment Former Hunt Wessen Facility 1111 E. Covell Boulevard Davis, California (Geotrans 2005),
- Status Report No. 1 through 6, Periodic Asbestos and Lead-related Consulting Services, Former Hunt-Wesson Processing Facility, 1111 East Covell Boulevard, Davis California (Geocon 2006), and

Comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic from the following: BJ Klosterman (April 11, 2012), the Sacramento-Yolo Mosquito and Vector Control District (April 12, 2012), and Pam Neiberg (April 11, 2012). Each of the comments related to this topic is addressed within this section.

3.8.1 Environmental Setting

Site Characteristics

The project site is located at 1111 E. Covell Boulevard in Davis, California. The southern portion of the site consists of the former 52-acre Hunt-Wesson tomato processing plant. The northern portion of the site consists of a 47-acre undeveloped agricultural field.

Hunt-Wesson operated the processing plant from approximately 1963 until October 1999. The obsolete canning facilities were demolished in 2006 but a few building foundations remain in the
southern portion of the project site. The northern portion of the project site, once intended for facilities plant expansion, remains undeveloped and was recently under agricultural use.

Adjacent land around the project site consists of: agricultural fields to the north and east; railroad tracks, residential development, an equipment rental center, and a quick lube business to the west; residential development and business offices to the south; and a park to the southwest.

Site Topography
The U.S. Geological Survey 7.5-minute Davis and Merrit, California quadrangles were used to reference geographic features in the vicinity of the project site. The quadrangles were originally published in 1952 and were revised in 1981. According to the topographic maps, the former processing plant area is located at an approximate elevation of 40 feet above mean sea level (MSL). The regional ground surface at the former processing plant is generally flat.

Soils
The 1987 Geologic Map of the Sacramento Quadrangle (State of California Department of Conservation, Division of Mines and Geology 1987) indicates that the project site is located on Holocene age alluvium (basin deposits) of the Quaternary Period. The alluvium consists of poorly sorted stream and basin deposits ranging from clay to boulder size. According to the Soil Survey of Yolo County, California (USDA 1972), the project site contains the following soils.

- Yolo silt loam (Ya) – Permeability is moderate (Ya). Surface runoff is very slow, and the erosion hazard is none to slight.
- Yolo silty clay loam (Yb) – Permeability is moderately slow (Yb). Surface runoff is very slow, and the erosion hazard is none to slight.
- Rincon silty clay loam (Rg) – This soil is slowly permeable. Surface runoff is very slow, and the erosion hazard is none to slight.
- Pescadero silty clay, saline alkali (Pb) – This soil is slowly permeable. Surface runoff is very slow, and the erosion hazard is none to slight.
- Sycamore silty clay loam (St) – Permeability is moderately slow. Surface runoff is very slow, and the erosion hazard is none to slight.

Groundwater Conditions
Groundwater conditions on the project site were assessed in the Preliminary Geotechnical Investigation, Hunt-Wesson Facility, Davis California (Lowney Associates 2002- included as Appendix E to this EIR). Free ground water was encountered during drilling in EB-1, near the center of the project site, at a depth of approximately 32 feet below existing grade. Ground water was encountered during drilling in EB-7 near the northwestern corner of the site at a depth of approximately 25 feet, and in EB-8 near the center of the northern half of the site at approximately 33 feet. Ground water was not encountered in any of the other borings. Fluctuations in the level of the ground water may occur due to variations in rainfall and other factors not in evidence at the time measurements were made.
Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) consistent with ASTM Standard E1527-00 and general industry standards was conducted on the project site by GeoTrans in 2004. The objective of the Phase I ESA and Document Review activities was to provide an evaluation of current and historical use of the Property to assess whether such use has, or is expected to, result in environmental degradation of the project site.

2004 Site Reconnaissance (Pre-demolition of the Hunt-Wesson Plant)

GeoTrans (2004) visually assessed the project on March 17, 18 and 19, 2004. A copy of the 2004 Site Reconnaissance Report is attached as Appendix G. The processing plant facilities have since been removed with the exception of a few building foundations. Below is a summary of the processing plant facilities that were present during the 2004 site reconnaissance.

Hunt-Wesson Processing Plant

The processing plant remained mostly intact at the time of the reconnaissance, but had undergone some dismantling since going non-operational in October 1999. The processing plant primarily supported two large warehouse style buildings, a boiler area and process water facilities, process water and cooler facilities, bulk truck unloading and shaker tower area, former underground and above ground storage tank (UST and AST) locations, forklift maintenance & former hazardous materials storage, a permitted wastewater treatment sump and oil/water clarifier unit, two rail spurts, four production wells and one monitoring well, a "bone yard", outbuildings, and a 47-acre undeveloped agricultural field. Please refer to the 2004 GeoTrans Phase I Environmental Assessment Report (Appendix G) for additional details concerning these facilities that were onsite and their operation.

Historical Aerial Photograph Review

Historical aerial photographs were reviewed to evaluate historical land use of the project site. Aerial photographs for the years 1937, 1957, 1964, 1971, 1984 and 1998 were obtained from the UC Davis Library in Davis, California. Wood Rogers also provided a year 2004 aerial photograph of the 99-acre processing plant. Aerial photographs earlier than 1937 were not readily available. Aerial photographs generally provide information on land use over time, and the position of notable features located on site such as buildings, landfill areas, above ground tanks, and areas of distressed vegetation or discoloration. A brief summary of each photograph is presented below.

1937 The project site was vacant and appeared to be supporting a dry-farmed grain crop on the northern 1/4 and southern 1/2 of the parcel. The middle portion of the project site and the southwest corner appeared fallow. A drainage ditch was visible transecting the southern half of the project site east to west. The adjacent land to the north, east, south and west appeared vacant and supporting agricultural uses similar to the project site. Covell Boulevard was visible to the south and existing railroad tracks are present to the west.

1957 The southern part of the project site appeared to be supporting a dry-farmed crop. The drainageditch remains, and a new drainage lateral is visible running north-south from
3.8 HAZARDS AND HAZARDOUS MATERIALS

Covell Boulevard to the existing drainage ditch. The northern half of the site appeared to be supporting a rice field, evidenced by what appears to be rice checks. The surrounding sites continue supporting agricultural uses.

1964 The southern half of the project site had been developed with the processing plant. Buildings NO.1 and NO.2 are visible, as are several smaller buildings and equipment on the north and east sides of Building NO.1. The above ground paste tanks have not been constructed. The southern rail spur appeared to have been constructed, but the northern rail spur was not visible. The northern half of the parcel appeared fallow, or supporting a dry-farmed crop. The surrounding land continues to support agricultural uses; however, some residential development had extended northward toward the project site.

1971 The southern half of the project site remained relatively unchanged since 1964. The above ground Paste Tanks have not been constructed, but the number and arrangement of the outbuildings on the north side of Building NO.1 have changed. The north rail spur does not appear to have been constructed. A large square shaped building has been constructed on the east side of the existing Bone Yard area, in addition to the former Pole Barn and Main Office buildings near the southeast corner of Building NO.1. Part of the northern half of the parcel appears fallow, with a portion supporting what appears to be a dry farmed crop. The surrounding land to the north and east continues to support agricultural uses. Additional residential development has occurred to the south and west, with J Street having been completed to Covell Boulevard by this time. The park to the southwest of the project site had also been constructed. The existing Davis Rental Center and Quick Lube sites to the west of the project site have not been constructed.

1984 The southern half of the project site remained relatively unchanged since 1971, and appeared similar to conditions observed during the site reconnaissance, except the former Cafeteria and Pole Barn were present near the southeast corner of Building NO.1. The 32 above-ground Paste Tanks had been constructed, as had the north rail spur. The large square-shaped building near the Bone Yard was no longer present. The northern half of the parcel appeared fallow. The surrounding land to the north and east continued to support agricultural uses. Additional residential development had occurred to the south and west, appearing similar to present day conditions. The existing Davis Rental Center site to the west of the project site had been constructed since 1971. The Quick Lube site to the west did not appear to have been constructed at this time.

1998 The southern half of the project site remains relatively unchanged since 1984, and appeared similar to conditions observed during the site reconnaissance, except the former Cafeteria and Pole Barn were present near the southeast corner of Building NO.1. The surrounding land to the north and east appear fallow. Surrounding land use to the south and west appear similar to present day conditions. The Quick Lube site to the west appeared to have been constructed adjacent to the Davis Rental Center.
Records Review

Environmental Data Resources (EDR)

Environmental Data Resources (EDR) performed a search of federal, state, and local regulatory agency databases that contain listings of facilities which use or store hazardous substances, as well as listings of sites that are known or suspected to have contaminated soil or groundwater due to a release of a hazardous substance or leaking underground storage tank. The database search also lists landfills, other disposal sites, and properties with registered underground storage tanks. Regulatory agency databases, which report hazardous substance use or storage, were searched for sites within a 1/2-mile radius of the project site. Databases that report hazardous substance release sites and landfill sites were searched out to a 1-mile radius.

Search Results

The processing plant area (1111 E Covell Blvd.), excluding the agricultural field, was listed in several databases including UST, Historical UST, LUST, HazNet, and Cortese (leaking UST). The UST listings correspond to several USTs formerly located on the project site. According to the EDR report, Beatrice Foods operated up to four petroleum USTs on the project site as late as March 1992, including two 10,000 gallon and two 20,000 gallon tanks. One 1,000 gallon petroleum UST was reportedly located on the project site as late as January 1987. The LUST/Cortese listing corresponds to a gasoline release that reportedly occurred on the project site, presumably from the 1,000 gallon UST.

