

15.0 HAZARDS AND HAZARDOUS MATERIALS

This section presents an overview of the hazardous materials associated with the proposed Riolo Vineyard specific plan area and immediate surroundings. Information has been summarized from documents supplied by the Applicant. These documents and information have been reviewed for their content and supplemented by URS' experience and knowledge of the region. Since the impacts and mitigation measures are based on a limited review of information provided by others, it should be noted that conditions not revealed or observed during the preparation of these mitigation measures might be identified during ground-disturbing activities associated with construction of the proposed project.

15.1 ENVIRONMENTAL SETTING

15.1.1 Regional Setting

The Plan Area and surrounding properties are shown on Figure 3-3 in Chapter 3, Project Description. The area is largely undeveloped, with scattered residential structures as well as a few orchards/vineyards. The property to the north, across Dry Creek, is largely undeveloped except for the new Doyle Ranch subdivision at the eastern end of the property. The Silver Creek subdivision (28.6 acres) has been proposed for the property to the east of Walerga Road, and the Morgan Place subdivision (12.5 acres) has been proposed for the property southeast of the proposed site. Currently, this land is vacant except for a wastewater treatment facility on the south bank of Dry Creek, about 1,500 feet east from the Riolo Vineyard property. The property to the south, across PFE Road, is mostly undeveloped to the Placer/Sacramento county line, then consists of extensive residential development. A church complex and the Wilson Riles Middle School occupy the land across PFE Road from the site, near its intersection with Walerga Road. An elementary school is proposed for the land west of the middle school. There is a high school located to the southwest of the Watt Avenue/PFE Road intersection and a rural residence northwest of this intersection. The Placer Vineyards Specific Plan (1,493 acres) has been proposed for land west of PFE Road and north of the Riolo Vineyard specific plan area (Figure 4-5 in Chapter 4, Land Use).

15.1.2 Existing Site Conditions

Currently much of the Plan Area is vacant, undeveloped, and weed-covered land with scattered residences and outbuildings, an equestrian center, localized drainage ditches, and an intermittent stream discharging into Dry Creek along the northern property line. Some old orchards and vineyards are also present. The site is in an established agricultural area that is trending toward growing suburban residential areas in southernmost Placer County. Historically, the area has been dry farmed since at least 1937. Some of the orchards and vineyards have been converted since that time and much of the site is now fallow land.

Ramcon Engineering & Environmental Contracting, Inc. (Ramcon) has characterized the presence of hazardous wastes/materials on properties within the specific plan area in a series of Phase I Environmental Site Assessments (ESAs) conducted on property owned by the Applicant, in general accordance with the provisions of American Society for Testing and Materials (ASTM) Standard Practice E1527-00. All relevant documents are listed in Chapter 18, References. Ramcon has also performed Phase II ESAs and conducted preliminary contamination removal on portions of certain properties, as indicated in Chapter 8. This removal is currently being reviewed by the California Environmental Protection Agency, the Department of Toxic Substances Control (DTSC). As requested by the Placer County Environmental Health Services Division (EHS), Ramcon conducted a sampling and analysis program of properties believed to be formerly orchards or vineyards. The work was performed in accordance with the Interim Guidance for Sampling Agricultural Fields for school sites published by the DTSC (Ramcon, 2007a, 2007b). The results of the testing indicated that the human health risk of

potential exposure to the chlorinated pesticide DDT as well as metals (including arsenic) is low. However, this was not quantified based on a human health risk assessment. The EHS requested additional localized screening for arsenic and lead from several discrete samples, both archived and newly obtained. The results are presented in [Results of Follow-up Grid Sampling and Testing (Frisvold Property)].

The presence of Recognized Environmental Conditions (RECs) identified on parcels within the Riolo Vineyard specific plan area, based on the environmental site assessments referenced above, are summarized in Table 15-1 by parcel, along with the status of Phase II ESAs and preliminary contamination removal. Figure 15-1 shows environmental features identified on each parcel of the site during the Phase I ESAs conducted by Ramcon. Although REC is a standard term used within the environmental assessment profession in accordance with ASTM nomenclature, it can also refer to contamination from types of land uses (e.g., pesticides in agricultural areas and petroleum hydrocarbons associated with underground storage tanks and aboveground storage tanks). The term REC is used in this Draft EIR to imply constituents of health or environmental concern whose presence might require a risk assessment and remediation in accordance with DTSC protocols.

As noted in Table 15-1, Phase II ESAs were conducted on seven parcels (only four reports were prepared because certain parcels were combined in the reports). Preliminary contamination removal activities were performed on three of the parcels. Table 15-2 lists the results of the Phase II ESAs and removal activities with respect to Assessor Parcel Numbers (APNs).

Analytical results from soil samples obtained during Phase II screening level investigations are compared to two standards in order to evaluate possible adverse impacts to human health:

- Preliminary Remediation Goals (PRGs) for residential usage, established by the U.S. EPA Region IX;
 and
- California Human Health Screening Levels (CHHSLs) established by the California EPA.

When exceedances of PRGs and/or CHHSLs are encountered, actual risks to human health are evaluated by means of remedial alternatives, if required. The remedial activities are planned in concert with DTSC or the Regional Water Quality Control Board (RWQCB), whichever is the lead agency.

The following summarizes the analysis and conclusion of the Phase II reports prepared for the identified parcels described below:

92-Acre Riolo Parcel (APN 023-200-023)

The former farm headquarters area centered around the packing shed (REC 1 on Figure 15-1) was sampled (from four excavations) for pesticide and metals contamination; no reportable pesticides were found, and metals were detected below PRGs and CHHSLs.

The site of an underground storage tank removed in 1990 (also REC 1 on Figure 15-1) was tested. Following removal of backfill material, samples of native soil beneath the excavation were tested for gasoline, volatile organic (benzene, toluene, ethylbenzene, and xylene [BTEX]) constituents, fuel oxygenates, and total lead. Low levels of lead were found but were below PRGs and CHHSLs.

A soil sample was collected below a small (100-gallon) tank containing a small amount of diesel fuel (REC 1 on Figure 15-1). Neither diesel fuel nor BTEX were detected in this soil sample.

