

4.13 HAZARDS AND HAZARDOUS MATERIALS

This section presents an overview of the hazardous materials within or adjacent to The Village at Loomis (proposed project) site. Information regarding hazardous materials/waste in the project vicinity that may potentially affect the environment on the project site or surrounding area has been summarized in this section from documents supplied by the project applicant and others including the following studies:

- Phase I Environmental Site Assessment (ESA), Village at Loomis (H&K 2009)
- Phase I ESA, The Village at Loomis Property 54 Acres at Eastern Terminus of Liberty Drive (WKA 2013a; see Appendix I)
- Phase I ESA, Quong, Le and Johnson Property 13 Acres West of Interstate 80 between Horseshoe Bar Road and King Road (WKA 2013b; see Appendix I)
- Phase II Assessment Report of Findings (WKA 2009; see Appendix I)

For the purposes of this environmental impact report (EIR), the definition for the term “hazardous materials” is taken from the California Health and Safety Code, Section 25501(o), where the term is defined as material that “because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.”

Similarly, the term “hazardous waste” is a subset of hazardous materials; its definition is derived from the California Health and Safety Code, Section 25517, and the California Code of Regulations, Title 22, Section 66261.2, which defines hazardous waste as material that “because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.”

A comment letter from the Placer Mosquito and Vector Control District was received in response to the Notice of Preparation. The comment letter notes that the area in and around the project site has historically produced high levels of mosquitoes during certain times of the year and West Nile virus is a concern. The letter provides recommendations to limit the ability for mosquito breeding by eliminating bodies of water that stand for longer than 72 hours and also provides information on design specifications and management practices to reduce or eliminate mosquito production. No other comments regarding the transport, use or handling of hazards or hazardous materials were received. The Notice of Preparation and comments received in response to it are included in Appendix A.

4.13.1 Environmental Setting

Regional Setting

The Town of Loomis (Town) is located near the base of the western foothills of the Sierra Nevada within Placer County, California. The site is located in the northwest quarter of Section 10, in Township 11 North, Range 7 East of the Rocklin Quadrangle Topographic Map. The regional location is shown in Figure 3-1 in Chapter 3, Project Description. Loomis is located southeast of the City of Lincoln, east of the City of Rocklin, and northeast of the City of Roseville. The elevation of the Town is approximately 400 feet above mean sea level, and the nonurbanized portions of the Town consist of gently to moderately rolling oak woodland terrain. The site is underlain by Mesozoic-age intrusive rocks of the Sierra Nevada Batholith and related plutons ranging in composition from diorite to granite. The underlying plutons are part of a regional pluton that extends for several miles within the vicinity of Newcastle, Penryn, and Loomis in Placer County (County).

Existing Site Conditions

The majority of the project site is undeveloped, as shown in the aerial photograph in Figure 3-3, Aerial Map, in Chapter 3. There are six residences and one commercial business located in the western portion of the project site.

The project site was evaluated for the presence of hazardous materials or other recognized environmental conditions. The most recent analysis was presented in the Phase I ESAs prepared for the site in 2013. In addition, a Phase II Assessment was conducted on the central portion of the project site, east of the perennial stream in the center of the site and south of the existing homes on David Avenue.

Three Phase I ESAs have been prepared for the project area. Holdrege and Kull (H&K) prepared the first Phase I ESA in 2009, which included a review of aerial photographs, historic mining maps, and hazardous material/waste databases; interviews with the project site property owners, the property manager for the project site, the Town of Loomis Fire Department; and a review of soil samples to help determine if there was the potential for hazardous materials or wastes on the project site that could be potentially upset and distributed during ground-disturbing activities associated with project construction (H&K 2009). In 2013, Wallace Kuhl & Associates (WKA) prepared a Phase I ESA for the 54 acres located in the western and central portion of the site (Assessor's Parcel Numbers (APNs) 043-080-015, 043-080-044, 044-094-001, 044-094-004, 044-094-005, 044-094-006, and 044-094-010) and a separate Phase I ESA for the 7 acres located in the southwestern corner of the site and the 6 acres located in the eastern portion of the site APNs 043-080-007, 043-080-008, 043-100-025, and 043-100-027) (see Appendix I).

Phase II Assessments

In 2009, WKA prepared a Limited Phase II Assessment to evaluate shallow soils in the central portion of the site for the presence of pesticide residuals associated with historical orchard use on the parcel (see Appendix I). This 2009 Phase II Assessment replaced WKA's 2007 Phase II Assessment for the same parcel, filling in data gaps present in the earlier document.