The release impacted soil only, according to the EDR report, and the incident was closed by Yolo County in January 1989 (See discussion below). All five tanks are listed as being inactive. The HazNet listing for the processing plant corresponds to the off-site disposal of halogenated organic wastes (> 1,000 ppm VOCs) and asbestos (by ConAgra, Inc.). The EDR report shows Beatrice Foods and ConAgra as having the same mailing address in Fullerton, California.

One release site (LUST) was listed just west (cross-gradient) of the project site at 2020 F Street (an equipment rental center). According to the EDR report, a gasoline release occurred at this site, which impacted soil only. The release was discovered in November 1991 during UST closure work. The site was subsequently closed in March 1996.

An oil change facility is also located just west of the project site, at 2000 F Street. The facility, which uses and temporarily stores oils and vehicle fluids, is listed as a small quantity hazardous waste generator. There is no indication that a release has occurred from this site.

Several other surface spill release sites (CHMIRS) are located west of the project site along F Street. These sites are not considered a concern for the project site.

Local Agency Records

Local governmental agencies most likely to have information regarding hazardous materials use, hazardous materials storage or hazardous materials releases, and abandoned oil and gas wells on the project site were visited to review records regarding the project site. The agencies from which
information regarding the Property were requested include: the Yolo County Agricultural Commissioner's office, the Yolo County Health Services Agency, the California Department of Conservation, the City of Davis Building and Planning Department, the City of Davis Fire Department, Yolo County Building Department, and the Division of Oil, Gas and Geothermal Resources (DOGGR).

**Yolo County Agricultural Commissioner**

Pesticide Prior Use Reports for the project site were requested from the Yolo County Agricultural Commissioner’s office. Information requested included grower names, owner names, crops grown, pesticide used, quantity applied, and number of acres applied. No records were found pertaining to pesticide or herbicide applications on the project site for seven years prior to the request.

**Yolo County Health Services Agency**

The Yolo County Health Services Agency - Environmental Health (YCHSA) records were reviewed and relevant information is summarized below.

52-acre Processing Plant (Southern Portion of Project Site)

The YCHSA has a large file for the processing plant, including several reports regarding the removal of a 1,000-gallon gasoline UST and subsequent groundwater monitoring, the removal two 20,000-gallon and 10,000-gallon diesel USTs, permits for two on-site liquid waste units, and a 1999 and 2000 hazardous materials management plan (HMMP). There are also approximately 21 pages of correspondence documenting the permitting and removal of the four large diesel USTs. A summary of the documents is as follows:

**Former 1,000-gallon Gasoline UST**

- A 1,000-gallon gasoline UST was installed on the east side of the former propane AST in 1975.
- The 1,000-gallon gasoline UST was removed on June 30, 1986. Soil excavation to 22 feet indicated gasoline contamination extended deeper than 22 feet. Impacted soil was staged adjacent to the excavation. Boring B-1 was subsequently drilled to 52.5 feet below grade in the former UST location. First groundwater was encountered at 29 feet below grade, stabilizing at 24 feet. Field screening of the soil indicated contamination extended to the water table.
- Boring B-1 was abandoned and monitoring well MW-1 was drilled and constructed just south of the former UST to a depth of 41.5 feet. The well was constructed of two inch Schedule 40 PVC, screened from 30 to 40 feet below grade.
- A soil sample from 29 feet (capillary zone) and a groundwater sample (8/86) from the well were collected for TPH, BTEX and lead analyses. The soil sample contained 120 ppm TPH gasoline, 11 ppm lead, 2,400 ppb benzene, 32,000 ppb toluene, 7,100 ppb ethylbenzene, and 29,000 ppb xylenes. TPH gasoline was not detected in the groundwater sample. Lead was detected at 0.015 ppm in groundwater. No BTEX compounds were detected in the water sample.
- MW-1 was sampled again in February 1987 and on June 30, 1988. TPH and BTEX compounds were not detected in either groundwater sample.
• The impacted soil (185 cubic yards) from the 1,000-gallon UST excavation appears to have been spread near the former tank and allowed to "photodegrade". Two samples of the material (February 1987) did not contain detectable TPH or BTEX concentrations.
• The YCHSA granted site closure for the former 1,000-gallon gasoline UST on January 1, 1989.

Former Diesel USTs
• Two 10,000-gallon diesel USTs were installed immediately south of Boiler #2 in 1981. Two 20,000-gallon diesel USTs were installed just off the southeast corner of Boiler #4, one in 1962 and one in 1981.
• All four diesel USTs were removed on October 23, 1996. The tank bottoms were approximately 12.5 to 13 feet below grade. All four tanks were reported to be in good condition. As the excavations were unstable, and the natural gas line was nearby, the excavations were immediately backfilled without collecting excavation confirmation samples.
• Ten soil borings were subsequently drilled through the backfill in the former UST locations and soil samples were collected from the backfill material and from the native soil just below the tank bottoms. No TPH, BTEX or MTBE compounds were detected in the native soil samples. Low concentrations of TPH diesel and motor oil were detected in composite soil samples of fill material at each tank pit.
• No closure letter from the YCHSA was found with regard to the four former diesel USTs.

Hazardous Materials Management Plans
• The 1999 and 2000 hazardous materials management plans (HMMPs) indicate large quantities of various hazardous materials were used and stored at the processing plant, primarily consisting of oils, waste oils, greases, diesel fuel (500-gallon AST), bleach, toluene/acetone/xylene-based solvents, isopropyl alcohol, water treatment compounds (anti-scale solutions) and compressed gases. Most of the oils, greases and solvents were located in the storage area on the north side of the Forklift Maintenance shop. Food-grade oils and greases were used inside the plant on the process line equipment.
• The HMMP plans do not list chlorinated solvents (PCE, TCE, carbon tetrachloride or Freons) in the inventory of chemicals.
• A water treatment compound (Series 713 Anti-Foam) is listed as containing Radioactive Carbon 14. According to maintenance personnel, the Carbon 14 material was contained in small pellets that were located in many flow meters within the plant. The Carbon 14 pellet was part of the flow meter telemetry. The material did not contact the process water stream.

Permitted Waste Units
• The waste water neutralization sump off the northeast corner of Building NO.1, and the below ground oil-water clarifier adjacent to the steam clean pad, were both permitted by the Department of Toxic Substances Control (DTSC). The DTSC classified both units as "Conditionally Exempt - Specified Waste Streams", and appear to have first permitted both units in 1992.
• The waste water neutralization sump reportedly neutralized 70,000-gallons of acidic or alkaline waste water from the processing lines each month. According to Mr. Thorne, the water would have been neutralized with sodium hypochlorite (bleach) or caustic soda.
• The oil-water clarifier (wash-down sump) reportedly received 300-gallons of oily water and separation sludge each month. The water was regularly siphoned off and disposed off-site. The sludge material was also removed and drummed onsite for off-site disposal.
• The permit indicates that both units must be properly closed when no longer used.

City of Davis Department of Community Development and Sustainability
The City of Davis has extensive records on the project site dating back to the earliest permit found that was issued on May 23, 1961. The files include information corresponding to plan drawings for processing equipment and machinery, wiring and mechanical schematics, and various building permits issued for plant upgrades. The City Planning Department did not have records for the undeveloped agricultural field portion.

City of Davis Fire Department
Most of the Fire Department records for the processing plant consisted of plumbing schematics for a fire suppression system, and several facility maps, some of which called out hazardous materials storage areas and UST locations. According to a January 1975 facility map, two 10,000-gallon #5 fuel oil (diesel) USTs were located off the south end of Boiler#2; two 20,000-gallon #6 fuel oil (diesel) USTs were located just off the southeast corner of Boiler#4; two 400-gallon diesel USTs were located on the north side of the northeast corner of the Pump House; and a 1,000-gallon gasoline UST was located just east of the north half of the former 6,900-gallon propane AST. A gas pump is also shown just north of the 1,000-gallon gasoline UST. A 5-gallon gasoline storage tank (presumably above ground) is also called out just north of Boiler#4. The call-out indicates the gasoline was for the "emergency feed pump". A March 1983 updated facility map indicates the two 400-gallon diesel USTs were being used for gasoline storage by that time. The Fire Department had records of the December 11, 1996 removal of the two 10,000-gallon and two 20,000-gallon diesel USTs from the project site.

The Fire Department did not have records for the undeveloped agricultural field.

California Division of Oil, Gas and Geothermal Resources
According to the Division of Oil, Gas, and Geothermal Resources (DOGGR) District 6 oil and gas well map (Map 614) for the Davis area, there are no active or abandoned oil/gas wells located on the project site. The well closest to the project site is located approximately 1/2 mile northeast of the project site (Hillard Oil & Gas, Inc. - Nishikawa 1 well).

Yolo County Building and Planning Department
The Yolo County Building Department had no records for any portion of the project site. According to a County Planner, available records for the processing plant were transferred to the City of Davis when the processing plant was incorporated into the City.
SCREENING-LEVEL PHASE II ESA

Based on the findings of the 2004 Phase I ESA, which is included as Appendix G, there were 14 potential source areas identified that warranted screening level Phase II subsurface sampling. Each of the potential source areas are discussed below. The 2005 Screening Level Phase II Soil and Groundwater Assessment (GeoTrans, 2005) is included as Appendix H. The soil borings were completed to address each area of concern noted below:

1. Two Former 20,000-gallon diesel USTs (1962/1981 to 1996) - Low level diesel and motor oil concentrations detected in backfill material. No groundwater samples were collected when the tanks were removed (GeoTrans boring 8B-1).