Table 15-1 Summary of Hazardous Materials Studies/Actions

Assessor Parcel Number	Owner	Approximate Acreage ¹	EIR Level	Phase I ESA Haz Mat	Phase II ESA Haz Mat	Preliminary Contamination Mitigation Conducted	RECs ²	
023-200-019	Navtej Riar/Singh	27.5	Program	No				
023-200-023	PFE (formerly Riolo)	92.0	Project	Yes	Yes	None Required	 Farm headquarters building area, possible buried metal/pesticides Orchard/vineyard, possible pesticides Possible ACMs³ in buildings 	
023-200-027	Roseville Public Cemetery District	1.9	Program	No	No	None Required	_	
023-200-051	PFE (formerly Riolo)	43.2	Project	Yes	Yes	Yes	 Possible pesticides in soil near farm headquarters building Possible pesticides in orchards 1,000-gallon UST⁴ Old dump area Possible ACMs³ in buildings 	
023-200-052	PFE (formerly Riolo)	43.1	Project	Yes	Yes	None Required	Sample near surface soils in former orchard for pesticides	
023-200-053	PFE (formerly Riolo)	5.5	Project	Yes	Yes	Yes	Old dump along bank of Dry Creek	
023-200-031	PFE (formerly Barco)	0.5	Project	Yes	Yes	None Required	 Possible pesticides at three former farm headquarters facilities Ruins of a large brick-lined cistern filled with rubbish/ debris; two containers of possible petroleum products 	
023-200-055	PFE (formerly Setliff)	100.6	Project	Yes	Yes	Yes		
023-200-056	PFE (formerly Setliff)	4.0	Project	Yes	Yes	Yes	 Disturbed ground with scattered rubble/debris Old dump along drainage ditch Possible ACMs³ in residence 	
023-200-057	Frisvold [Under Williamson Act]	12.6	Program	Yes	No ⁸	None Required	ACMs in residences; small AST; burn barrel area; all considered to be readily eliminated.	
023-220-064 ⁵	PFE (formerly Shobeiri)	29.1	Project	Yes	No	None Required	None	
023-220-053	Elliott	77.1	Program	Yes	No	None Required	Possible ACMs³ (transite pipe)	
023-221-054 ⁶	County (formerly Pulte)	28.8	Program	No	No	None Performed	_	
023-220-063 ⁶	Lund	39.2	Program	No	No	None Performed	_	
023-220-065 ⁷	Park Arya	7.5	Program	Yes	No	None Required	None	
	Total acreage	512.6						

Notes:

Surveyed acreage total differs slightly from Assessor Parcel acreages

REC = Recognized Environmental Condition; results of Phase II ESA and any subsequent remediation listed in Table 15-2. Location of REC shown on Figure 15-1.

ACM = Asbestos containing materials (not included in Phase II ESA; normally dealt with during construction)

UST = Underground Storage table

ADM 200 000 000 1 Figure 1504

APN 023-221-006 in Phase I ESA

Phase I ESAs would be required prior to approval of development on program-level parcels, to ascertain the presence or absence of RECs. If RECs are present, Placer County's EHS would determine whether additional studies and/or testing are required, under DTSC guidance, which would determine actions that would be taken to reduce the impact to a less-than-significant level APN 023-221-007 in Phase I ESA

⁸ Not a formal Phase II ESA, only soil screening

Table 15-2 Results of Phase II Environmental Site Assessments and Preliminary Contamination Mitigation Actions

APN (Reference)	RECs ¹	Description	Completed Scope of Work	Findings	Preliminary Contamination Mitigation Actions	
023-200-023 ²	1	Former farm facilities including former underground tank	Met and walked site with Frank Riolo. Only one former underground tank location. Scanned area with metal detector. Performed test excavations with backhoe in location identified by Frank Riolo. Sampled soil from floor of old tank excavation, tested for gas, diesel, BTEX, and lead. Collected 4-part composite soil sample from around packing shed, tested for chlorinated pesticides ³ as well as As, Cu, Hg, and Pb.	Floor of former tank pit tested "clean." Found a small above-ground diesel container – soil beneath tested "clean." No chlorinated pesticides ³ detected in shed-area soil sample. Low level metals detected in shed-area sample below PRGs and CHHSLs.	None	
	2	Former orchard and vineyard area	Collected two 4-part composite soil samples. Analyzed each for chlorinated pesticides ³ as well as As, Cu, Hg, and Pb.	No chlorinated pesticides ³ detected in orchard or vineyard soil samples. Low-level metals detected in orchard and vineyard soil samples below PRGs and CHHSLs.		
023-200-0514	3	Former farm headquarters	Scanned area around shop with metal detector. Collected a 4-part composite soil sample. Analyzed sample for chlorinated pesticides. ³ Analyzed sample for As, Cu, Pb, and mercury.	No elevated levels.	UST removed, remaining soil tested clean.	
	4	Former orchard area	Collected a 4-part composite soil sample. Analyzed sample for chlorinated pesticides. ³ Analyzed sample for As, Cu, Pb, and mercury.	No elevated levels.		
	5	Existing underground fuel tank (approximate 1,000-gallon gasoline)	Removed, sampled, disposed, and backfilled.	"Clean" – no gasoline constituents detected in tank pit or soil stockpile. Lead levels very low (below PRGs and CHHSLs).		
	6	Debris dump Thought mostly on Parcel -053 and addressed in -053 Phase II.		See Phase II for Parcels -052 & -053.		
023-200-052, -053 ^{5,6}	7	Former orchard area	Collected two 4-part composite soil samples. Analyzed each for old chlorinated pesticides. ³ Analyzed each for As, Cu, Pb, and mercury.	of concern.	Excavated debris from Parcel -053 over an area approximately 30 feet wide by 150 feet long to a	
	6	Debris dump Inaccessible with backhoe. Collected 3-part composite soil sample with a shovel. Analyzed for chlorinated pesticides and 4 metals.		DDT detected – below PRGs and CHHSLs	depth ranging between 1 and 6 feet. Soil/debris stockpiles lawfully disposed. Native soils tested below action levels.	
023-200-031, -055, -056 ^{7,8}	8	Three former farm facilities	Scanned each with metal detector. Performed test excavations with backhoe. Sampled soil within each for old pesticides. ³	Occasional metal debris; no obvious tanks. No reportable pesticides ³ detected in any of the composite soil samples.		
	9	Cistern/Brick water tank feature and nearby suspicious excavation Explored/excavated around each with backhoe. Sampled soil within each for old pesticides. ³		Excavated into soils immediately beneath the thin concrete floor of the cistern – no reportable pesticides. ³ Excavated upper 13 feet of hand-dug well shaft; no pesticides ³ in excavated debris.	Excavated debris from an area approximately 160 feet long by 16 feet wide on the order of 8 feet	
	10	Large area of disturbance and rubble north of existing residence on old aerial photos Scanned area with metal detector. Performed test excavations with backhoe. Sampled soil for old pesticides. ³		Occasional spurious magnetic signals typical of small debris. No suspicious materials. No reportable pesticides ³ detected.	deep in parcel -055. Debris lawfully disposed of. Native soil tested clean.	
	11	Rubble, appliances, and drums along ditch bank Scanned area with metal detector. Performed test excavations with backhoe. Sampled soil for old pesticides. ³		Significant debris, cans, bottles, occasional drum, and old appliances. No reportable pesticides ³ in native soil sampled beneath debris.		
023-200-023, 023- 200-031, 023-200- 051, 023-200-052, 023-200-055	2	Former orchard and vineyard area	Collected 29 composite soil samples. Performed test excavations with backhoe. Analyzed each for organochlorine pesticides and CAM 17 Metals.	DDT detected in APN 023-200-023– below PRGs and CHHSLs. Metals detected – below PRGs and CHHSLs. Detected arsenic represents background levels and within acceptable risk levels, according to Applicant's consultant.	None	
023-200-057 ¹¹		Possible automobile/equipment maintenance; possible pesticide mixing/storage	Collected three, 4-point composite samples; tested for petroleum hydrocarbons, total lead, pesticides	Trace petroleum hydrocarbons, low-level concentrations (below state screening level); no pesticides.	None	

Notes:

Recognized Environmental Condition; location shown on Figure 15-1.