Historical Use – Aerial Photo Interpretation

Photographs of the project site from 1938 through 2008 were reviewed for any apparent changes in surface development and vegetation patterns on and around the site. In the 1938 photo, Interstate 80 (I-80) had not been constructed; however, Horseshoe Bar Road was apparent, as were connected roadways in the present location of Gates Lane and Library Drive. The majority of the site was undeveloped. The central portion of the site (APN 043-080-15) and areas to the north of the site appeared to be under orchard cultivation. Much of the west central portion of the site (APN 043-080-44) appeared to be undeveloped or grazing land. The western parcels (APNs 044-094-001, 044-094-004, 044-094-005, 044-094-006, and 044-094-010) appeared to be developed with residential structures. In the 1952 photograph, the orchard on the central parcel appeared to be out of cultivation with scattered areas of remnant trees in a grid pattern, mainly in the northwest, west-central and eastern corner of that parcel. By 1961, I-80 had been constructed adjacent to the southeast site boundary. Also, the orchard on the adjacent property to the north had been cleared, and that site had been graded for future residential development. Several houses had been constructed along Day Avenue to the north of the site. The 2009 Phase I ESA observed that between 1961 and 2008, the site and surrounding properties appear to have changed little, with the exception of new residential development to the north of the project site and construction of the Raley's shopping center and the Loomis Library (H&K 2009).

The 2013 Phase I ESAs include an aerial review of photographs from 1957 through 2012 and notes that from 1998 through 2012 there had been no significant changes for the project site or in the project vicinity (WKA 2013a).

Historical Use – Mining Maps and Documents

The 2009 Phase I ESA reviewed geologic maps and maps of mines in the Mineral Land Classification of Placer County, California (Department of Conservation 1995) and the Mineral Land Classification of the Auburn 15 Minute Quadrangle, El Dorado and Placer Counties (Department of Conservation 1984). As discussed in Section 4.4, Cultural Resources, of this EIR, an isolated quartz prospect, the Quartz Mine Prospect, was identified on a south-facing slope approximately 100 feet north of the employee parking lot at the north side of the Raley's supermarket. The prospect, which is classified as a minor historic archaeological resource not

eligible for listing in the California Register of Historical Resources, consists of two small, side-by-side, shallow pits and an outcrop of white quartz.

Site Observations

The 2009 Phase I ESA reports on the observed surface conditions in accessible portions of the site and portions of surrounding properties that were visible from the project site. No apparent hazardous materials or hazardous waste was observed on the subject property. Evidence of remnant orchards was observed only on parcel 043-080-015, as discussed previously in the aerial photograph observations. The 2013 Phase I ESA notes that three single-family residences with associated outbuildings/garages and a small barn with a burned interior were observed in the western portion of the site. A small homeless encampment and old debris, including an older transformer was also visible in the western portion of the northern boundary of the project site (see Appendix I (WKA 2013a)). The barn has since burned to the ground. WKA also identified an abandoned septic system and leach field, as well as a homeless encampment and debris in the southwestern corner of the project site (see Appendix I (WKA 2013b)).

Other than the former orchard cultivation noted in the 2009 Phase I ESA, there was no other evidence of environmental conditions that would impact the proposed uses on any of the 11 parcels that comprise the project site.

Soil Sampling

As mentioned previously, portions of the project site supported a fruit orchard between 1938 and 1952. Orchard cultivation during this period of time historically used pesticide applications known to contain lead arsenate. As a result, surface soil samples in accordance with the sampling methods established by the California Department of Toxic Substance Control were taken by H&K during their field review of the project site in 2009. Eight soil samples were taken from the upper 6 inches of soil in the central portion of the site for the purposes of testing for total arsenic and lead concentrations associated with the orchard. The detected lead concentrations were below the California Human Health Screening Level (CHHSL) for lead in residential soil. The detected arsenic concentrations exceeded the CHHSL for arsenic in residential soil (H&K 2009).

Two Phase II Assessments were prepared for APN 043-080-015 by WKA in 2007 and 2009, in the central portion of the site. More than 30 soil samples ranging in depth from 6 to 8 inches below grade, as well as 5 feet below grade, were collected to test for arsenic, lead, and organochlorine pesticides associated with the orchards and former agricultural activities. The reports indicated that the materials were present in concentrations that are within acceptable levels and no further investigation is required (Appendix I).

Surrounding Properties

The 2009 Phase I ESA also included a windshield survey of the surrounding area in addition to reviewing the Environmental Data Resources (EDR) radius map to assess land uses on adjacent properties. The EDR report is a compilation of data from routinely updated federal, state, and local government agency lists and information. The EDR report was reviewed for identified sites that meet the following criteria: (1) sites that are applicable to the American Society for Testing and Materials guidelines, and (2) sites with the greatest potential to affect the subject property. The following land uses were observed on properties adjacent to the project site (H&K 2009):

- I-80 lies to the east of the site.
- Single-family residential properties are located to the north and northwest.
- The Raley's shopping center is located to the south, which includes several fast-food outlets including Burger King, Starbucks, and Quizno's, Trend Cuts (hair salon), Loomis Park Place Cleaners (dry cleaning), and a recycling collection center.
- The Loomis Library is located to the west along Library Drive.
- The Loomis Veterans Memorial Hall is located across Library Drive to the southwest of the property.
- Residential properties on the west side of Horseshoe Bar Road and the north side of Laird Street.
- Loomis Fire Department Station is located across Horseshoe Bar Road to the west.