2. Two former 10,000-gallon diesel USTs (1981 to 1996) - Low level diesel and motor oil concentrations detected in backfill material. No groundwater samples were collected when the tanks were removed (GeoTrans boring 8B-2).

3. Former 1,000-gallon gasoline UST (1975 to 1986) - Residual gasoline impacted soil remained from approximately 20 feet below grade to first groundwater (29 feet when tank removed). Monitoring well subsequently installed 30 feet south of former UST and monitored several times. No gasoline or BTEX compounds were detected (GeoTrans boring 8B-3).

4. Potential 1,000 or 3,000-gallon gasoline UST - The Lowney report referenced the potential for a 1,000- or 3,000-gallon gasoline UST to be located just south of the former 10,000-gallon diesel USTs. According to ConAgra maintenance personnel, an old facility blue print reportedly showed such tank; however, it is unknown if the tank was ever installed or removed (GeoTrans boring 8B-3).

5. Two 400-gallon diesel/gasoline USTs - Two 400-gallon diesel USTs were located at the processing plant Pump House from at least 1975. The USTs were used for gasoline storage by 1983. Soil and groundwater conditions are unknown, and it is unknown if the USTs remain on-site. A 500-gallon diesel above ground storage tank (AST) was then located above the location of the 400-gallon USTs (GeoTrans boring S8-5).

6. Steam Clean Pad/Oil-Water Clarifier Sump - A steam clean pad was used to clean forklifts and various equipment at the processing plant. The oily water was washed into an adjacent oil-water clarifier sump, reportedly at a rate of 300 gallons per month. (GeoTrans boring S8-6).

7. Former Hazardous Materials Storage - A hazardous materials storage area was located on the north side of the Forklift Maintenance shop from 1973 until 1999. Oils, greases, solvents (acetone, xylene, toluene based), batteries and compressed gases were stored in this area. Staining was observed on the concrete storage pad. (GeoTrans boring S8-7).

8. North Cooling Tower Area - A soil boring (EB-1) was completed to groundwater in this area by Lowney and Associates in December 2001. Chromium was detected at 92 ppm in soil at
1.5 feet in boring EB-1. Chromium was not detected in five other soil samples collected by Lowney. An unfiltered groundwater sample from EB-1 contained concentrations of arsenic, chromium, nickel and lead above respective State Maximum Contaminant Levels (MCLs). Dissolved (filtered) concentrations of these metals are unknown. Hexavalent chromium (Chrome 6+) is known to have been historically used in boiler water treatment systems; however, it is unknown if Chrome 6+ was used at this Property (GeoTrans boring S8-8).

9. Groundwater - The December 2001 subsurface investigation conducted by Lowney and Associates did not address general sitewide groundwater conditions. Only one of the four borings was completed to groundwater (GeoTrans borings S8-9, S8-10 and S8-11).

10. Surface Staining - Surface staining is present at several areas at the processing plant, including a former maintenance area in the southeast corner of the Building NO.1 warehouse, two battery charging areas in Building No.2, beneath a hydraulic pump at the Shaker Tower, and inside the former maintenance shop on the east side of Building NO.1. Soil conditions are unknown in the stained areas (GeoTrans borings S8-12, S8-14, S8-15 and S816-. 80ring S8-13 location could not be accessed and was not completed).

11. Former Greenhouse - A greenhouse was formerly located at the processing plant near the 300 kVA substation along the east Property boundary. It is unknown if pesticides or herbicides were used. Mercury-treated seeds were commonly used in greenhouse applications in the past. Shallow soil conditions are unknown at the former greenhouse (GeoTrans boring S8-17).

12. Pesticide Sampling - Lowney conducted limited shallow soil sampling for pesticides in December 2001. Low concentrations of Endosulfan and Dieldrin were detected in two shallow soil samples. Samples do not appear to have been collected from the 47-acre undeveloped agricultural field portion of the Property north of the processing plant (GeoTrans grab soil samples GS-1 through GS-4).

13. Rail Spurs - Two rail spurs enter the processing plant from the west. Elevated metals concentrations in shallow soil can result along rail lines, depending on the ballast rock used. (GeoTrans grab soil samp/"s GS-5 and GS-6).

14. Electrical Substations - A large PG&E substation and a 300 kVA step-down substation are located on the Property, along with several other transformers. No releases are known to have occurred from equipment at the substations or transformers; however, the potential exists for unreported releases to have occurred. Shallow soil conditions are unknown (GeoTrans grab soil samples GS7 and GS-B).

**Soil and Groundwater Sampling (Screening-level Phase II)**

Screening level soil and grab-groundwater sampling activities were performed at the project site over a three-day period, January 19, 20 and 27, 2005. A soil boring permit was obtained from Yolo County Department of Environmental Health for the eleven (11) deep borings to groundwater (SB-
1 through SB-11); five (5) shallow borings to three feet in depth (SB-12, SB-14 through SB-17); and eight (8) grab soil samples from 0.5 feet in depth (GS-1 through GS-8).

Depth to first groundwater was found to vary from 30 to 50 feet in borings SB-1 through SB-11, stabilizing between 17 to 32 feet below grade. The first water bearing zone was described to be somewhat confined. Depth to groundwater was measured at 28 feet below grade in existing groundwater monitoring well MW-1 on January 19, 2005. This well is located adjacent to the former 1,000 gallon gasoline UST, just north of the fire suppression water storage tanks. The groundwater flow in the region is southeasterly in the absence of pumping. The groundwater flow direction at the project site was thought to be likely influenced by the periodic operation of production well #4 on the project site (by the City of Davis). Production wells #1 through #3 were non-operational.

The lithology at the project site generally consists of yellowish brown to dark yellowish brown silty clays and clayey silts with fine sand to approximately 30 feet bgs (the maximum depth of soil samples). The soil exhibits low to moderate plasticity, is generally firm to stiff, and is slow to recharge. No unusual odor or soil discoloration was noted in the soil samples collected, with the exception of the 30-foot soil sample collected from boring 88-3 (former 1,000-gallon gasoline UST location). A mild petroleum odor was noted in this soil sample, but did not register on the field instrument (OVM).

**Analytical Results (Screening-level Phase II)**

No Volatile organic compounds (VOCs), benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), total petroleum hydrocarbons gasoline (TPH-g) or total petroleum hydrocarbons diesel (TPH-d) compounds were detected in the 13 soil samples analyzed. Low concentrations of total petroleum hydrocarbons motor oil (TPH-mo) were detected in 11 of the 13 soil samples at concentrations ranging from 2.6 to 26 milligrams per kilogram (mg/Kg). These are considered trace results and are not of environmental concern. The 30-foot soil sample from boring SB-3, which exhibited a mild petroleum odor, contained only 4.4 mg/kgK TPH-mo and no gasoline constituents were detected.

Various metals were detected in the soil samples in a generally consistent range of concentrations, with the exception of elevated detections of chromium and nickel in soil at SB-7 (former haz mat storage area). Chromium and nickel were detected at 640 and 930 mg/Kg, respectively, in the 1-foot soil sample from boring SB-7. The chromium detection exceeds both the residential (210 mg/Kg) and commercial (450 mg/Kg) U.S. EPA Preliminary Remediation Goal (PRG) value for chromium in soil. While the detection of nickel in the 1-foot soil sample is elevated in comparison to other nickel concentrations, it does not exceed the residential or commercial PRG values for nickel. Metals concentrations in the 5-foot soil sample from SB-7 are consistent with other detected metals concentrations across the project site, and are well below corresponding residential and commercial PRG values.
3.8 Hazards and Hazardous Materials

Pesticides and herbicides were not detected in the five shallow soil samples collected from across the project site. Polychlorinated biphenyls (PCBs) were not detected in the two soil samples collected adjacent to transformers on the project site.

No BTEX, MTBE, TPH-d or TPH-g compounds were detected in the 11 grab groundwater samples collected. Low concentrations of TPH-mo were detected in seven grab groundwater samples at concentrations ranging from 0.45 milligrams per liter (mg/L) to 3.0 mg/L. No field evidence of the presence of oil in the groundwater samples was noted.

Chloroform was detected in three of the groundwater samples (SB-1, SB-5 and SB-7) at low concentrations ranging from 0.79 micrograms per liter (μg/L) to 33 (μg /L. The State Maximum Contaminant level (MCL) for chloroform is 100 μg/L.

The VOC 1,2-dichloroethane (1,2-DCA) was detected in one groundwater sample (SB-6) at a concentration of 4.0 μg/L. The MCL for 1,2-DCA is 0.5 μg/L. Boring SB-6 was completed near the steam clean pad/oil-water sump.

The VOC tetrachloroethenyl (PCE, or "PERC") was detected in one groundwater sample (SB-9) at a concentration of 3.5 μg/L. The MCL for PCE is 5.0 μg /L. Boring SB-9 was completed in the "bone yard" area on the anticipated upgradient side of the project site.