Ramcon, 2004b

"Old Pesticides" refers to old-formulation EPA Priority Pollutant Chlorinated Pesticides by EPA Test Method 8081A.

Ramcon, 2004c

Ramcon, 2004d

Ramcon, 2004d

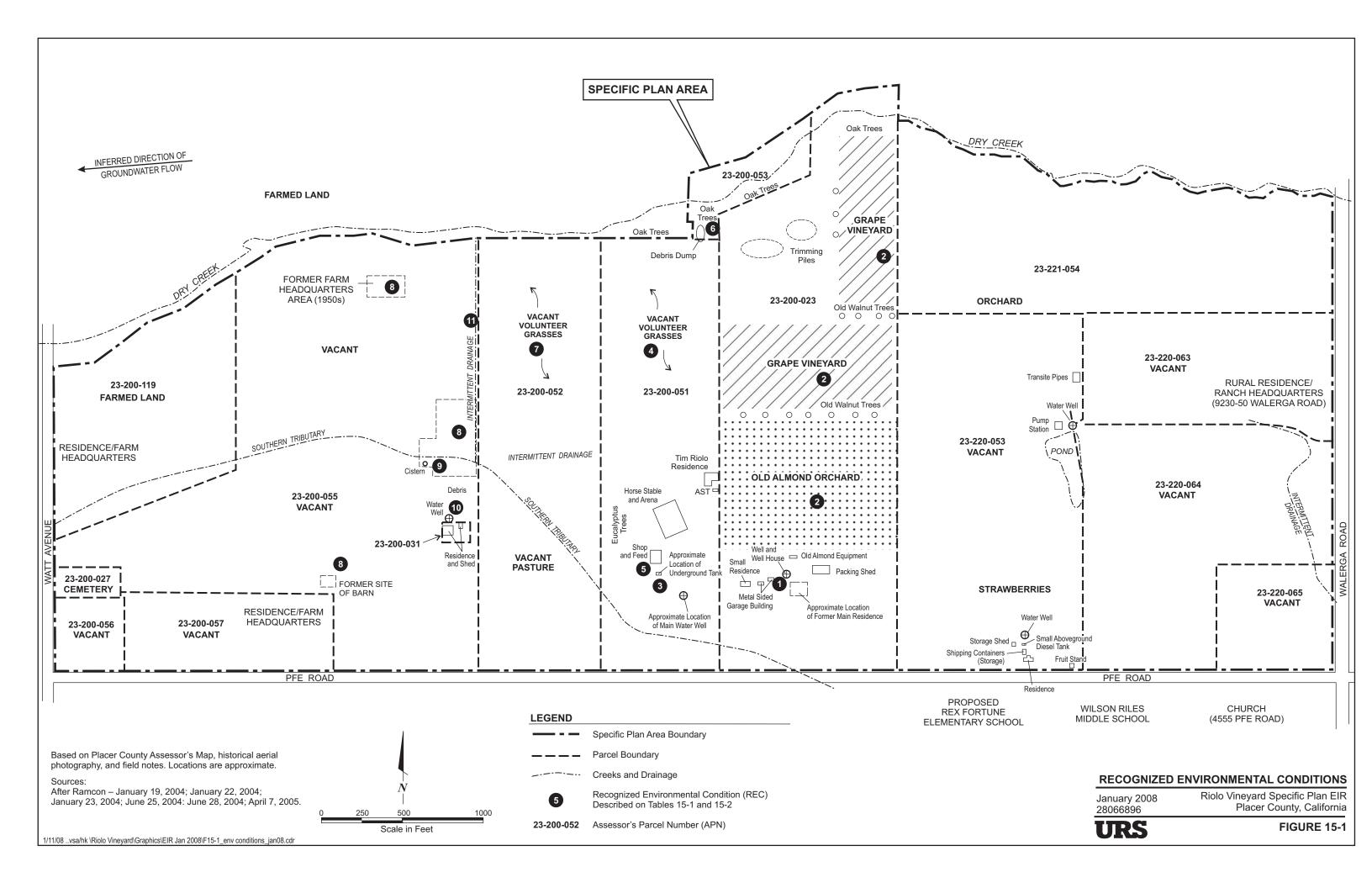
Ramcon, 2005b

Ramcon, 2007b

Ramcon, 2007a

Ramcon, 2007a

As = arsenic Cu = copper Hg = mercury Pb = lead



The existing orchard and vineyard areas on this parcel were also tested (REC 2, Figure 15-1). Eight soil samples were collected from the northern two-thirds of the site for testing per U.S. Environmental Protection Agency (EPA) protocols 8081 (for organic pesticides) and EPA 6000/7000 Series methods for metals. No organochlorine pesticides were detected. Trace amounts of arsenic, copper, and lead were detected, but the amounts were below PRGs and CHHSLs.

All of the Phase II ESAs shown in Table 15-2 and listed in Chapter 18 were conducted by Ramcon in late 2003.

Subsequent sampling and analysis of near surface soils (Ramcon, 2007a, 2007b) have indicated a low risk to human health due to the presence of pesticides and metals, in the opinion of the Applicant's consultant. This has not been quantified based on a risk assessment.

Tim Riolo Property (APN 023-200-051)

The former farm headquarters area (REC 3 on Figure 15-1) was sampled (from four excavations) for pesticides and metals contamination; no reportable pesticides were found, and metals were detected below PRGs and CHHSLs.

The former orchard area (REC 4 on Figure 15-1) on this parcel was also tested. Eight soil samples were collected from the northern third of the site for testing per U.S. EPA protocols 8081A (for organic pesticides) and U.S. EPA 6000/7000 Series methods for metals. No organochlorine pesticides were detected. No arsenic or mercury was detected. Copper and lead were detected below PRGs and CHHSLs and in the opinion of the Applicant's consultant, within the range attributable to natural occurrence.

