

4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7 HAZARDS AND HAZARDOUS MATERIALS

This section of Draft Environmental Impact Report (Draft EIR) for the proposed Mitchell Ranch Center project addresses the potential presence of hazardous materials and conditions in the project area. The section analyzes the potential risk of such materials and conditions in proximity to proposed development and human activity. This section also addresses potential conflicts with the City's adopted emergency plan and hazards to people and structures on the proposed project site as a result of aircraft operations at the nearby Modesto City-County Airport (Harry Sham Field). The analysis contained in this section is based primarily on the Phase I Environmental Site Assessment prepared by Secor International in May 2006, as well as a review of the Ceres General Plan (City of Ceres, 1997), the City of Ceres Emergency Operations Plan (City of Ceres, 2003), and the Stanislaus County Airport Land Use Commission Plan (Stanislaus County ALUC, 2004).

Following publication of the Notice of Preparation/Initial Study (NOP/IS) for the proposed project, no comments were received related to hazards and hazardous materials.

4.7.1 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS DEFINED

Under Title 22 of the California Code of Regulations (CCR), which defines the characteristics of hazardous material in terms of ignitability, corrosivity, reactivity, and toxicity, the term hazardous substance refers to both hazardous materials and hazardous wastes, both of which are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness, or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific CCR Title 22 criteria. While hazardous substances are regulated by multiple agencies, as described in Subsection 4.7.2, Regulatory Framework, cleanup requirements of hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the proposed project.

Public health is potentially at risk whenever hazardous materials are or will be used. It is necessary to differentiate between the "hazard" of these materials and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to health and public safety is determined by the probability of the hazard, in addition to the inherent toxicity of a material (California Department of Toxic Substances Control, 2009).

Factors that can influence the health risks when human beings are exposed to hazardous materials include the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) is a report prepared for a real estate holding company which identifies existing and potential environmental contamination liabilities. The

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analysis contained in a Phase I ESA typically addresses both the underlying land and the physical improvements to the property and includes examination of potential soil contamination, groundwater quality, surface water quality, and indoor air quality. The examination of a site may include a survey of past uses of the property, definition of any chemical residues within structures, identification of possible asbestos-containing building materials and lead paints, inventory of hazardous substances stored or used on the site, assessment of mold and mildew, and evaluation of other indoor air quality contaminants such as radon. A Phase I ESA was conducted for the proposed project site by Secor International in May 2006 (see **Appendix 4.7-1**). The contents of this report are summarized throughout this section of the Draft EIR.

In addition, an Environmental Data Resources Report was prepared for the proposed project. This report was designed for the evaluation of environmental risk associated with the proposed project site. (see **Appendix 4.7-2**)

EXISTING PROJECT SITE CONDITIONS

The proposed project site consists of approximately 26.3 acres of mostly undeveloped land located in the City of Ceres near State Route 99 at the northwestern corner of Service Road and Mitchell Road. Four abandoned residential structures were located on the proposed project site at the time of the NOP. Three of the four residences were demolished during preparation of this Draft EIR, under demolition permits issued by the City. Refer to **Section 3.0, Project Description**, for details of the demolition of these buildings. Asbestos hazards related to the demolition of the on-site structures are addressed in **Section 4.2, Air Quality**.

There are nine schools located within 1 mile of the proposed project site. The nearest school is the Whitmore Charter School located at 3435 Don Pedro Road, approximately 0.25 mile east of the project site. In addition, a site for a future elementary school has been identified just north of the proposed project site across Don Pedro Road.

Summary of Prior Uses

Aerial Photography

Based on a review of aerial photographs from 1957 to 1972, the project site appears to have been used for agricultural uses (alfalfa, row crops). The adjacent properties surrounding the project site also appear to have been used for agriculture. Service Road appears to have been constructed to the south of the proposed project site during this period (Secor, 2006).

Based on a review of aerial photographs from 1984 to 1998, the majority of the proposed project site appears to have been vacant, with the exception of the three residential structures and a small building located on one parcel (APN 053-013-018). The proposed project site and adjacent sites appear to be similar in their current condition as compared with these past photographs. No potential environmental contamination activities (e.g., past mining operations, landfills, or industrial processes) were observed on the site or adjacent properties during the review of historical site use information sources (Secor, 2006).

Site Features

Storage Tanks

No aboveground or underground storage tanks were reported or observed at the proposed project site during the site visit conducted by Ms. Kimberly Wood of Secor International Incorporated on August 18, 2005 (Secor, 2006).

Transformers or PCB-Suspect Hydraulic Systems

Electrical transformers, hydraulic equipment, capacitors, and similar equipment may contain polychlorinated biphenyls (PCBs) in hydraulic or dielectric insulating fluids. The federal Toxic Substances Control Act (TSCA) generally prohibited the domestic manufacture of PCBs after 1979; therefore, there is a potential for the dielectric fluid in electrical and hydraulic equipment manufactured prior to that date to contain PCBs (Secor, 2006).