Dissolved concentrations of nickel, zinc, selenium and hexavalent chromium were detected in groundwater on the project site. Nickel was detected twice at 23 and 22 μg/L in borings SB-6 and SB-10, respectively. The MCL for nickel is 100 μg/L. Zinc was detected three times at concentrations of 26, 23 and 26 μg/L at borings SB-8, SB-9 and SB-11, respectively. The MCL for zinc is 5,000 μg/L. Selenium was detected in five of the six groundwater samples at concentrations ranging from 17 μg/L to 180 μg/L. The MCL for selenium is 50 μg/L. Three of the groundwater samples (SB-7, SB-8 and SB-11) exceeded the MCL for selenium.

Hexavalent chromium was detected in two of the five samples at concentrations of 2.4 μg/L (SB-9) and 12 μg/L (SB-11). There is no MCL value for hexavalent chromium; however, the U.S. EPA has a drinking water reference dose of 21 μg/L. The sample from boring SB-9 was analyzed after the recommended 24-hour hold time, as were the samples from borings SB-8 and SB-10, which did not contain detectable concentrations of hexavalent chromium.

Assessment and Conclusion (Screening-level Phase II)
The low concentrations of TPH-mo detected in soil and groundwater at the Property do not appear to represent a significant release and are not considered an environmental concern to the project site at the concentrations detected. No TPH-g, TPH-d, BTEX or MTBE compounds were detected in soil and groundwater. The residual TPH impacts to soil and groundwater previously documented at the former 1,000-gallon gasoline UST, were not detected. No indication of a release was found at the former 10,000-gallon and 20,000-gallon diesel UST locations. The reported 1,000- or 3,000-gallon UST was not encountered at boring SB-4. No indication of a release was found at boring SB-5, completed near the former 400-gallon gasoline/diesel USTs.
The soil data collected indicated total chromium is present in shallow soil (1-foot) at concentrations above residential and commercial PRG values at the former hazardous materials storage area (boring SB-7). The impact appears to be limited to the upper 5-feet of soil, based on data from one soil boring. Elevated concentrations of nickel are also present, but do not exceed residential or commercial PRG values.

Three VOCs were detected in groundwater - chloroform, 1,2-DCA and PCE. The detection of chloroform is below the MCL value. Chloroform is a common laboratory contaminant; however, chloroform was not detected in the laboratory blank samples.

The detection of 1,2-DCA at a concentration of 4.0 μg/L in groundwater at boring SB-6 exceeds the MCL of 0.5 μg/L. Boring SB-6 was completed near the oil/water separator sump and steam clean pad. The potential exists for solvents containing 1,2-DCA to have been discharged to the sump at some point in time; however, the Phase I ESA did not find evidence of the use or storage of 1,2-DCA on the project site. As the detection of 1,2-DCA is low, and no other groundwater samples contained 1,2-DCA, the detection does not indicate a significant release has occurred.

The detection of PCE at a concentration of 3.5 μg/L in groundwater at boring SB-9 does not exceed the MCL of 5.0 μg/L for PCE. Boring SB-9 was completed in the bone yard area, in the anticipated upgradient location of former processing plant activities. No indication of PCE use on the project site was discovered during the Phase I ESA.

Dissolved selenium was detected in three groundwater samples (SB-7, SB-8 and SB-11) above the MCL of 50 μg/L. Boring SB-7 was completed at the former hazardous materials storage area, boring SB-8 was completed near the cooling towers on the north side of Building NO.1, and boring SB-11 was completed in the southeast corner of the project site, in the anticipated downgradient location of former processing plant activities. The sample from boring SB-9, completed upgradient of the processing plant, contained selenium at 44 μg/L, just below the MCL. A potential source for selenium in groundwater was not found during the Phase I ESA. The selenium may be naturally occurring in groundwater in the area.

Hexavalent chromium was detected in two of the five groundwater samples at concentrations below the U.S. EPA drinking water reference dose of 21 μg/L. There is no published MCL for hexavalent chromium in water. The highest detection was 12 μg/L in sample SB-11, analyzed within the recommended 24-hour hold time. Three of the five samples were analyzed outside of the recommended 24-hour hold time (by approximately 24 hours). One of those samples contained 2.4 μg/L hexavalent chromium. The remaining two did not contain detectable concentrations of hexavalent chromium. Based on the sample results, hexavalent chromium does not appear to represent a concern on the project site.

**Recommendations (Screening-level Phase II)**

Follow-up shallow soil sampling should be performed in the former Haz Mat storage area to confirm the initial detection of an elevated concentration of chromium in soil at 1-foot in depth at SB-7, and to assess the lateral and vertical extent of chromium impact to soil.
3.8 HAZARDS AND HAZARDOUS MATERIALS

The elevated concentrations of selenium should be assessed by researching local groundwater conditions in an effort to establish whether high concentrations of selenium are naturally occurring in the Davis area.

If USTs are encountered during redevelopment activities, they should be removed under permit from the Yolo County Environmental Health Department.

Findings of this assessment should be provided to the Yolo County Environmental Health Department.

SUPPLEMENTAL PHASE II SOIL INVESTIGATION

During the soil and groundwater sampling performed under the Screening-level Phase II, an elevated concentration of total chromium was detected in one soil sample collected at 1-foot in depth from boring SB-7, completed within the former hazardous materials storage area. Also, elevated concentrations of selenium were found in three of the six grab-groundwater samples collected from across the project site. The Supplemental Phase II soil investigation was performed in 2005 to confirm the presence or absence of elevated chromium concentrations and to research the naturally occurring concentrations of selenium in groundwater in and around the Davis area. The Supplemental Phase II report (GeoTrans, 2005) is included as Appendix I.

Soil Sampling (Supplemental Phase II)

Soil sampling activities were performed at the project site on May 25, 2005. A permit was not needed for the five borings (HA-1 through HA-5) completed to five feet in depth at and around prior boring SB-7. Boring HA-1 was completed immediately adjacent to boring SB-7 to serve as a duplicate boring location, and to collect a duplicate sample. Borings HA-2 through HA-5 were completed approximately 10 feet north, east, south and west, of boring SB-7, respectively.

The lithology at the project site generally consists of yellowish brown to dark yellowish brown silty clay and clayey silt with fine sand to approximately 5 feet bgs (the maximum depth of soil samples). The soil exhibits low to moderate plasticity, and is generally firm to stiff. No unusual odor or soil discoloration was noted in the soil samples collected.

Analytical Results (Supplemental Phase II)

No anomalous metals concentrations were detected in the five borings. The initial elevated total chromium sample result from the 1-foot sample at SB-7 was not confirmed by the 1-foot sample from HA-1, or by any other sample analyzed from the five hand auger borings.

Assessment (Supplemental Phase II)

An elevated chromium concentration (640 ppm) was found at 1-foot in depth at boring SB-7 in the former hazardous materials storage area during the initial Phase II ESA in January 2005. This chromium concentration exceeded both the residential and commercial U.S. EPA Preliminary Remediation Goals (PRGs) of 210 and 450 ppm, respectively. The chromium concentration in the 5-foot soil sample from boring SB-7 was significantly lower at 99 ppm, and well below both the residential and commercial PRG values for chromium.
The chromium concentrations detected at 1-foot and 5-feet in depth from the five confirmation soil borings (HA-1 through HA-5) ranged from 82 ppm to 100 ppm. The 1- and 5-foot soil samples from boring HA-1, completed immediately adjacent to boring SB-7, did not confirm the elevated chromium concentration previously detected at one foot in depth.

Based on findings of the follow-up soil sampling, the initial elevated chromium concentration detected at boring SB-7 does not appear to represent soil conditions in the area investigated. The supplemental soil investigation performed did not confirm the presence of elevated chromium concentrations in soil. Further soil investigation does not appear necessary, and soil cleanup is not needed.

**Selenium in Groundwater Literature Review**

Three of the six grab-groundwater samples collected from across the project site during the Screening-level Phase II contained selenium concentrations above the 50 ppb primary drinking water standard (also referred to as the "MCL", maximum contaminant level). Selenium is a trace element and also an essential nutrient. Grab-groundwater samples collected from borings SB-7, SB-8 and SB-11 contained selenium concentrations of 70, 94 and 180, respectively. While the groundwater that was sampled was shallow, first encountered groundwater, and not part of an aquifer that would be considered suitable for drinking water, the detections still warranted follow-up review. No source of selenium to groundwater was discovered during the course of a previous Phase I or Phase II ESA. Therefore, to better put the selenium detections in context, a literature search was performed to assess known selenium concentrations in groundwater from the Davis and surrounding area to allow for a comparison to be made.

Background selenium data from shallow and deep wells in and around the Davis area were obtained from the following agencies:

- City of Davis, Public Works Dept.
- Yolo County Flood Control and Water Conservation District
- University of California, Davis; Unpublished Data from Davis Landfill

Selenium concentrations in groundwater are variable in the Davis area. Shallow groundwater (40-60 feet in depth) near the Davis landfill has documented selenium concentrations above the 50 ppb MCL value in three of the seven wells sampled, with a maximum value of 172 ppb.

The City of Davis analyzed 17 wells in the El Macero Water System and found selenium concentrations ranging from non-detect up to 45 ppb. These wells are "deep wells" that are screened below 330 -feet in depth.