The site of an underground storage tank was tested after removal of the tank for proper disposal (REC 5 on Figure 15-1). Two samples of native soil beneath the excavation were tested for gasoline, volatile organic (BTEX) constituents, fuel oxygenates, and total lead. Low levels of lead were found but were below PRGs and CHHSLs.

A debris dump was identified near the common property line between APN 020-200-051 and -053 (REC 6, Figure 15-1). This is the same as REC 6 identified in the Phase I ESAs for APN 023-200-052 and -053.

An existing water well and aboveground storage tank were observed (Figure 15-1) but judged not to represent RECs.

Don Riolo Property (APN 023-200-052 and-053)

The northern half of APN 023-200-052, while presently open pasture, appeared to support orchard use as far back as 1937. Eight soil samples were collected from the northern half of the site for testing per U.S. EPA protocols 8081A (for organic pesticides) and U.S. EPA 6000/7000 Series methods for metals (REC 7, Figure 15-1). No organochlorine pesticides were detected. No arsenic or mercury was detected. Copper and lead were detected below PRGs and CHHSLs and within the range attributable to natural occurrence, in the opinion of the Applicant's consultant.

An onsite debris dump in APN 023-200-053 (REC 6, Figure 15-1) was excavated for soils testing. The only organochlorine pesticide detected was dichloro-diphenyl-trichloroethane (DDT), at a concentration of 320 parts per billion (ppb). Arsenic was detected at 2.0 parts per million (ppm), copper at 38 ppm, and lead at 88 ppm. The removal and disposal of the waste and contaminated soil within this debris pit is discussed in a separate report (*Remediation Summary, Former Tim and Don Riolo Properties* [Ramcon,

2005b]). Native soils exposed in the cleaned excavation were tested for metals and pesticides; no pesticides were found and metals were below PRGs and CHHSLs.

Setliff Properties (APNs 023-200-031, -055, and -056)

Three former farm headquarters facilities were identified (REC 8, three locations, Figure 15-1), all dating prior to 1937. No orchard use was evident from historical photographs. Each facility was scanned with a metal detector and excavated with multiple test pits (four at each location). Soils were tested per U.S. EPA 8081A protocol, and no reportable organochlorine pesticides were detected in the soil samples collected and analyzed.

The historic cistern and hand-dug well sites were examined and excavated for soils testing (REC 9, Figure 15-1); no reportable organochlorine pesticides were detected. Long-chain hydrocarbon interference was found in the sample by the laboratory and is believed to be related to decomposition of household rubbish.

A large area of soil disturbance and rubble was noted in historical aerial photographs north of the existing residence in the southern half of the properties along the eastern property lines (REC 10, Figure 15-1). This area was investigated by magnetometer survey. In addition, eight shallow test pits were excavated, and samples from four of them analyzed for organochlorine pesticides. Spurious magnetic signals were related to isolated small metal debris; no organochlorine pesticides were detected.

The locations of discarded rubbish and appliances along a ditch between APN 023-200-052 and -055 (REC 11) were excavated and tested; no reportable organochlorine pesticides were detected. The rubbish has been removed for proper disposal, as recommended by the Phase II report. The removal and disposal of this waste is discussed in a separate report (Summary Report, Ditch Bank Clean-Up, Former Setliff Property [Ramcon, 2004a]). As part of the removal/disposal process, the contents of the rubbish stockpiles were tested, which revealed elevated old-formulation pesticides in one stockpile and slightly elevated lead content in the other. Additional sampling of the native soils in the floor and sidewalls revealed neither pesticides nor elevated lead.

Frisvold Property (APN 023-200-057)

This property has included some light alfalfa farming since 1928. The residence was constructed by 1953 and is generally vacant. There is no evidence of former orchards or pesticide usage (Ramcon, 2006). Areas possibly indicative of automobile/equipment maintenance were tested for petroleum hydrocarbons and total lead with results below state screening levels (Ramcon, 2007a). These agricultural sampling results followed the DTSC interim guidance protocol and indicated that no significant pesticide residuals were present in the former vineyard area. Confirmation testing of the former burn barrel area indicated that no significant levels of chemicals of concern (COC) remained following a cleanup performed by the owner.

Surrounding Properties

All of the Phase I ESAs conducted on various parcels of the specific plan area, which are listed in Table 15-1, included a review of agency files for the surrounding area, as required by ASTM Standard Practice E 1527-00. Each document concluded that no mapped sites were identified in agency lists reviewed on the target property or within the designated search radius as specified by ASTM E-1527-00. Accordingly, no surrounding properties are judged to represent a threat to the proposed project related to hazardous materials handling or usage.

15.2 REGULATORY SETTING

The State of California, the Placer County Environmental Health Services Division (EHS), and the Placer County Fire Department have codes and regulations concerning the handling, storage, and disposal of hazardous substances and flammable materials. Permits and requirements related to the handling, storage, and disposal of hazardous substances that may be applicable to the proposed project include the following:

- Coordination of permits and requirements related to hazardous substances with the Certified Unified Program Agency (CUPA) program. The CUPA program is mandated by Senate Bill 1082 (California Health and Safety Code, Division 20, Chapter 6.11), which establishes a unified hazardous waste and materials management regulatory program. Through this unified program, there is a single point of contact for permitting related to hazardous waste generation, underground and aboveground storage tanks, hazardous materials release response plans and inventories, and risk management and prevention programs. This program is implemented locally by the Placer County EHS, which was certified as a CUPA in 1997.
- The Placer County Fire Department has requirements for the installation of temporary aboveground storage tanks used to store fuel and/or other flammable/combustible liquids during construction activities. These requirements include inspection of a vegetation break and identification of emergency shut-off valves and switches. If electrical connections are required to these facilities, permitting will be required through the Placer County Building Department.
- Following construction and development, commercial businesses that have underground storage tanks and/or aboveground storage tanks must register the tanks with the State Water Resources Control Board.
- Commercial businesses which handle and store hazardous substances may need to file an Emergency Response Plan and Hazardous Chemical Inventory Listing with the EHS, depending on the types and quantities of substances stored.
- During construction of the proposed project, any potential hazardous environmental condition within the Plan Area will require oversight by the appropriate governmental agency (including, but not limited to, the Placer County EHS, California DTSC, and the RWQCB). Note that EHS performs initial screening of analytical results, but actual remediation is performed under the auspices of the DTSC and/or the RWQCB based upon risk assessments of the impacted area(s).
- There are no specific state or federal regulations pertaining to mosquito abatement that would address environmental impacts associated with the proposed Specific Plan. The Placer Mosquito Abatement and Vector Control District, under Section 2270 of the California Health and Safety Code, has the authority to exterminate mosquitoes, flies, and other insects either inside or outside the district.