The EDR report summarized four sites where known releases or spills of hazardous materials have occurred up slope and within a one-half-mile radius of the project site. Three of the sites were known to have had spills generally related to gasoline stations; however, they had since completed remediation measures and actions and had received letters of "No Further Action" from the Regional Water Quality Control Board, Central Valley Region (RWQCB). The RWQCB is the responsible agency with oversight for the remediation activities.

Only one noteworthy site was identified in the EDR report and analyzed in the 2009 Phase I ESA. A hazardous materials release from an underground storage tank (UST) occurred at the Beacon service station located at 3430 Taylor Road that was discovered in 1990. The report stated that shallow groundwater was impacted by hydrocarbons. Subsequently, 13 monitoring wells were installed on the site and on a residential property to the southeast of the site. The groundwater flow direction is toward the southeast (toward the project site). The nearest monitoring well was located approximately 1,500 feet northwest of the project site. The RWQCB monitored the contaminated groundwater plume and required extraction of contaminated soils and groundwater to further reduce hydrocarbon impacts to groundwater

beneath the adjacent residential properties (H&K 2009). The site achieved “completed – case closed” status as of June 8, 2010 (Geotracker 2015), and the site is not expected to adversely affect water quality or soils in the project area.

The 2013 Phase I ESAs indicated there are 15 sites within 1 mile of the project site. All of the listed sites were identified as requiring no further remedial action, having no violations, or would not affect the project site (Appendix I). This includes the site at 3430 Taylor Road identified in the 2009 ESA as having potential to affect the project site. In the EDR report provided in the August 9, 2013, Phase I ESA (Appendix I), the site status is given as “Completed – Case Closed.” In addition, a preliminary screening for vapor encroachment conditions was conducted in the 2013 Phase I ESAs to ascertain if there are any known or suspected contaminated sites surrounding or upgradient of the project site. Based on the findings it was determined that vapor encroachment conditions are not likely to exist in these portions of the project site (Appendix I).

4.13.2 Regulatory Setting

Federal Regulations

Several federal agencies regulate hazardous materials, including the U.S. Environmental Protection Agency, the Occupational Safety and Health Administration (OSHA), the U.S. Department of Energy, and the U.S. Department of Transportation. Applicable federal regulations are contained primarily in Title 40 (Chapter I – U.S. Environmental Protection Agency), Title 29 (Chapter XVII – OSHA), Title 10 (Chapter X – U.S. Department of Energy), and Title 49 (Chapter I – U.S. Department of Transportation) of the Code of Federal Regulations. Title 40, Chapter 1, regulates water and air contamination, pesticide use, toxic substances, emergency planning, and solid and liquid wastes. Title 29, Chapter 17, regulates worker safety and health concerning environmental hazards, and Title 10, Chapter 10, regulates petroleum-based products. Title 49, Chapter 1, regulates the transportation of hazardous materials, and details hazardous material spill/release prevention and response plans.

State Regulations

California Hazardous Waste Control Law

The California Hazardous Waste Control Law is administered by the California Environmental Protection Agency to regulate hazardous wastes. Although the Hazardous Waste Control Law is generally more stringent than Resource Conservation and Recovery Act, until the U.S. Environmental Protection Agency approves the California program, both the state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit

requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

Title 22 of the California Code of Regulations defines hazardous waste as a waste that exhibits the characteristics that may:

- A. cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
- B. pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of or otherwise managed (22 CCR 662610).

According to Title 22 of the California Code of Regulations, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated, or that is being stored prior to proper disposal.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) protects water quality in California by setting statewide policy. The SWRCB supports the nine RWQCBs, which, within their areas of jurisdiction, protect surface and groundwater from pollutants discharged or threatened to be discharged to the waters of the state. For Placer County, the Central Valley RWQCB maintains jurisdiction within the subject basin. This protection is carried out by the RWQCB through the issuance and enforcement of National Pollutant Discharge Elimination System permits, called Waste Discharge Requirements, regulation of leaking USTs and contaminated properties through the Leaking Underground Storage Tank, and Spills, Leaks, Investigation, and Cleanup programs, respectively. The SWRCB also regulates the handling, storage, and disposal of hazardous substances on construction projects. Permits and/or other action by the SWRCB may be required if contamination of water or soils occurs during construction of the proposed project.

Local Regulations

Town of Loomis General Plan

The Town's General Plan contains policies governing safety and hazardous materials within its jurisdiction. The project's consistency with relevant General Plan Safety Element policies is evaluated in the General Plan consistency discussion in Appendix B. The applicable policies from the General Plan Safety Element are summarized in the following text (Town of Loomis 2001):

Policy 14: As individual developments are proposed, the Environmental Health specialist responsible for the project will review lists of hazardous materials provided by the applicant as part of the project description to determine consistency with the State Health and Safety Code. A site visit may be necessary to determine compatibility to surrounding areas. Whether the hazardous material impacts of a project are significant shall be decided on a case-by-case basis and depends on:

- Individual or cumulative physical hazard of material or materials.
- Amounts of materials on site, either in use or storage.
- Proximity of hazardous materials to populated areas and compatibility of materials with neighboring facilities.
- Federal, State, and local laws, and ordinances, governing storage and use of hazardous materials.
- Potential for spill or release.
- Proximity of hazardous materials to receiving waters or other significant environmental resource.