In a report titled, *Groundwater Monitoring Program, Data Management System, and Update of Groundwater Conditions in the Yolo County Area* (Yolo County Flood Control & Water Conservation District 2004), selenium concentrations from the six closest shallow wells (<150 feet in depth) to the Davis area ("lower Cache-Putah Subbasin") ranged up to 57.7 ppb. Selenium sample results from 20 additional groundwater monitoring wells from the "Intermediate" zone (<150 ft - 500 ft in depth) ranged from <1 ppb to 62 ppb.
Selenium concentrations in groundwater from samples collected from 1969 to March 2004 by the Yolo County Flood Control & Water Conservation District shows selenium concentrations in shallow groundwater (40-60 feet in depth) above 50 ppb in the Davis area.

Based on findings of the literature review, selenium concentrations detected in grab groundwater samples collected from borings SB-7, SB-8 and SB-11 at the former processing facility (70 ppb, 94 ppb, 180 ppb) are not significantly dissimilar to what appear to be background values in shallow groundwater in and around the Davis area. The one detection of 180 ppb is higher than the data presented in the three references reviewed (the highest published value found was 172 ppb at the Davis landfill), but other samples collected across the former processing facility do not indicate that the 180 ppb concentration is prevalent across the facility.

**Recommendation (Supplemental Phase II)**

Chromium impact to soil at the former hazardous waste storage area was not confirmed by the additional sampling performed in that area.

Elevated selenium concentrations in three of the seven groundwater samples analyzed from the Hunt-Wesson site are not significantly dissimilar to what appears to be naturally occurring background levels in shallow groundwater in the Davis area. Also, no potential source of selenium impact to groundwater was found as a result of the Phase I/II ESA performed on the project site.

No further site assessment activities to address the chromium concentrations in soil or selenium concentrations in groundwater were recommended for the project site.

**DEMONLITION OF THE PROCESSING PLANT**

Demolition of the processing plant was planned for two phases. Phase I was permitted, contracted, and implemented in 2006 to Complete Decon, Inc., which is a fully licensed and bonded contractor with asbestos certifications.

**Phase 1 Demolition**

The first phase included asbestos abatement, lead paint removal, hazardous materials disposal/recycle, and demolition of the following:

- Building #1 (Warehouse Processing Building),
- Building #2 (Warehouse),
- Main Offices,
- Field Surface Trailer/Carpenter Shop, Vacant Guard Shack,
- Transformer Substation/Fire Protection building and Tanks,
- PGE Substation

All clean wood/green waste was transported for recycle at Woodland Bio Mass, Woodland, CA. All lead paint was transported to Chemical Waste Management, Kettleman Hills, CA. All friable asbestos was transported to Waste Management Altamont Landfill, Livermore, CA. All construction debris/non friable asbestos was transported to B&J Landfill, Vacaville, CA. A manifest
of the transport and disposal of these materials is maintained in the Project Completion Close-Out Package.

Geocon prepared status reports for their periodic asbestos and lead-related consulting services during the demolition of the processing plant on May 22 and 30, June 5, 12, and 27, and July 27, 2006. Geocon's work included inspection of demolition methods and conditions, testing materials, and air quality monitoring. All six status reports noted that the contractor was using adequate work practices throughout the demolition work.

**Phase 2 Demolition**

The second phase of the demolition work has not been undertaken, and is part of the proposed project. This work includes asphalt removal, concrete removal, tree removal, and removal/disposal/recycle of underground utilities including: high voltage electrical conduit, fire suppression pipe, domestic water pipe, sanitary sewer pipe, natural gas pipe, storm sewer pipe, grey water drain pipe, two fixed-treatment units, monitoring well abandonment, and shallow soil sampling. The monitoring well is associated with the former Leaking Underground Storage Tank (LUST), which received closure in 1989. The monitoring well was never abandoned following the closure.

**3.8.2 Regulatory Setting**

**Federal**

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below.

**Resource Conservation and Recovery Act**

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.
3.8 HAZARDS AND HAZARDOUS MATERIALS

Comprehensive Environmental Response, Compensation, and Liability Act
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (the Act) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

STATE
The primary state agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code
Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26
The California Code of Regulations (CCR) Title 22 provides state regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the “Unified Hazardous Waste and Hazardous Materials Management Regulatory Program” (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

DATABASES
There is a broad list of federal and state databases that provide information for sites with varying potential for risk from the possible existence of hazardous materials. There are numerous redundancies among these various database listings. Below is a brief summary of each.
National Priorities List
The National Priorities List (NPL) of Superfund Sites is EPA’s database of more than 1,200 sites designated for priority cleanup under the Superfund program. NPL sites may encompass relatively large areas.

RCRIS System
The Resource Conservation and Recovery Information System (RCRIS) is an EPA database that includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Identification on this list does not indicate that there has been an impact on the environment.

CERCLIS Data
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) is an EPA database that contains information on potential hazardous waste sites that have been reported to EPA by states, municipalities, private companies, and individuals, pursuant to Section 103 of CERCLA. CERCLIS contains sites that are either proposed for or on the NPL, as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.

CORRACTS
Corrective Action Report (CORRACTS) is an EPA database that identifies hazardous waste handlers with RCRA corrective action activity.

RAATS System
RCRA Administrative Action Tracking System (RAATS) is an EPA database that contains records based on enforcement actions issued under RCRA pertaining to major violators, and includes administrative and civil actions brought by EPA.

PADS System
PCB Activity Database System (PADS) is an EPA database that identifies generators, transporters, commercial storers, and/or brokers and disposers of polychlorinated biphenyls (PCBs) who are required to notify EPA of such activities.

CHMIRS Data
The California Hazardous Material Incident Report System (CHMIRS) contains information on reported hazardous materials incidents (i.e., accidental releases or spills). The source of this information is the California Office of Emergency Services.

ERNS Sites
The Emergency Response Notification System (ERNS) provides records of reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.
3.8 HAZARDS AND HAZARDOUS MATERIALS

Cortese Database
The Cortese database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known hazardous substance migration. The source of this database is the California Environmental Protection Agency (CAL-EPA).

LUST Reports
The Leaking Underground Storage Tank (LUST) Incident Reports contain an inventory of reported leaking underground storage tank incidents. This information comes from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

UST Database
The Underground Storage Tank (UST) database lists registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The UST information comes from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

HIST UST Sites
The Hazardous Substance Storage Container Database is a historical listing of UST sites. The data source is the State Water Resources Control Board.

CA FID Information
The Facility Inventory Database (CA FID) lists active and inactive underground storage tank locations. This database is maintained by the State Water Resources Control Board.

HAZNET Database
The Hazardous Waste Information System (HAZNET) includes data extracted from the copies of hazardous waste manifests each year by the State Department of Toxic Substances Control.

FINDS Data
The Facility Index System (FINDS) contains both facility information and "pointers" to other sources of information that contain more detail (e.g., RCRA Info, Permit Compliance System [PCS], Aerometric Information Retrieval System [AIRS]). The source of this information is the U.S. EPA.

FTTS Database
The Federal Toxics Tracking System (FTTS) tracks administrative cases and pesticide enforcement actions/compliance activities related to the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA), Toxic Substances Control Act (TSCA), and Emergency Planning and Community Right-to-Know Act (EPCRA). The source of this data is the Environmental Protection Agency (EPA) Office of Prevention, Pesticides, and Toxic Substances.
HAZARDS AND HAZARDOUS MATERIALS

CA SLIC Database
The statewide Spills, Leaks, Investigations, and Cleanups (CA SLIC) database includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites. The data source is the State Water Resources Control Board.

Notify 65 Records
Proposition 65 Notification Records (Notify 65) contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The State Water Resources Control Board maintains this database.

EMI Data
Emissions Inventory Data (EMI) is comprised of toxics and criteria pollutant emissions data collected by the state Air Resources Board and local pollution agencies.

Manufactured Gas Plant Database
This database includes records of coal gas plants (manufactured gas plants), which were in operation in the U.S. until the 1950s. Due to common past practices, the potential for on-site hazardous by-products (such as coal tar, sludge, oils, and chemical compounds) remains on such sites, which could result in soil or groundwater contamination. These records are maintained by EDR, Inc., as part of its proprietary database.

SWEEPS Records
The Statewide Environmental Evaluation and Planning System (SWEEPS) UST list, which is no longer maintained or updated, was under the purview of the State Water Resources Control Board. Other agencies (e.g., as identified above) now maintain UST records.

LOCAL

City of Davis General Plan
The City of Davis General Plan contains the following goals and policies that are relevant to hazards and hazardous materials aspects of the proposed project:

DISASTER PLANNING

Goal HAZ 3. Provide for the safety and protection of citizens from natural and environmental hazards.

Policy HAZ 3.1 Provide for disaster planning.

TOXICS

Goal HAZ 4. Reduce the use, storage, and disposal of toxic and hazardous substances in Davis, and promote alternatives to such substances and their clean up.
3.8 HAZARDS AND HAZARDOUS MATERIALS

Policy HAZ 4.1. Reduce and manage toxics within the planning area.

Policy HAZ 4.2. Provide for the proper disposal of hazardous materials in Davis.

Policy HAZ 4.3. Reduce the potential for pesticide exposure for people, wildlife, and the environment.

Policy HAZ 4.4. Increase awareness of agricultural chemical use impacting Davis residents.

Policy HAZ 4.5. Minimize impacts of hazardous materials on wildlife inhabiting or visiting the Davis area.

Policy HAZ 4.6. Increase awareness of asbestos in the community.

Policy HAZ 4.7. Ensure that remediation of hazardous waste sites is conducted in the most timely and environmentally responsible manner possible.

Combined Pollutants

Goal HAZ 5. Reduce the combined load of pollutants generated in the City by 30 percent by the year 2010.