Placer County General Plan

The *Placer County General Plan* contains policies governing safety and hazardous materials within Placer County. The proposed project's consistency with applicable General Plan policies is evaluated in Appendix D. General Plan policies and goals applicable to the proposed project include the following:

Goal 8.G To minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous materials wastes.

- Policy 8.G.1 The County shall ensure that the use and disposal of hazardous materials in the County complies with local, state, and federal safety standards.
- Policy 8.G.2 The County shall discourage the development of residences or schools near known hazardous waste disposal or handling facilities.
- Policy 8.G.3 The County shall review all proposed development projects that manufacture, use, or transport hazardous materials for compliance with the County's Hazardous Waste Management Plan (CHWMP).
- Goal 8.I To provide municipal-type environmental health services to the unincorporated urban development areas in Western Placer County.
- Policy 8.I.2 The County shall endeavor to identify and control important diseases transmitted by environmental factors in the Western Placer County.

Dry Creek/West Placer Community Plan

The proposed project's consistency with applicable Community Plan policies is evaluated in Appendix D. Community Plan policies and goals applicable to the proposed project include the following:

Public Health

- Goal 8.I To provide municipal-type environmental health services to the unincorporated urban development areas in Western Placer County.
- Policy 8.1.1 The County shall endeavor to identify and control important diseases transmitted by environmental factors in Western Placer County.

15.3 IMPACTS

This section identifies and discusses the environmental impacts resulting from the proposed project, and suggests mitigation measures to reduce the levels of impact. A detailed discussion of mitigation measures is included in Section 15.4.

15.3.1 Significance Criteria

Potential significant impacts associated with hazardous waste/materials impacts have been evaluated using the following criteria:

- Create a significant hazard to the public or the environment through the route transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or 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 it create a significant hazard to the public or the environment; and
- Expose people to existing sources of potential health hazards.

15.3.2 Project-Level Impacts

The following section discusses the impacts related to the construction and operation of the proposed development on project-level parcels.

IMPACT 15-1: Accidental releases of hazardous materials or hazardous waste

during construction due to presence of construction-related

hazardous materials

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measures 15-1a and 15-1b **Proposed:** Mitigation Measures 15-1a and 15-1b

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

Hazardous materials could be used and stored in the Plan Area during construction, including paints, solvents, greases, motor oil, gasoline and diesel fuels, and other construction-related materials. The use of these materials may also generate hazardous waste. Potential hazards associated with use of these types of materials are potential exposure to construction workers and the environment due to accidental releases during construction. Local and state requirements for interim storage of hazardous and flammable materials have been adopted to ensure proper use, storage, and handling of these materials. Depending on the type and quantity of materials, these requirements may include obtaining a permit from the Placer County EHS, adequate labeling, and storage in secondary containment or flammable cabinets. If a spill should occur, it should be contained and immediately reported to the Placer County Fire Department and EHS.

The proposed project would be developed in phases, which would reduce the quantities of hazardous materials used and hazardous waste generated in the Plan Area at one time. Due to the routine nature of the activities to be performed, the threat of an accidental spill is considered unlikely. If a spill should occur, it should be contained and reported to the Placer County EHS immediately. Affected soil should be excavated and disposed in accordance with County requirements. Accidental releases could occur if these local and state regulations were not followed. Ensuring compliance with these regulations would reduce potential impacts from accidental releases. With implementation of the specified mitigation measures, impacts would be reduced to a less-than-significant level.

IMPACT 15-2: Release of hazardous materials or hazardous waste during

construction due to existing site conditions on project-related parcels

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measures 15-2a through 15-2e

Proposed: Mitigation Measures 15-2a, 15-2b, 15-2c, 15-2d, 15-2e

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

As noted in Tables 15-1 and 15-2, preliminary removal of contaminated materials was conducted on four parcels in an attempt to clean the properties to acceptable standards (Ramcon, 2004a, 2004c, 2005b). DTSC review is required for this preliminary removal. This work included removal of debris from a former dump area in APN 023-200-053, ditch bank clean-up on APN 023-200-055, and removal of an underground storage tank from APN 023-200-051. The Phase I ESAs conducted on parcels within the Riolo Vineyard specific plan area (Table 15-1) indicate that contaminated soil may be present in several areas due to past agricultural activities, including the application of chlorinated pesticides onto orchards and vineyards. The areas covered by the Phase I ESAs are identified on Figure 15-1. The results of Phase II ESAs conducted by Ramcon are presented in Table 15-2, which indicate that chlorinated pesticides were detected well below PRGs and CHHSLs and low levels of metals were measured and found to be below levels of concern. However, the analyses reported between 2003 and 2005 were performed in accordance with a different protocol than the DTSC protocol for schools on former agricultural sites. School uses are considered less sensitive than the proposed residential uses, but this school protocol is still directed for use at residential sites (as the best available protocol to date), along with state and federal health and environmental screening levels. The analyses reported in 2007 for all Applicant parcels within the Riolo Vineyard Specific Plan with former orchard or vineyard uses were conducted in accordance with the Interim Guidance for Sampling Agricultural Fields for School Sites published by the DTSC. The results of the two 2007 studies indicate that the human health risk of potential exposure to the detected chlorinated pesticide, DDT, and metals is believed to be low, although actual hazards to human health have not been quantified by means of a risk assessment.

There is a potential that unidentified contaminated soils are present on the site that resulted from historical site uses. Disturbance of these soils during construction could result in exposure to workers and the environment to potentially contaminated soil.

Disturbance of previously impacted soil within and adjacent to the Plan Area during construction activities could allow potentially contaminated soils to migrate across the site or into the air, thus creating a potentially significant impact.

Prior to site grading, all debris should be removed from the site. During site grading and construction activities, any unearthed areas of apparent or suspected environmental impacts should be immediately reported to the DTSC and/or the RWQCB. A Preliminary Endangerment Assessment shall be conducted be DTSC, prior to initiation of grading and other earth-moving activities. Implementation of these mitigation measures would reduce the impacts to a less than significant level.

IMPACT 15-3: Potential hazards associated with unused wells

SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15-3a
Proposed: Mitigation Measure 15-3a

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

All wells within the project-level parcels will be abandoned according to applicable standards. Proper closure of these older wells of unknown construction according to local and state regulations would eliminate this impact. Similar wells on program-level parcels will conform to this requirement in the future.

The abandonment of the onsite wells would need to occur prior to occupancy of development within the project phase containing the well site in question. This is necessary to facilitate the use of non-potable water from these wells for construction purposes and would need to happen prior to the availability of treated or recycled water from system mains.