Policy 15: The storage, handling and disposal of potentially hazardous waste must be in conformance with the requirements set forth in California Administrative Code, Title 22, Division 4, Ch. 30, and California Health and Safety Code, Division 20, Chapter 6.5.

Multi-Hazard Mitigation Plan

In 2005, a multi-jurisdictional, Multi-Hazard Mitigation Plan was prepared on behalf of Placer County and participating districts and the incorporated communities of Auburn, Colfax, Lincoln, Loomis, and Rocklin. The plan is multi-jurisdictional and identifies goals, objectives, and measures for hazard mitigation and risk reduction to make communities less vulnerable and more disaster resistant and sustainable.

The plan is designed to reduce or eliminate long-term risk to people and property from natural hazards and their effects. The plan was prepared to meet the Disaster Mitigation Act of 2000 requirements to maintain Placer County's eligibility for FEMA Pre-Disaster Mitigation and Hazard Mitigation Grant Programs. The plan also serves to enhance the County's CRS Floodplain Management Program.

Placer Mosquito Abatement District

The Placer Mosquito Abatement District was established to control the populations of mosquitoes in Placer County. The District was expanded in 2004 to incorporate the entire county

into the District. The District is taking an aggressive and proactive approach to control the populations of mosquitoes in the County. Along with their abatement programs, the District confers with landowners whose land includes potential mosquito habitat and suggests management alternatives through preparation and implementation of pond management plans.

4.13.3 Impacts

Methods of Analysis

The analysis of the potential public safety and hazardous materials impacts is based on information from the 2013 Phase I ESAs prepared by WKA for the project site and the 2009 Phase I ESA prepared by H&K. As stated in the ESA reports, “the purpose of the Phase I ESAs is to evaluate the site for evidence of potential Recognized Environmental Conditions (RECs) resulting from current and/or former site activities as defined by the American Society of Testing and Materials (ASTM) Standard E 1527-05 (ASTM 2005).” Preparation of the ESA reports included the following steps:

- Conduct a site reconnaissance for visual evidence of surface contamination and potential sources of subsurface contamination;
- Conduct a visual inspection of the adjoining properties for evidence of RECs
- Conduct interviews with the following, as available:
 - Key site manager,
 - Major occupants,
 - Past and present owners, operators,
 - Government and/or agency personnel, and
 - Inquiries conducted at abandoned sites may include interviews with owners or occupants of neighboring or nearby properties;
- Conduct a records review, including the following:
 - Physical setting documents to determine regional geology, general soil information, and local and regional groundwater conditions,
 - Historical information, including but not limited to, Sanborn maps, topographic maps, aerial photographs, ownership records, building department records, local street directories, zoning and land use records, and prior assessments, as available,
 - Environmental records, including federal, state, tribal, and county regulatory agency lists that will help identify RECs on the site and the adjoining properties, and

- Based on the outcome of the database search, review of specific regulatory agency files for identified contaminated facilities in order to evaluate whether the listed facilities are hazardous materials threats to the site;
- Conduct a preliminary screen for vapor encroachment conditions on the site per ASTM E2600-10;
- Review of the completed ASTM E 1527-05 User Questionnaire (Questionnaire) regarding Recorded Environmental Liens, activity and use limitations (AULs), relationship of the purchase price to the fair market value of the site, and any specialized knowledge of the site;
- Review of environmental liens and AULs reports, as provided; and
- Prepare a final report of the results of the ESA.

In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable state and local ordinances and regulations. These requirements are summarized in Section 4.13.2, Regulatory Setting. The Phase I ESAs prepared for the project site did not identify the project site as being on a list of hazardous materials sites, pursuant to California Government Code, Section 65962.5. Therefore, this issue will not be further addressed.

The project site is located approximately 10 miles southeast of the Lincoln Regional Airport, 16 miles northeast from McClellan Airfield, 20 miles west of the Cameron Airpark, and 10 miles southeast from the Auburn Municipal Airport. Because the project site is not located within 2 miles of an airport, there would be no safety hazard to future residents due to proximity to planes overhead and in the immediate vicinity. Therefore, this issue is not further addressed.

Significance Criteria

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

- 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 it create a significant hazard to the public or the environment?
- 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?
- Create or expose residents to potential health hazards?

Impact Discussion

IMPACT 4.13-1: Expose construction workers and/or the environment to hazardous materials due to an accidental release during construction.