Policy HAZ 5.1. Reduce the combined load of pollutants generated in the City’s wastewater, stormwater, and solid waste streams. Such pollutants include, but are not limited to toxic and hazardous substances.

Certified Unified Program Agency (CUPA)

The California Environmental Protection Agency designates specific local agencies as Certified Unified Program Agencies (CUPA), typically at the county level. The Yolo County Environmental Health Department is the CUPA designated for Davis, West Sacramento, Winters, Woodland, Yolo-Unincorporated. Yolo County Environmental Health is responsible for the implementation of six statewide programs within its jurisdiction. These programs include:

- Underground storage of hazardous substances (USTs)
- Hazardous Materials Business Plan (HMP) requirements
- Hazardous Waste Generator requirements
- California Accidental Release Prevention (Cal-ARP) program
- Uniform Fire Code hazardous materials management plan
- Above Ground Storage Tanks (Spill Prevention Control; and Countermeasures Plan only)

Implementation of these programs involves:

- Permitting and inspection of regulated facilities.
- Providing educational guidance and notice of changing requirements stipulated in State or Federal laws and regulations.
- Investigations of complaints regarding spills or unauthorized releases.
- Administrative enforcement actions levied against facilities that have violated applicable laws and regulations.
3.8.3 Impacts and Mitigation Measures

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.
HAZARDS AND HAZARDOUS MATERIALS

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: The project may have the potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Less than Significant with Mitigation)

CONSTRUCTION PHASE IMPACTS

Construction of the proposed project would require disturbance to the remnant concrete foundations from the processing plant, which have historically been exposed to some hazardous materials and show signs of staining. Additionally, construction activities would likely require the use of petroleum based products (oil, gasoline, diesel fuel), and a variety of chemicals including paints, cleaners, and solvents. The use of these materials will pose a reasonable risk of release into the environment if not properly handled, stored, and transported. These are potentially significant impacts. Implementation of the following mitigation measures will ensure that these potential impacts are reduced to a less than significant level.

OPERATIONAL PHASE IMPACTS

The operational phase of the project will occur after construction is completed and tenants and residents move in to occupy the structures and facilities on a day-to-day basis. Below is discussion of the environmental impacts associated with the various components of the proposed projects throughout the operational phase.

Residential, Open Space, Neighborhood Center: The proposed project includes a mix of land uses, the majority of which are considered compatible with the surrounding uses. These land uses include: low, medium, and high density residential uses; open spaces including greenbelts and drainage facilities, multi-use open space areas; parks; and a neighborhood center. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household cleaners, paint, etc. The operational phase of the proposed project does not pose a significant hazard to the public or the environment. Implementation of the proposed project would have a less than significant impact relative to this issue.

Urban farm: The proposed project includes an urban farm area that would encompass approximately 7.4 acres along the project site’s eastern boundary. The entire urban farm area would be dedicated to the City and would likely be operated by the Center for Land-Based Learning (CLBL). The urban farm does not pose a significant hazard to the public or the environment from the routine transport, use, or disposal of hazardous materials, nor does it present a reasonably foreseeable release of hazardous materials. Individual farm plots within the urban farm would not be at a scale that would allow for the aerial application (spraying) of pesticides or fertilizers. Thus, there is no potential for the urban farm to expose adjacent residential areas to airborne hazards. It is possible that farming activities would include the
application of common agricultural pesticides and fertilizers directly to the soil or directly to plants via manual, ground-level application. The use of common agricultural products, such as pesticides and fertilizers on an area approximately 7.4 acres in size would not result in significant volumes of hazardous materials that would pose a risk to the adjacent residential areas. Mitigation Measure 3.2-1 includes operational requirements that would reduce potential hazards from the urban farm to adjacent residential areas to a less than significant level.

The regulation of pesticide use occurs at the County level, and is mandated by the California Food and Agricultural Code. The Yolo County Agricultural Commissioner is under the direction and supervision of the Director of the California Department of Pesticide Regulation for the enforcement of State laws and regulations pertaining to pesticide use within the State. The objective of the program is to protect the public, pesticide applicators, field workers, the environment and agricultural crops from the adverse effects of pesticides resulting from misuse or improper handling. This is accomplished through the regulation of the activities of professional pest control operators, advisors, dealers, private applicators (growers) and other pesticide users County-wide.

Additionally, it is anticipated that the urban farm component of the proposed project would include the installation and use of an above-ground storage tank (AST) that would store diesel fuel for tractors and other farm equipment used at the urban farm. Facilities having an aggregate petroleum storage capacity of 1,320 gallons or greater in containers 55 gallons and larger (with exception to the tanks exempted by Section 25270.4.5 (b) of the Aboveground Petroleum Storage Act) are subject to the Aboveground Petroleum Storage Act. The proposed project would have an AST approximately 250-300 gallons in size, and thus, would not be regulated by the Aboveground Petroleum Storage Act.

The Yolo County Agriculture Department inspects farms for the Hazardous Materials Business Plan program. The California Health and Safety Code, Section 25503.5, makes a special exemption for farmers concerning the Hazardous Materials Business Emergency Response Plan. Farmers may choose either to provide a copy of their current Hazardous Materials Business Emergency Response Plan to Yolo County Environmental Health, or to post warning signs on each building in which hazardous materials are stored. Even if signs are posted, the farm must have a Hazardous Materials Business Emergency Response Plan, however it doesn’t need to be sent in to the Environmental Health office. In either case farms must submit the annual chemical inventory to Environmental Health.

If the farm elects to post signs instead of sending in a plan to Yolo County Environmental Health pursuant to The California Health and Safety Code, Section 25503.5, the signs must conform to the following:

1. Be posted on each building in which hazardous materials are stored
2. Specify pesticides, petroleum fuels and oil, and types of fertilizers.
3. Be visible from any direction of probable approach, readable from a distance of 25 feet
4. State the wording, “DANGER HAZARDOUS MATERIAL STORAGE AREA,” LIST HAZARDOUS MATERIAL STORED WITHIN, BY CATEGORY (pesticides, petroleum fuels and oil, and types of fertilizers), state, “ALL UNAUTHORIZED PERSONS-KEEP OUT,” “IN AN EMERGENCY, CONTACT:” listing name and telephone number of an emergency contact person.

5. Sign repeated in another language if reasonably anticipated that persons who do not understand English may enter the posted building.

Mitigation Measure 3.8-3 requires the operator of the urban farm to prepare and submit a Hazardous Materials Business Emergency Response Plan to the Yolo County Agriculture Department. Implementation of this mitigation measure would reduce this impact to a less than significant level.

**Mixed-Use Business Component:** The proposed project includes a 15-acre mixed-use business component that would face onto East Covell Boulevard and would accommodate up to approximately 198,000 square feet of business uses, as well as 24 residential units. The types of land uses envisioned for the mixed-use area include professional office, flex space, medical office, research and development, restaurants, entertainment/music venues, retail, fitness facilities, and daycare, in addition to the residential uses.

The project site is currently designated "Industrial", which allows for the following uses: manufacturing, warehousing and distribution, research and development, commercial recreation, open space areas for buffering, transportation and employee recreation. Solid waste transfer/processing stations are conditionally allowable subject to performance standards in the municipal code.

Theoretically speaking, both the proposed "Mixed-Use Business Component" and the existing land use designation of "Industrial" have the potential to include businesses that would routinely transport, use, or dispose of hazardous materials. Comparatively speaking, uses such as manufacturing, warehousing, distribution, and waste transfer stations (allowed under the existing "Industrial" designation) would involve activities that are more likely to require the routine transport, use, or disposal of hazardous materials, when compared to the allowed uses under the "Mixed-Use Business Component" (professional office, flex space, medical office, research and development, restaurants, entertainment/music venues, retail, fitness facilities, and daycare). As a result, the "Industrial" uses would also be more likely to have a reasonably foreseeable release of hazardous materials into the environment when compared to the "Mixed-Use Business Component."

While there is the potential for a future tenant of the Mixed-Use Business Component to propose a business use that could routinely transport, use, or dispose of hazardous materials, this is not currently part of the proposed project. A future tenant with such a proposal would be required to comply with all applicable state and federal regulations regarding the use, storage, transport, handling, and disposal of hazardous materials. Compliance with applicable state and federal regulations regarding hazardous materials would ensure that future businesses within the project site do not pose a threat to adjacent businesses and residents.
Overall, there is no component of the proposed Mixed-Use Business Component that is expected to routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, and this component does not pose a significant hazard to the public or the environment. Implementation of the proposed project would have a **less than significant** impact relative to this issue.

**Mitigation Measures**

**Mitigation Measure 3.8-1**: Prior to commencement of grading, the applicant shall submit a Soil Management Plan (SMP) for review and approval by the City. The SMP shall establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction to reduce the potential for spills and to direct the safe handling of these materials if encountered. The city will approve the SMP prior to any earth moving.

**Mitigation Measure 3.8-2**: Prior to the issuance of grading permits, the applicant shall confirm that all remnant concrete foundations, to the extent they are not suitable for on-site recycling and reuse, will be removed, transported, and disposed of in accordance with environmental regulations and the specifications contained in the 2006 Specifications for Site Demolition Report (GeoTrans, 2006) and shall provide the City with the appropriate documentation.

**Mitigation Measure 3.8-3**: Prior to commencement of farming activities on the project site, the applicant and/or the urban farm operator shall submit a Hazardous Materials Business Emergency Response Plan to the Yolo County Agriculture Department for review and approval.