IMPACT 15-4: Accidental releases of hazardous materials or hazardous waste

during project operation

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measures 15-4a and 15-4b **Proposed:** Mitigation Measures 15-4a and 15-4b

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

Accidental releases of hazardous materials and hazardous waste after construction could occur from onsite or offsite sources. Development of the proposed project would include residential, commercial, and public/quasi-public land uses. Potential onsite sources of hazardous materials and waste include small to moderate quantities of hazardous substances used by residences or commercial businesses within the Plan Area. These could include household pesticides, cleaning agents, and small quantities of motor fuel stored within the Plan Area. Any business that stores an acutely hazardous substance or 55 gallons and/or 500 pounds of a hazardous substance or 200 cubic feet of combustible gas must file an Emergency Response Plan and Hazardous Materials Storage and Containment Plan with the Placer County EHS. In addition, businesses that have underground storage tanks must comply with County underground storage tank regulations.

During the storage and/or use of chemical products, the risk of an accidental release exists. However, based on the types and quantities of hazardous substances anticipated to be used, the risk of a release of a significant quantity of hazardous substances on the Plan Area is considered minimal. By following local and state requirements for the management of hazardous materials, as outlined in Mitigation Measures 15-4a and 15-4b, the risk of a release of hazardous substances on the Plan Area would be reduced to a less-than-significant level.

IMPACT 15-5: Potential health hazard caused by mosquitoes and other vectors

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measures 15-5a and 15-5b **Proposed:** Mitigation Measures 15-5a and 15-5b

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

The Placer Mosquito Abatement and Vector Control District serves the specific plan area. A benefit assessment has been established to provide revenue as development occurs. The Plan Area includes wetland, park, agricultural, and open space areas that have the potential to become locations for mosquito breeding. If not managed properly, residents and businesses may be exposed to diseases transmitted by vectors such as mosquitoes. This is considered a potentially significant impact.

Mitigation measures include preventing the occurrence of standing water or other areas conducive to breeding of mosquitoes or other vectors during construction as well as during the life of the proposed project. The Placer Mosquito Abatement and Vector Control District would be allowed to perform vector control in all common areas of the proposed project in perpetuity. These measures would reduce the resulting impacts to a less-than-significant level.

IMPACT 15-6: Potential health and safety hazard caused by abandoned septic

systems on project-level parcels

SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15-6a
Proposed: Mitigation Measure 15-6a

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

All existing septic systems on project-level parcels would be abandoned and existing and future residents would be provided sewer service. Abandoned septic systems present health and safety hazards related to subsidence, subsurface voids, and possible chemical contamination resulting from disposal of hazardous materials in the systems. This could introduce hazardous materials to the native soils of the disposal areas. Septic tanks have commonly been constructed from metal, wood, and concrete. Metal and wooden tanks (or tank lids) decompose and corrode over time and can leave subsurface voids that are unidentified at the surface. Concrete tanks could also become weak and unable to support surface loads. Septic systems could have been used to dispose of hazardous materials, including petroleum hydrocarbon products and wastes. Materials disposed of in domestic wastewater drains could enter subsurface disposal trenches or dry wells, and thereby impact the subsurface soils or groundwater. The presence of existing and probable abandoned septic systems in the specific plan area is considered a potentially significant impact.

Mitigation includes appropriate site-specific evaluations of possible septic systems conducted in accordance with County policy and the destruction of septic facilities in accordance with state and Placer County regulations. This mitigation measure would reduce the impacts associated with onsite septic systems on project-level parcels to a less-than-significant level.

IMPACT 15-7: Potential health hazard caused by asbestos in older structures to be

demolished

SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15-7a
Proposed: Mitigation Measure 15-7a

Significance After

Proposed Mitigation: Less than Significant

Recommended: None

RESIDUAL SIGNIFICANCE: Less than Significant

The Historic Resources Inventory and Evaluation (JRP, 2006) indicates the existing structures on the Riolo Vineyard property that were constructed before 1970 (Table 15-3).

Table 15-3
Structures Constructed Prior to 1970

Address	Year Constructed		
9255 Watt Avenue	1948		
5718 PFE Road	1940		
5520 PFE Road	1954		
9250 Walerga Road	Circa 1937		

Source: JRP, 2006

Construction/building materials were produced and used prior to regulation of asbestos-containing construction materials during the 1970s and 1980s. Dwellings observed in the specific plan area were constructed prior to regulation, and ruin areas observed indicate that previous buildings may have been constructed in the decades prior to 1970. The possible presence of asbestos-containing materials (ACMs) in the Plan Area is considered a potentially significant impact.

If ACMs are identified, mitigation of the potential hazards associated with ACMs would include pre-demolition surveys performed by a Certified Asbestos Consultant followed by proper removal and disposal accomplished by a California licensed asbestos abatement contractor. Implementation of this mitigation would reduce the impacts associated with ACMs to a less-than-significant level.

15.3.3 Program-Level Impacts

Impacts related to hazardous materials and wastes on program-level parcels would be similar to those for project-level parcels, and mitigation identified for project-level parcels would reduce impacts to a less-than-significant level. However, the extent of RECs on program-level parcels is unknown, except for the Frisvold property (APN 023-200-057). A Phase I ESA was conducted and submitted to the County for the Frisvold property, and no further environmental testing of the property is required. Impacts 15-8 and 15-9 and associated mitigation measures address concerns related to the remainder of the program-level parcels.

IMPACT 15-8: Release of hazardous materials or hazardous waste during

construction due to existing site conditions on program-level parcels

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measures 15-8a through 15-8c

Proposed: None

Significance After

Proposed Mitigation: Potentially Significant

Recommended: Mitigation Measures 15-8a, 15-8b, and 15-8c

RESIDUAL SIGNIFICANCE: Less than Significant

Program-level parcels have not been subjected to Phase I ESAs. Therefore, the presence of RECs is unknown. The potential exists for RECs to occur on program-level parcels. Development on program-level parcels would therefore represent a potentially significant impact.

Phase I ESAs would be required prior to approval of development on program-level parcels, to ascertain the presence or absence of RECs. If RECs are present, Placer County's EHS would determine whether additional studies and/or testing are required, under DTSC guidance which would determine actions that would be taken to reduce the impact to a less-than-significant level. These actions would include

remediation or avoidance. Additionally, mitigation measures identified for release of hazardous materials or hazardous waste during construction due to existing site conditions on project-level parcels would be required for program-level parcels. Implementation of these mitigation measures would reduce the impacts to a less-than-significant level.

Worker contact with hazardous materials and the potential for hazardous release of waste or materials during construction activities at the program-level parcels is low, and this impact is considered less than significant.

There is also a potential that unidentified contaminated soils are present on program-level parcels as a result of historical site uses. Disturbance of these soils during construction could result in exposure of workers and the environment to potentially contaminated soil. Disturbance of previously impacted soil within and adjacent to program-level parcels during construction activities could also allow migration of potentially contaminated soils across the site or into the air, creating a potentially significant impact.