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measure 4.13a

RESIDUAL Less Than Significant

SIGNIFICANCE:

Hazardous materials may be used and stored at the project site during construction, including paints, solvents, greases, motor oil, gasoline diesel fuels, and other construction-related materials. The use of these materials may also generate hazardous waste. Potential adverse impacts associated with use of these types of materials involve the exposure of construction workers and/or the environment to hazardous materials from an accidental release during construction. The applicant would be required to comply with the Town’s General Plan Safety Element policies that require the implementation of state and local requirements for interim storage of hazardous and flammable materials during all construction activities. No acutely hazardous materials would be used during construction of the project. In addition, materials handled would not pose a significant risk to off-site residents or construction workers because they would be used and stored in accordance with existing laws and regulations. All construction equipment and materials would be temporarily stored on site during construction. Although not anticipated, if quantities of fuel or oil greater than or equal to 1,320 gallons are stored on the project site during construction, a Spill Prevention Control and Countermeasure Plan must be prepared in accordance with Title 40, Code of Federal Regulations, Section 112.

An accidental release of construction-related hazardous materials may occur even if these local and state regulations are followed. Due to the routine nature of the activities involved in

construction activities, an accidental spill of hazardous materials is unlikely, but if it were to occur, exposure of workers and/or the environment to hazardous materials would be considered a potentially significant impact. **Mitigation Measure 4.13a** defines requirements for use and storage of hazardous materials and for disposal of hazardous waste to ensure that if a spill should occur, it will be contained and reported to the Placer County Environmental Health Department immediately. Specifically, the measure requires that hazardous materials be stored in locations that are removed from storm drain inlets, drainageways, and canals and are surrounded by earthen berms. This would ensure that if a spill or release occurs, the released material would be contained within the earthen berms and would not enter stormwater runoff or natural drainage features. If necessary, contaminated soil would be excavated and disposed of in accordance with County requirements. The materials must also be covered with impervious tarps or stored inside buildings, which would ensure that materials would not be released to the air during windy conditions or exposed to rain. Typically, construction projects require on-site storage of relatively small amounts of hazardous materials, which would also limit the potential effects from a release of these materials. Compliance with **Mitigation Measure 4.13a** would ensure potential impacts from accidental releases are **less than significant**.

IMPACT 4.13-2:	Expose people and/or the environment to hazardous materials due to the routine storage or transport of hazardous materials during operation of the project.
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None
RESIDUAL SIGNIFICANCE:	Less Than Significant

Accidental releases of hazardous materials and hazardous waste during project operation could occur from on-site or off-site sources. Potential on-site sources could include small to moderate quantities of household hazardous substances used by residences and commercial businesses that would be located on the project site. These could include household pesticides, cleaning agents, and small quantities of motor fuel stored or sold on the project site. Any business that stores an acutely hazardous substance, or stores 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 EHD. In addition, businesses that have USTs and/or aboveground storage tanks must comply with County and state UST 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 is considered minimal and

commensurate with other residential and commercial land uses. All future residents and commercial businesses that locate within the project site are required by local, state and federal law to comply with applicable regulations regarding use, transport, and storage of hazardous materials. These requirements for the management of hazardous materials, as outlined previously in the regulatory setting section, ensure that the risk of a release of hazardous substances by residents and/or commercial businesses is minimized. The proposed project would develop residential, office, and commercial land uses. No industrial land uses are proposed. The project is not expected to introduce any land uses that require the use, transport, or storage of large volumes of hazards materials or the use of acutely hazardous materials. The risk of release of hazardous materials during project operation would be **less than significant**.

IMPACT 4.13-3:	Expose school students and staff to hazardous emissions or hazardous or acutely hazardous materials.
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None
RESIDUAL SIGNIFICANCE:	Less Than Significant

The project site is located approximately 0.25 mile south of the Loomis Grammar School, which is located at 3505 Taylor Road within the Town of Loomis. The school would be within 0.25 mile of proposed commercial, residential, park, and open space land uses proposed within the project site. Schools are frequently located in proximity to commercial and residential land uses, and the use of hazardous materials associated with these existing and proposed land uses is not expected to create a risk of hazardous conditions at the proposed school site (H&K 2009). The construction and operation of the proposed project would not include uses that would emit hazardous emissions or include activities that use acutely hazardous materials. Any hazardous materials used on site would be typical of construction and residential and commercial land uses, and would not create hazardous emissions that could adversely affect nearby schools. The impact would be **less than significant**.

IMPACT 4.13-4:	Exposure of people to existing hazardous conditions or materials on site.
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None
RESIDUAL SIGNIFICANCE:	Less Than Significant

The multiple Phase I ESAs prepared for the project site assessed the history of uses at the site and in the project area to identify any potential hazards that could affect future residents, employees, or visitors to the project site. Based on review of aerial photography, the ESAs revealed evidence of historical orchard cultivation starting in 1938 or earlier and ending sometime prior to 1952, which implies the potential for soil contamination from pesticide compounds. More than 30 soil samples were tested for lead, arsenic, and organochlorine pesticides.