**Significance After Mitigation**

Implementation of MM 3.8-1, MM 3.8-2, MM 3.8-3, and MM 3.2-1 will reduce these impacts to **less than significant**.

**Impact 3.8-2**: The project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Less than Significant with Mitigation)

The proposed project includes a mix of land uses within 1/4 mile of two schools. These land uses include: low, medium, and high density residential uses; open spaces including greenbelts and drainage facilities, multi-use open space areas; parks; a neighborhood center, urban farm, and mixed-use business. The project site is located within 1/4 mile of the following schools:

- **Oliver Wendell Holmes Junior High School**: Serves 7-9th grades and is located at 1220 Drexel Dr, Davis, CA95616, which is approximately 1,300 feet to the south.
- **North Davis Elementary School**: Serves K-6th grades and is located at 555 E 14th St, Davis, CA 95616, which is approximately 1,130 feet to the southwest.

Other schools located in the vicinity of the project site, but beyond the 1/4 mile CEQA threshold include the following: Davis Senior High School (1,500 feet to the southwest), St. James School...
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(2,100 feet to the southwest), Birch Lane Elementary School (2,640 feet to the east), Leonardo Da Vinci High School (3,170 feet to the southeast).

CONSTRUCTION PHASE IMPACTS

As discussed under Impact 3.8-1, construction of the proposed project would require disturbance to the remnant concrete foundations from the processing plant, which have historically been exposed to some hazardous materials and show signs of staining. The concrete will need to be appropriately removed, transported, and disposed of in accordance with environmental regulations. Additionally, construction activities would likely require the use of petroleum based products (oil, gasoline, diesel fuel), and a variety of chemicals including paints, cleaners, and solvents. The use of these materials will pose a risk if not properly handled, stored, and transported. These are potentially significant impacts. Implementation of MM 3.8-1 and MM 3.8-2 (previously listed) will ensure that the potential impact is reduced to a **less than significant** level.

OPERATIONAL PHASE IMPACTS

The operational phase of the project will occur after construction is completed and tenants and residents move in to occupy the structures and facilities on a day-to-day basis. Below is discussion of the environmental impacts associated with the various components of the proposed projects throughout the operational phase.

**Residential, Open Space, Neighborhood Center:** The proposed project includes a mix of land uses, the majority of which are considered highly compatible with school uses. These compatible land uses include: low, medium, and high density residential uses; open spaces including greenbelts and drainage facilities, multi-use open space areas; parks; and a neighborhood center. None of these land uses are expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. There is the potential for people residing in area to use common residential grade hazardous materials; however, this does not pose a significant hazard to schools within one-quarter mile of the project site. Implementation of the proposed project would have a **less than significant** impact relative to this issue.

**Urban farm:** The proposed project includes an urban farm area that would be dedicated to the City as a small-scale farming opportunity. The urban farm does not pose a significant hazard to schools within one-quarter mile of the project site. Implementation of the proposed project would have a **less than significant** impact relative to this issue.

**Mixed-Use Business Component:** The proposed project includes a 15-acre mixed-use business component that would accommodate approximately 198,000 square feet of business uses and 24 residential units. The types of uses envisioned include professional office, flex space, medical office, research and development, restaurants, entertainment/music venues, retail, fitness facilities, and daycare.

The project site is currently designated "Industrial," which allows for the a variety of uses such as manufacturing, warehousing, distribution, and waste transfer stations, all of which would involve activities that are more likely to emit hazardous emissions or handle hazardous or acutely
hazardous materials, substances, or waste, when compared to the uses envisioned under the Mixed-Use Business Component. It is possible that a future tenant would propose a business use that could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste; however, this is not currently proposed. A future tenant with such a proposal would be required to comply with all applicable state and federal regulations regarding the use, storage, transport, handling, and disposal of hazardous materials. Compliance with applicable state and federal regulations regarding hazardous materials would ensure that future businesses within the project site do not pose a threat to nearby schools.

Overall, there is no component of the proposed Mixed-Use Business Component that is expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, and this component does not pose a significant hazard to schools within one-quarter mile of the project site. Implementation of the proposed project would have a less than significant impact relative to this issue.

**Mitigation Measures**

Implementation of MM 3.8-1, MM 3.8-2, and MM 3.8-3.

**Significance after Mitigation**

Implementation of MM 3.8-1, MM 3.8-2, and MM 3.8-3 will reduce this impact to less than significant.

**Impact 3.8-3: The project has the potential to result in impacts from being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Less than Significant with Mitigation)**

**Phase 1 ESA:** Prior to demolition of the processing plant, a Phase I Environmental Site Assessment (ESA) was performed in conformance with the scope and limitations of ASTM Standard Practice E 1527-05. The Phase 1 ESA included a database search, historical land use research dating back to the early 1900s, interviews with a property representative, and review of local agency records. The Phase I ESA reported evidence of the presence of Recognized Environmental Conditions associated with the former processing plant on the project site as follows:

- The potential exists for subsurface soil and/or groundwater impacts at the processing plant in connection with former USTs, the former hazardous materials storage area, an underground oil/water separator, at several stained areas, at two maintenance areas, and at two battery charging areas. Shallow soil conditions are unknown at the location of a former greenhouse, along the two on-site rail spurs, and near the on-site transformers.
- The potential exists for two 400- or 500-gallon USTs to remain at the processing plant Pump House.
- The potential exists for a 1,000- or 3,000-gallon gasoline UST to be present just south of the boilers, on the east side of Building NO.1 at the processing plant.
• Elevated total metals concentrations (above State water quality goals) were detected in one groundwater sample collected at the processing plant. Dissolved metals concentrations in groundwater are unknown.
• Pesticide concentrations in shallow soil are unknown at the processing plant. Limited shallow soil sampling found low concentrations of pesticides.
• General site-wide groundwater conditions across the processing plant are unknown.
• The permitted oil/water clarifier sump and waste water neutralization sump at the processing plant require proper closure, according to the DTSC permit.
• Asbestos containing building materials were present at the processing plant site, and lead paint was likely present.

Based on the evidence of Recognized Environmental Conditions on the project site, Phase II soil and groundwater sampling was recommended. It was also recommended that the potential for USTs at the processing plant be evaluated, all wells be properly abandoned, a comprehensive pre-demolition asbestos and lead paint survey be completed, and the oily water clarifier and neutralization sump be properly closed.

**Phase II Screening Level Soil and Groundwater Sampling:** As described in detail above, Phase II screening level soil and grab-groundwater sampling activities were performed at the project site based on the findings from the Phase 1 ESA. There were low concentrations of TPH-mo detected in soil and groundwater at the project site that do not appear to represent a significant release and it is not considered an environmental concern to the project site at the concentrations detected. No TPH-g, TPH-d, BTEX or MTBE compounds were detected in soil and groundwater. The residual TPH impacts to soil and groundwater previously documented at the former 1,000-gallon gasoline UST, were not detected. No indication of a release was found at the former 10,000-gallon and 20,000-gallon diesel UST locations. The reported 1,000- or 3,000-gallon UST was not encountered at boring SB-4. No indication of a release was found at boring SB-5, completed near the former 400-gallon gasoline/diesel USTs.

The soil data collected indicated total chromium present in shallow soil (1-foot) at concentrations above residential and commercial PRG values at the former hazardous materials storage area (boring SB-7). The impact appears to be limited to the upper 5-feet of soil, based on data from one soil boring. Elevated concentrations of nickel are also present, but do not exceed residential or commercial PRG values.

Three VOCs were detected in groundwater - chloroform, 1,2-DCA and PCE. The detection of chloroform is below the MCL value. Chloroform is a common laboratory contaminant; however, chloroform was not detected in the laboratory blank samples.

The detection of 1,2-DCA at a concentration of 4.0 μg/L in groundwater at boring SB-6 exceeds the MCL of 0.5 μg/L. Boring SB-6 was completed near the oil/water separator sump and steam clean pad. The potential exists for solvents containing 1,2-DCA to have been discharged to the sump at some point in time; however, findings of the Phase I ESA did not find evidence of the use or storage of 1,2-DCA on the project site. As the detection of 1,2-DCA is low, and no other
groundwater samples contained 1,2-DCA, the detection does not indicate a significant release has occurred.

The detection of PCE at a concentration of 3.5 µg/L in groundwater at boring SB-9 does not exceed the MCL of 5.0 µg/L PCE. Boring SB-9 was completed in the bone yard area, in the anticipated upgradient location of former processing plant activities. No indication of PCE use on the project site was discovered during the Phase I ESA.

Dissolved selenium was detected in three groundwater samples (SB-7, SB-8 and SB-11) above the MCL of 50 µg/L. Boring SB-7 was completed at the former hazardous materials storage area, boring SB-8 was completed near the cooling towers on the north side of Building NO.1, and boring SB-11 was completed in the southeast comer of the project site, in the anticipated downgradient location of former processing plant activities. The sample from boring SB-9, completed upgradient of the processing plant, contained selenium at 44 µg/L, just below the MCL. A potential source for selenium in groundwater was not found during the Phase I ESA. The selenium may be naturally occurring in groundwater in the area.