Prior to an applicant's submittal of development plans on program-level parcels, properties not previously evaluated with a current Phase I ESA may be required to complete a Phase I ESA, as determined by EHS. A Phase I ESA shall be conducted by a qualified professional. If past land uses are disclosed that could have resulted in persistent contamination, then screening level soil sampling and analysis shall be conducted according to guidelines developed by the DTSC. Sampling and site investigation shall be conducted by a California registered environmental professional, performed with oversight from DTSC, and with applicable permits.

As a result of soil investigation, an area of contamination may be identified and, based on a risk assessment, found to be suitable for simple removal. If this is the case, remediation will be required to meet State and County regulations. During the course of soil investigation, widespread residual concentrations of chemicals or other contaminants may be identified at levels where they individually or in combination meet or exceed U.S. EPA or California EPA Preliminary Remediation Goals or equivalent screening levels, thereby indicating the need for a risk assessment. Any indicated risk assessment shall be completed prior to improvement plans or equivalent approval. Risk assessments shall include a DTSC Preliminary Endangerment Assessment or no further action determination, or equivalent.

Remediation shall include a DTSC Remedial Action Workplan or equivalent, and can include a range of activities, including deed restrictions, soil excavation and offsite disposal, or encapsulation in appropriate areas away from sensitive receptors in the specific plan area.

IMPACT 15-9: Potential health and safety hazard caused by abandoned septic

systems on program-level parcels

SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15-9a

Proposed: None

Significance After

Proposed Mitigation: Potentially Significant **Recommended:** Mitigation Measure 15-9a **RESIDUAL SIGNIFICANCE:** Less than Significant

All existing septic systems on program-level would be abandoned as landowners apply for development permits. Future residents of these parcels would be provided sewer service. Abandoned septic systems present health and safety hazards related to subsidence, subsurface voids, and possible chemical contamination resulting from disposal of hazardous materials in the systems. This could introduce hazardous materials to the native soils of the disposal areas. Septic tanks have commonly been

constructed from metal, wood, and concrete. Metal and wooden tanks (or tank lids) decompose and corrode over time and can leave subsurface voids that are unidentified at the surface. Concrete tanks could also become weak and unable to support surface loads. Septic systems could have been used to dispose of hazardous materials, including petroleum hydrocarbon products and wastes. Materials disposed of in domestic wastewater drains could enter subsurface disposal trenches or dry wells, and thereby impact the subsurface soils or groundwater. The presence of existing and probable abandoned septic systems in the specific plan area is considered a potentially significant impact.

Mitigation includes appropriate site-specific evaluations of possible septic systems conducted by a qualified professional and the destruction of septic facilities in accordance with state and Placer County regulations. This mitigation measure would reduce the impacts associated with onsite septic systems to a less-than-significant level.

15.4 MITIGATION MEASURES

This section discusses mitigation measures that will be implemented to reduce project-related impacts due to hazards and hazardous materials. Mitigation measures are separately identified as those "Proposed" by the Applicant and those "Recommended" by County staff.

Mitigation Measure 15-1a: Comply with Placer County EHS and Fire Department requirements (Proposed)

Each phase of construction within the Riolo Vineyard specific plan area shall comply with Placer County EHS and Fire Department requirements for temporary storage of combustible/flammable liquids at construction sites.

These requirements include inspection to verify maintenance of a vegetation break and identification of emergency shutoff valves and switches. If electrical connections are provided to these facilities, the County will additionally require permitting through the County Building Department.

Mitigation Measure 15-1b: Comply with Placer County EHS requirements regarding releases of hazardous materials (Proposed)

Each future construction project within the Riolo Vineyard specific plan area shall comply with Placer County EHS requirements for reporting releases of hazardous materials.

If a release of hazardous materials should occur, it will be contained and immediately reported to the County EHS. Impacted soil shall be excavated and disposed as required by the agency with regulatory jurisdiction.

Mitigation Measure 15-2a: Remediate contaminated properties in accordance with applicable regulations (Proposed)

Contamination found during construction is reported to EHS, which in turn confers with state oversight agencies as necessary for removal. If near surface soil sampling and testing is conducted, a letter documenting the sampling program and test results shall be submitted to the DTSC, and no construction activities shall be initiated at the site until the DTSC issues a letter authorizing such activities, which should be based upon a risk assessment. Prior to Grading or Improvement Plan approval, the Applicant shall complete a risk assessment with DTSC and submit the results to EHS. The risk assessment shall address future use as open space as well as removal of fill materials proposed for areas with past vineyard, or soil stockpile use.

As discussed in Section 15.1.2 and presented in Tables 15-1 and 15-2, some preliminary removal of contaminated materials of project-level parcels has already occurred and been documented. Additionally, an evaluation of possible pesticide contamination associated with past agricultural uses has been conducted (Ramcon, 2007a, 2007b).

The potential for worker contact with hazardous materials and hazardous release of waste or materials at the project-level parcels during construction activities would be subject to a risk assessment and appropriate remediation, if necessary, or if not already completed. Prior to Final Map approval, the Applicant shall complete and certify any remedial action required by DTSC. Remediation, if required, may include a range of activities, including restrictions on use, soil excavation, disposal off the site, or encapsulation in appropriate areas away from sensitive receptors.

Mitigation Measure 15-2b: Remove debris and report possible contamination to DTSC (Proposed)

Partial removal of debris has already occurred on certain parcels (Ramcon, 2004a and 2005b). During future construction, projects within the Riolo Vineyard specific plan area shall include removal of debris and reporting of any possible contamination to DTSC in their construction contracts.

Prior to initiating construction, all abandoned refuse on the site shall be removed and disposed of appropriately. Construction contract specifications shall require that during the course of construction of any individual project within the boundaries of the Riolo Vineyard Specific Plan, if evidence of soil and/or groundwater contamination with hazardous material (i.e., soil staining, unusual odors) is encountered, the Applicant shall stop work and immediately contact the DTSC and/or RWQCB. If such a condition is identified, then (1) the condition shall be resolved (i.e., through soil excavation, remediation, covering, or other method) to the satisfaction of DTSC and/or the RWQCB, and (2) construction activities shall not commence until the DTSC and/or RWQCB issue a letter of authorizing such activities.

Mitigation Measure 15-2c: Implement Preliminary Endangerment Assessment in accordance with DTSC protocols (Proposed)

A Preliminary Endangerment Assessment (PEA) will be conducted in accordance with DTSC protocols prior to grading or other earth-moving activities to address the potentially significant health and environmental risks associated with the current concentrations of arsenic detected in the soils assessments conducted for the project site that are above the most recently developed PRGs. DTSC will evaluate the PEA as part of the Voluntary Cleanup Agreement and provide additional project-specific requirements.

Mitigation Measure 15-2d: Obtain "No Further Action" letter from DTSC (Proposed)

Prior to grading and other earth-moving activities, the Applicant shall obtain notice from DTSC that the property in question does not require further investigation and action.