Lead concentrations ranged from 19.8 milligrams per kilogram (mg/kg) to 44.9 mg/kg. The amount of lead in the soil samples was lower than the CHHSL, and arsenic concentrations ranged from 2.0 mg/kg to 12.1 mg/kg. These concentrations are above the CHHSL of 0.07 mg/kg (OEHHA 2010) for arsenic in residential soil. According to the 2009 Phase I ESA, it is common for naturally occurring arsenic concentration in the region to exceed the CHHSL (H&K 2009). The 2013 Phase I ESA (WKA 2013a) reviewed the soil analysis results from all prior Phase I and II reports and completed a statistical evaluation of the data. WKA “calculated that the 95% upper confidence limit of the mean level of arsenic within the 043-080-015 portion of the site is 4.7 mg/kg” (WKA 2013a). This level of arsenic is typical of background levels found in soil within the region. This determination is consistent with the conclusion in the 2009 Phase I ESA prepared by H&K that the results of the soil sampling and analysis performed at the site did not indicate that arsenic or lead are present in the soil samples at concentrations that imply significant pesticide impact and that the former orchard cultivation is not considered a recognized environmental condition (Appendix I; H&K 2009). Further, the California Office of Environmental Health Hazard Assessment Soil Screening Numbers table indicates “the screening numbers for arsenic are for contamination resulting from human activity. Concentrations of naturally occurring arsenic may be far above the screening number. When levels of arsenic at a site are a concern, the agency with authority over remediation decisions should be consulted” (OEHHA 2010).

Additionally, the Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties report (CalEPA 2005) states:

Naturally occurring background concentrations of arsenic and other metals in soils may exceed their respective soil CHHSLs. California Environmental Protection Agency generally does not require cleanup of soil to below background levels. This issue is frequently encountered with arsenic. Natural background concentrations of arsenic in California are often well above the health-based, direct-exposure goals in soil of 0.07 mg/kg for residential land use and 0.24 mg/kg for commercial/industrial land use.

Based on the conclusions of the Phase I and II reports, the small amount of lead and arsenic in the native soil on the project site would not adversely affect construction or operation of

the proposed project and would not expose people at the project site to hazardous materials or conditions.

Similarly, minor amounts of household debris, construction debris, and yard waste were observed in several areas of the site. Removal of this debris as part of the site clearing and grading would not impact the construction or operation of the project site or require regulatory action.

As discussed previously in the environmental setting section, sites within a 0.5-mile radius of the site where releases of hazardous materials are known to have occurred were identified and according to the 2013 Phase I ESAs, all of these sites have been closed and do not present a hazard that would adversely affect the proposed project or people within the project site. Therefore, the project would not expose future residents, employees, and visitors of the project to existing hazardous conditions and the impact would be **less than significant**.

IMPACT 4.13-5: Impair implementation of an adopted emergency response plan.

SIGNIFICANCE: Less Than Significant

MITIGATION: None

RESIDUAL Less Than Significant

SIGNIFICANCE:

The Town of Loomis, in collaboration with Placer County and the cities of Auburn, Colfax, Lincoln, and Rocklin, prepared the Multi-Hazard Mitigation Plan, adopted January 2005 to satisfy federal requirements of the Department of Homeland Security and FEMA. The plan enables the Town of Loomis, Placer County, and the other participating communities to take ongoing action to reduce or eliminate long-term risks to human life and property from many types of hazards. The plan was approved by the Placer County Board of Supervisors, the California Office of Emergency Services, and FEMA.

Development of the proposed project could increase the transport, handling, storage, and use of hazardous materials in the project area primarily during project construction. During project operation, the use of hazardous materials would be limited to common household and landscaping products. The project design and layout has been reviewed by the Town’s law enforcement and fire personnel to ensure adequate emergency ingress and egress is provided throughout the site. The project, as designed, would not interfere with or impair the implementation of an adopted emergency response plan. Therefore, impacts related to the implementation of emergency response plans would be **less than significant**.

IMPACT 4.13-6: Exposure to risks associated with wildland fires.

SIGNIFICANCE: No Impact

MITIGATION: None

RESIDUAL No Impact

SIGNIFICANCE:

Developed uses surround most sides of the project site. There is undeveloped land north of the northernmost portion of the project site, adjacent to King Road. These small areas of undeveloped land would not pose a substantial risk of wildfire that could affect the project site. The proposed project would develop the currently undeveloped project site, which would reduce the wildland fire potential and associated risks for existing land uses adjacent to the site since the existing undeveloped site contains grasslands that have a greater risk of wildfires than the project as developed. Therefore, the project is considered to have **no impact** with respect to exposure to risks associated with wildland fires.

IMPACT 4.13-7: Creation of or exposure to health hazards.

SIGNIFICANCE: Significant

MITIGATION: Mitigation Measures 4.13b through 4.13d

RESIDUAL Less Than Significant

SIGNIFICANCE:

Mosquitoes can carry and transmit various human diseases. In 1999, the West Nile virus, a disease spread by infected mosquitoes, emerged as a threat to public health. The virus, which can infect people and livestock, has spread throughout much of North America, including California. The most serious manifestations of infection are encephalitis (inflammation of the brain) and death.