Hexavalent chromium was detected in two of the five groundwater samples at concentrations below the U.S. EPA drinking water reference dose of 21 µg/L. There is no published MCL for hexavalent chromium in water. The highest detection was 12 µg/L in sample SB-11, analyzed within the recommended 24-hold time. Three of the five samples were analyzed outside of the recommended 24-hour hold time (by approximately 24 hours). One of those samples contained 2.4 µg/L hexavalent chromium. The remaining two did not contain detectable concentrations of hexavalent chromium. Based on the sample results, hexavalent chromium does not appear to represent a concern on the project site.

**Supplemental Phase II Soil Investigation:** The Supplemental Phase II soil investigation, discussed above, was performed to confirm the presence or absence of elevated chromium concentrations and to research the naturally occurring concentrations of selenium in groundwater in and around the Davis area.

Chromium concentrations detected at 1-foot and 5-feet in depth from five confirmation soil borings (HA-1 through HA-5) ranged from 82 ppm to 100 ppm. The 1- and 5-foot soil samples from boring HA-1, completed immediately adjacent to boring SB-7, did not confirm the elevated chromium concentration previously detected in the Screening-level Phase II at one foot in depth.

Based on findings of this soil sampling, the initial elevated chromium concentration detected at boring SB-7 does not appear to represent soil conditions in the area investigated. The supplemental soil investigation performed did not confirm the presence of elevated chromium concentrations in soil. Further soil investigation does not appear necessary, and soil cleanup is not needed.

**Selenium in Groundwater Literature Review:** Three of the six grab-groundwater samples collected from across the project site during the Screening-level Phase II contained selenium concentrations above the 50 ppb primary drinking water standard (also referred to as the "MCL", maximum contaminant level. No source of selenium to groundwater was discovered during the course of the
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Phase I or Phase II ESA. Therefore, to better put the selenium detections in context, a literature search was performed to assess known selenium concentrations in groundwater from the Davis and surrounding area to allow for a comparison to be made.

Elevated selenium concentrations in three of the seven groundwater samples analyzed from the project site are not significantly dissimilar to what appears to be naturally occurring background levels in shallow groundwater in the Davis area. Also, no potential source of selenium impact to groundwater was found as a result of the Phase I/II ESA performed on the project site. No further site assessment activities to address the chromium concentrations in soil or selenium concentrations in groundwater were recommended for the project site.

Demolition of the Processing Plant: Demolition of the processing plant was planned to be accomplished in two phases. Phase 1 was permitted, contracted, and implemented in 2006. The second phase of the demolition work is part of the proposed project. This work includes asphalt removal, concrete removal, tree removal, and removal/disposal/recycle of underground utilities including: high voltage electrical conduit, fire suppression pipe, domestic water pipe, sanitary sewer pipe, natural gas pipe, storm sewer pipe, grey water drain pipe, two fixed-treatment units, monitoring well abandonment, and shallow soil sampling. The monitoring well is associated with the former Leaking Underground Storage Tank (LUST), which received closure in 1989. The monitoring well was never abandoned following the closure, but would be appropriately abandoned as part of the proposed project.

Conclusion: The project site has been extensively studied for hazardous materials contamination. The project site is listed as a LUST Cleanup Site, but the case was closed in 1999. The project site is not a listed site pursuant to Government Code Section 65962.5. There is no evidence that the project site has had significant release of a hazardous material. There is no evidence that the project site is contaminated. There is no evidence that the project site is in need of a site cleanup. Implementation of the proposed project would have a less than significant impact relative to this issue.

Mitigation Measures

Mitigation Measure 3.8-4: Prior to the commencement of grading activities for construction of the project, the applicant shall confirm to the City of Davis that shallow soil sampling was performed during Phase 2 of the demolition activities. The sampling shall be performed in the areas that will be affected by the removal of asphalt, concrete, and all underground utilities/pipe/conduit/treatment units. The samples shall be submitted for laboratory analysis of total petroleum hydrocarbons (TPH) (gas, diesel and motor oil) by EPA Method 8015M and volatile organic compounds (VOCs) by EPA Method 8260. The results of the soil sampling shall be provided to the City of Davis. If elevated levels of TPH or VOCs are detected during the laboratory analysis of the soils, a soil cleanup and remediation plan shall be prepared and implemented prior to the commencement of grading activities.

Mitigation Measure 3.8-5: Prior to issuance of a final map, the applicant shall properly abandon the monitoring well associated with the former Leaking Underground Storage Tank (LUST), which
received closure in 1989. The well abandonment shall be completed consistent with the requirements of the Yolo County Health Department, and the work shall be completed by a C-57 State licensed well contractor.

SIGNIFICANCE AFTER MITIGATION

Implementation of MM 3.8-4 and 3.8-5 will reduce this impact to less than significant.

Impact 3.8-4: The project has the potential to result in safety hazards for people residing or working on the project site as a result of a public airport or public use airport (Less than Significant)

The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. The Yolo County Airport Land Use Commission (ALUC) is an advisory body that assists local agencies with ensuring the compatibility of land uses in the vicinity of airports. The County ALUC reviews proposed development projects for consistency with airport land use compatibility.

There are two airports in the vicinity of the project site. The UC Davis Airport is located approximately 3 miles southwest of the site, and the Yolo County Airport is located approximately eight miles to the west of the project site.

The UC Davis Airport is operated as a general aviation airport. The Airport offers the sale of aviation fuel (100 LL) and rents hangers, open shades and tie downs for aircraft storage. Additionally, there are two fixed base operators located at the Airport that provide aircraft maintenance (Davis Air Repair), flight instruction, and aircraft rentals (Cal Aggie Flying Farmers). The project site is not located within the approach or take-off zones of the UC Davis Airport, nor is it located within the overflight zones of the airport.

The Yolo County Airport is a general aviation airport owned by the County. The Yolo County Comprehensive Airport Land Use Plan (1999) does not show the project site within a flight zone and the proposed project is not considered an incompatible land use.

Implementation of the proposed project would have a less than significant impact with regards to this environmental issue.

Impact 3.8-5: The project has the potential to result in safety hazards for people residing or working on the project site as a result of a private airstrip (Less than Significant)

There are no documented private airstrips within close proximity to the project site. Implementation of the proposed project would have a less than significant impact with regards to this environmental issue.
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Impact 3.8-6: The project has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Less than Significant)

The City of Davis Fire Department maintains the City’s Multi-Hazard Functional Planning Guide, which plans for emergency management and evacuation in the event of disasters. According to the departments, the most likely disaster scenario for Davis is a toxic spill on Interstate 80 or the Southern Pacific mainline railroad tracks passing through town. Other disasters could occur, such as a flood, an earthquake or a major fire.

The Guide includes operating procedures in the event of a disaster, as well as descriptions of emergency evacuation routes in Davis. According to the guide, all major roads are available for evacuation, depending on the location and type of emergency that arises. Major roads identified for evacuation in the Guide are Russell Boulevard, Highway 113, Interstate 80, Richards Boulevard, County Road 102/Pole Line Road, Mace Boulevard southbound, Road 32A, Covell Boulevard/Road 31, “F” Street/County Road 101A and North Sycamore Frontage Road.

The proposed project does not include any actions that would impair or physically interfere with the City’s Multi-Hazard Functional Planning Guide. The proposed project would add additional traffic onto Covell Boulevard, which is one of ten roads that are identified as major roads for evacuation in the City’s Multi-Hazard Functional Planning Guide. The proposed project does, however, include traffic improvements and upgrades that would accommodate the additional project-related traffic so that Covell Boulevard would continue to operate at acceptable levels of service. Implementation of the proposed project would have a less than significant impact with regard to this environmental issue.

Impact 3.8-7: The project has the potential to expose people or structures to a risk of loss, injury or death from wildland fires (Less than Significant)

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The proposed project is located on the northern edge of the City of Davis in an area that is actively irrigated in association with farming or surrounded by development, and the topography is flat. This area is considered low risk to wildfires when compared to the hilly areas on the west or east sides of the Sacramento Valley. Implementation of the proposed project would have a less than significant impact with regards to this environmental issue.
Impact 3.8-8: The project’s water quality and detention basin may create a breeding ground for mosquitoes (Less than Significant with Mitigation)

During the NOP comment period for the EIR, the Yolo-Sacramento Mosquito and Vector Control District submitted a comment letter requesting that the EIR address the potential for the project to result in risks to public health as a result of the potential to breed mosquitoes.

As described in greater detail in Section 3.9, Hydrology and Water Quality, the project includes a stormwater and water quality detention basin along the northern boundary of the project site. This detention basin would be used to store and attenuate the flow of stormwater during a storm event, and to treat surface water discharges from the site year-round. Year-round surface water discharges would result from landscape irrigation, residents washing vehicles, and other minor sources of surface water introduction throughout the year. During a storm event, it is anticipated that standing water would remain in the detention basin for a period of one to seven days, depending on the intensity and duration of the storm. However, standing water may remain in the lower water quality control areas of the detention basin year-round. The presence of standing water on the project site has the potential to result in the breeding of mosquitoes, which may pose a risk to public health. The following mitigation measure would reduce this potential impact to a less than significant level.

Mitigation Measure 3.8-6 Upon completion of the onsite stormwater detention basin, the project applicant shall contact the Sacramento-Yolo Mosquito Vector Control District (District) to collaboratively develop and implement a site-specific mosquito control and abatement plan. The applicant shall implement BMPs contained in the District’s Mosquito Reduction Best Management Practices Handbook, as directed by District staff.

Significance after Mitigation

Implementation of MM 3.8-6 will reduce this impact to less than significant.
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