Mitigation Measure 15-2e: Implement Mitigation Measure 15-2a (Remediate contaminated properties in accordance with applicable regulations) (Proposed)

Mitigation Measure 15-2a (Remediate contaminated properties in accordance with applicable regulations) is described above.

Mitigation Measure 15-3a: Abandon onsite wells in accordance with local and state regulations (Proposed)

The Applicant shall ensure that unused wells on the site are closed in accordance with local and state regulations prior to initiating any construction activities. A permit for well destruction shall be obtained from the Placer County EHS and a licensed contractor shall perform the work, as required. The abandonment of the onsite wells would need to occur prior to occupancy of development within the project phase containing the well site in question.

Mitigation Measure 15-4a: Comply with requirements for filing of emergency response and hazardous materials storage/containment plans (Proposed)

Comply with Placer County EHS requirements for preparation and filing of Emergency Response Plans and Hazardous Materials Storage and Containment Plans.

All future development within the boundaries of the Riolo Vineyard specific plan area will comply with EHS requirements for preparation and filing of Emergency Response Plans and Hazardous Materials Storage and Containment Plans. These requirements apply to any commercial business that stores an acutely hazardous substance or 55 gallons and/or 50 pounds of a hazardous substance or 200 cubic feet of combustible gas. These plans would be prepared under Article 80 of the Uniform Fire Code. Copies of these documents must be provided to the Placer County Division of Environmental Health as the CUPA.

Mitigation Measure 15-4b: Comply with underground storage tank and aboveground storage tank regulations of Placer County EHS and the RWQCB (Proposed)

Comply with underground and aboveground storage tank regulations of the County EHS.

Any commercial businesses located within the boundaries of the Riolo Vineyard specific plan area that have underground storage tanks and/or aboveground storage tanks shall comply with the underground storage tank regulations of Placer County and the aboveground storage tank regulations of the RWQCB.

Mitigation Measure 15-5a: Avoid occurrence of standing water during construction (Proposed)

During construction, all grading shall be performed in a manner to prevent the occurrence of standing water or other areas suitable for breeding of mosquitoes and other disease vectors. Direct pumping and/or ditching will be used to reduce to the amount of standing water or reduce the length of time water can stand in low areas following rainfall events. The target holding period is 72 hours, which is consistent with guidelines being developed by the Placer County Mosquito Abatement and Vector Control District (Scott, 2007).

Mitigation Measure 15-5b: Grant access to Placer Mosquito Abatement and Vector Control District for vector control (Proposed)

The Placer Mosquito Abatement and Vector Control District shall be granted access to perform vector control in all common areas including drainage, open space corridor, and park areas in perpetuity. Such access shall be a condition of approval of all tentative maps approved within the specific plan area.

Mitigation Measure 15-6a: Destroy existing septic systems in accordance with Placer County EHS criteria (Proposed)

Site-specific evaluation shall be conducted in accordance with County policy at each identified existing and former dwelling area to identify surface indications and locations of septic tanks or cesspools prior to demolition of existing residences. Identified septic tanks shall be destroyed according to Placer County EHS criteria prior to recordation of final small lot subdivision map for the affected property. The locations of existing septic systems shall be shown on the final small lot subdivision map to ensure that the septic system remains with the associated parcel.

Surface conditions shall be evaluated by Placer County EHS when the dwellings are vacated, and prior to demolition of the structures regarding the possibility of previous site uses that may have included hazardous materials that could have been disposed of in onsite wastewater disposal systems.

Tank or cesspool destruction shall be performed under permit with Placer County EHS. Any required remediation work shall be completed in accordance with state and Placer County regulations prior to recordation of a final small lot subdivision map for the affected property.

Mitigation Measure 15-7a: Evaluate and abate ACMs in accordance with regulations (Proposed)

Surveys of structures that are planned for demolition during Specific Plan development shall be conducted by a Certified Asbestos Consultant licensed with the California Department of Occupational Safety and Health to determine if friable Regulated ACMs or non-friable ACMs are present within the structure demolition areas. This is required in order to obtain a demolition permit from the Placer County Building Department. The Placer County Air Pollution Control District does not have delegation for Asbestos National Emission Standard for Hazardous Air Pollutants enforcement. Accordingly, asbestos notifications will be sent to the U.S. EPA Region IX and the California Air Resources Board. (Nishikawa, 2007). Any regulated ACMs found in the investigated areas shall be removed and disposed of by a California licensed asbestos abatement contractor. All removal of ACMs shall be completed prior to recordation of final maps for the affected property.

Mitigation Measure 15-8a: Conduct Phase I Environmental Site Assessments on program-level parcels proposed for development, and comply with Placer County requirements for remediation, if required (Recommended)

For each program-level parcel proposed for development, properties not previously evaluated with a current Phase I ESA may be required to complete an ESA determined by Environmental Health Services. If past uses are disclosed that could have resulted in persistent contamination, then soil sampling shall be conducted within appropriate areas according to guidelines developed by the DTSC Phase II Environmental Site Assessment and/or equivalent protocol.

The site investigation including sampling shall be conducted by a California registered environmental professional, performed with oversight from Placer County Environmental Health Services, in accordance with applicable permits. As a result of soil investigation, a limited and restricted area of contamination may be identified and judged suitable for simple removal. If this is the case, remediation will be required to meet state and County regulations. If a result of soil investigation, widespread residual concentrations of chemicals or other contaminants maybe identified at levels where they individually or in combination meet or exceed U.S. EPA, California EPA Preliminary Remediation Goals, or equivalent screening levels, a risk assessment will be required. Risk assessments shall include a DTSC Preliminary Endangerment Assessment or no further action determination, or equivalent.

Any remedial action indicated by a risk assessment shall be completed and certified. Remediation shall include a DTSC Remedial Action Workplan, or equivalent, and involve a range of activities, including deed restrictions, soil excavation and offsite disposal, or encapsulation away from sensitive receptors in the Specific Plan Area.

Mitigation Measure 15-8b: Implement Mitigation Measure 15-2a (Remediate contaminated properties in accordance with applicable regulations) (Recommended)

Mitigation Measure 15-2a (Remediate contaminated properties in accordance with applicable regulations) is described above.

Mitigation Measure 15-8c: Implement Mitigation Measure 15-2b (Remove debris and report possible contamination to Placer County EHS) (Recommended)

Mitigation Measure 15-2b (Remove debris and report possible contamination to Placer County EHS) is described above.

Mitigation Measure 15-9a: Destroy existing septic systems in accordance with Placer County EHS criteria on program-level parcels when these lots receive development entitlements (Recommended)

This mitigation measure is similar to Mitigation Measure 15-6a described above but would apply to program-level parcels.