The project would have a significant impact related to health hazards if the proposed detention basins and any other water quality devices provide mosquito breeding habitat. Siltation traps installed in conjunction with catch basins and other drainage devices can hold water for several days and provide mosquito breeding habitat. Implementation of **Mitigation Measures 4.13b, 4.13c, and 4.13d** requiring management of on-site water quality devices and facilities to minimize the potential for the project site to support mosquito populations would ensure that this impact is reduced to **less than significant**.

IMPACT 4.13-8:	Contribute to cumulative increases in exposure to hazards and hazardous materials.
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None
RESIDUAL SIGNIFICANCE:	Less Than Significant

The geographic scope for consideration of cumulative impacts related to hazards and hazardous materials is the Town of Loomis.

Exposure to Hazardous Environmental Conditions

Potential hazardous materials impacts related to site-specific conditions (including exposure to potentially contaminated soils, and exposure to potentially contaminated groundwater during construction dewatering) is generally not regional in nature and would not combine with impacts from other projects in the Town limits to create a cumulative impact. Thus, there would be no cumulative impact to which the project could contribute. Compliance with all applicable federal, state, and local regulations related to hazards and hazardous materials on a project-by-project basis would be required for all projects within the Town and would ensure that site-specific impacts are appropriately addressed and cannot combine with site-specific impacts from other project sites.

For any projects in the Town that would entail development of a site where past uses could have resulted in soil or groundwater contamination, the potential exists for release of hazardous substances during construction at those sites. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through dust either from soil remediation activities or from soil-disturbing activities during construction where previously unidentified contamination may exist. (Other potential pathways, such as direct contact with contaminated soils or groundwater, would not pose as great a risk to the public because such exposure scenarios are site specific and would typically be confined to the construction zones.)

Use, Storage, and Transport of Hazardous Materials During Construction

During the construction process, hazardous materials spills or accidents would typically be site-specific and would not combine with other uses to create a cumulative effect. Associated health and safety risks generally would be limited to those individuals using the materials or to persons in the immediate vicinity of the materials.

Construction of the proposed project could result in an incremental increase in risk from contaminant-related air emissions when considered in combination with other development projects in the Town. However, implementation of site-specific risk management controls and compliance with applicable laws and regulations pertaining to hazardous materials management at each project site is expected to provide sufficient control of hazardous materials to ensure that impacts in the cumulative scenario are **less than significant**; thus, there would be no cumulative impact to which the project could contribute. Moreover, due to atmospheric dispersion, chemical concentrations decrease as the distance from the source increases. Thus, it is unlikely that an individual would be exposed to maximum contaminant-related air emissions from more than one construction site at the same time. In other words, an individual who is directly outside the construction zone of one source would be unlikely to be exposed to maximum levels from another source. Also, construction similar in scale to the proposed project is unlikely to occur adjacent to the project site given the developed nature of most surrounding properties.

Use, Storage, and Transport of Hazardous Materials During Operation

The proposed project would not introduce any industrial land uses to the project site. During project operation, the use, storage, and transport of hazardous materials would be limited to materials such as paints, solvents, cleaning supplies, pool chemicals, pesticides, and herbicides. The proposed project, in conjunction with other existing, planned, and probable future projects within the Town, would result in an increase in the amount of hazardous materials used and stored within the Town limits and transported through the Town. As described in Section 4.1, Land Use, other projects in the cumulative scenario within the Town include development of approximately 150 new dwelling units and 36,209 square feet of commercial and office land uses. These projects would involve similar requirements for use, storage, and transport of hazardous materials as the proposed project. The quantities of hazardous materials that would be present during occupancy of these residential, office, and commercial land uses are expected to be minimal and would consist of household and maintenance products. Implementation of applicable hazardous materials management laws and regulations adopted at the federal, state, and local level would ensure cumulative impacts related to hazardous materials use remain **less than significant**. Thus, there would be no cumulative impact to which the project could contribute.

14.3.4 Mitigation Measures

4.13a The following best management practices (BMPs) shall be implemented during all site preparation and construction activities within the project site to control pollutant sources associated with the handling and storage of construction materials and equipment, and related to waste management and disposal:

- A. Store construction raw materials (e.g., dry materials such as plaster and cement, pesticides and herbicides, paints, petroleum products, treated lumber)

in designated areas that are located away from storm drain inlets, drainageways, and canals and are surrounded by earthen berms. Train the construction employees working on the site in proper materials handling practices to ensure that, to the maximum extent practicable, those materials that are spread throughout the site are covered with impervious tarps or stored inside buildings.

- B. Whenever possible, wash out concrete trucks off site in designated areas. When the trucks are washed on site, contain the wash water in a temporary pit adjacent to the construction activity where waste concrete can harden for later removal. Avoid washing fresh concrete from the trucks, unless the runoff is drained to a berm or level area, away from site waterways and storm drain inlets.
- C. Collect non-hazardous waste construction materials (e.g., wood, paper, plastic, cleared trees and shrubs, building rubble, scrap metal, rubber, glass) and deposit in covered dumpsters at a designated waste storage area on the site. Store recyclable construction materials separately for recycling. Transport all solid waste and recyclable material to the Western Regional Sanitary Landfill and Materials Recovery Facility.
- D. Store hazardous materials in portable metal sheds with secondary containment. The quantities of these materials stored on site shall reflect the quantities needed for site construction. Apply all fertilizers, herbicides, and pesticides following the methods and amounts recommended by the manufacturer. Do not mix hazardous waste with other waste produced on site. Contract with a Certified Waste Collection contractor to collect hazardous wastes for disposal at an approved hazardous waste facility.
- E. Dispose of waste oil and other equipment maintenance waste in compliance with federal, state, and local laws, regulations, and ordinances.

4.13b

In constructing the stormwater detention basins and installing stormwater conveyance infrastructure, the project applicant shall implement the following BMPs or other similar and equally effective practices in accordance with the recommendations of the *Best Management Practices for Mosquito Control in California: Recommendations of the California Department of Public Health and Mosquito and Vector Control Association of California* (Mosquito BMPs Handbook; CDPH and MVCAC 2010).

- A. Consider mosquito production during the design, construction, and maintenance of stormwater infrastructure.

- B. Ensure that all underground drain pipes are laid to grade to avoid low areas that may hold water for longer than 72 hours.
- C. Provide proper grades along conveyance structures to ensure that water flows freely.
- D. Design and maintain systems to fully discharge captured water in 72 hours or less.
- E. Avoid the use of loose rock riprap that may hold standing water; use concrete or liners in shallow areas to discourage plant growth where vegetation is not necessary.
- F. Design containment basins with adequate slopes to drain fully. The design slope should take into consideration buildup of sediment between maintenance periods.
- G. Design accessible shorelines of detention basins to allow for periodic maintenance and/or control of emergent and shoreline vegetation, and routine monitoring and control of mosquitoes.
- H. Whenever possible, design deep zones in excess of 4 feet to limit the spread of invasive emergent vegetation such as cattails. The edges below the water surface should be as steep as practicable and uniform to discourage dense plant growth that may provide immature mosquitoes with refuge from predators and increased nutrient availability.
- I. Whenever possible, provide a means for easy dewatering if needed.

4.13c

The applicant shall prepare a Mosquito Control Plan for administration by the Homeowner's Association (HOA). This plan shall describe various methods of managing the stormwater detention basins, stormwater conveyance infrastructure, and any commonly owned landscape irrigation systems to reduce mosquito breeding. The management plan shall be reviewed and approved by the Placer Mosquito and Vector Control District prior to issuance of a grading permit. The Placer County Mosquito Vector Control District shall inspect the project site periodically and notify the HOA of any needed maintenance or repairs to minimize the potential for mosquito breeding onsite. Evidence of required maintenance and/or repairs shall be provided to the Placer Mosquito and Vector Control District upon request. The following measures shall be the responsibility of the HOA for all commonly held property within the project site. The HOA shall also distribute the management plan or similar recommendations to all homeowners within the project site at least once every year to ensure that homeowners have appropriate information

regarding how to minimize the potential for mosquito breeding within their individual property. The management plan shall include the following BMPs or other similar and equally effective practices in accordance with the recommendations of the Mosquito BMPs Handbook:

- A. Avoid over-irrigating to prevent excess pooling and runoff.
- B. Routinely inspect, maintain, and repair irrigation system components; check and repair leaky outdoor faucets.
- C. Manage sprinkler and irrigation systems to minimize runoff entering stormwater infrastructure.
- D. Avoid intentionally running water into stormwater systems by not washing sidewalks and driveways; prohibit washing cars on streets or driveways.
- E. Inspect facilities weekly during warm weather for the presence of standing water or immature mosquitoes.
- F. Remove emergent vegetation and debris from gutters and channels that accumulate water.
- G. Keep inlets free of accumulations of sediment, trash, and debris to prevent standing water from backing up on roadways and gutters.
- H. Maintain accessible shorelines to allow for periodic maintenance and/or control of emergent and shoreline vegetation, and routine monitoring and control of mosquitoes. Emergent plant density should be routinely managed so mosquito predators can move throughout the vegetated areas and are not excluded from pond edges.
- I. If applicable, maintain deep zones in excess of 4 feet to limit the spread of invasive emergent vegetation such as cattails.
- J. Manage the spread and density of floating and submerged vegetation that encourages mosquito production (i.e., water hyacinth, water primrose, parrot's feather, duckweed, and filamentous algal mats).

4.13d

If siltation devices are installed with catch basins and other road drainage features, the developer and/or HOA shall provide periodic treatment, inspection, and vegetation removal when proscribed by the Placer Mosquito and Vector Control District to prevent development of mosquito habitat. Evidence of treatment shall be provided to the Placer Mosquito and Vector Control District upon request.

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