A pole-mounted transformer (associated with the parcel designated as APN 053-013-018) was observed at the south-central boundary of the project site adjacent to Service Road. Another was observed at the southwest corner of the parcel designated as APN 053-013-017, approximately 150 feet east of the southwest corner of the proposed project site. As this parcel has been neglected, it is doubtful that power is still being provided to the property. A third pole-mounted transformer was observed across Don Pedro Road, north of the northern border of the proposed project. It appears that this transformer provides power to parcel designated as APN 053-012-068. Several pole-mounted transformers were located east of Mitchell Road and did not appear to be associated with the project site. The transformers are in good condition with no evidence of releases or staining (Secor, 2006).

Stained Soil or Pavement

No significant staining was observed at the project site during the site visit (Secor, 2006).

Distressed Vegetation

Vegetation can sometimes indicate the presence of contaminants in soil. Contaminants can alter plant metabolism and thus overall vitality and health of the plant. Contaminated soil can lower the leaf production rates of plants and negatively affect flowering cycles. Similarly, the lifespan of various plant parts can be dramatically shortened by contaminants in soil. The presence of contiguous areas of similarly distressed vegetation involving multiple species is evidence to potential soil contamination. Vegetation observed on and in the vicinity of the proposed project site during the site visit did not appear to be distressed (Secor, 2006).

Discharges to Drains, Ditches, and Streams

No discharges to drains, ditches, or streams were observed during the site visit or have been reported (Secor, 2006).

Wells

A water well and a water pump appear to be located on and associated with the parcel designated as APN 053-012-068, which represents the north-western and west-central portion of the proposed project site. The owners of this parcel appeared to be utilizing the water well to provide potable water to the residence. Four irrigation wells of unknown age were observed

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along the southern portion of the same parcel during the site visit. As of May 2006, no records of the wells were found during the Phase I ESA investigation. However, it can be assumed that other wells associated with the three buildings that have recently been demolished potentially exist on the proposed project site.

Irrigation Facilities

Established in 1887, the Turlock Irrigation District was the first publicly owned irrigation district in the state and is one of only four in California today that also provides electric retail energy directly to homes, farms and businesses. TID serves a significant portion of Stanislaus County. According to TID, an irrigation pipeline belonging to Improvement District 454 runs from east to west at the approximate midpoint of the proposed project site. This pipeline and any other irrigation facilities that may be located on the project site have been abandoned and will be removed and plugged in accordance with TID standards with the development of the proposed project (TID, 2007).

Leach Fields, Septic Tanks, and Cesspools

No evidence of any cesspools or any leach fields and septic tanks other than what would have been associated with homesites were observed during the site visit (Secor, 2006). However, it is reasonable to assume that potential exists for the occurrence of cesspools, leach fields, and/or septic tanks due to the historic rural residential use of the site.

Fill Sites and Dumping

No evidence of current or past presence of dumping on the project site was observed during the site visit (Secor, 2006).

Radon

Radon is a colorless, tasteless radioactive gas that can cause lung cancer and other health problems. The amount of radon in the soil depends on soil chemistry, which varies depending on location. Radon levels in soil range from a few hundred to several thousands of pCi/L (Pico Curries per Liter). Pico Curries are a measurement of radium. One gram of radium disintegrated at 37 billion nuclear disintegrations per second produce one Curie (Colorado, 2009). One Pico Curie equals one trillionth of a Curie and is placed in one liter of volume for measurement purposes (Colorado, 2009).

The amount of radon that escapes from the soil to enter a building depends on the weather, soil porosity, soil moisture, and the suction within the building. The U.S. Environmental Protection Agency (EPA) recommends radon control methods be used if the radon level is 4 pCi/L or higher (USEPA, 2009). Radon gas has a very short half-life of 3.8 days. The health risk potential of radon is associated with its rate of accumulation within confined areas, particularly confined areas near to the ground where vapors can readily transfer to indoor air from the ground through foundation cracks or other pathways. Large, adequately ventilated rooms generally present limited risk for radon exposure.

A review of the California Statewide Radon Survey indicated that in zip code 95307, in which the proposed project site is located, three tests were conducted as part of the survey. Of the three tests, none had greater radon levels than 4.0 pCi/L. The EPA uses three zone designations in order to reflect the average short-term radon measurement that can be expected in a building without the implementation of radon control methods. The radon zone designation of the

highest potential is Zone 1. The proposed project site is located in Zone 3, which by EPA standards is considered "low potential," with levels of radon less than 2.0 pCi/L (Secor, 2006). Secor reviewed the California Statewide Radon Survey and found that zip code 95307 is located in Zone 3.

Lead-Containing Paint

Concern for lead-containing paint (LCP) is primarily related to structure surfaces with lead-containing paint applied prior to 1977. LCP is recognized as a potential health risk due to the known toxic effects of lead exposure, primarily through ingestion, on the central nervous system, kidneys, and blood system. The risk of lead toxicity in lead-based paint varies based on the condition of the paint and the year of its application.

Potential LCPs were observed located in the abandoned house on the parcel designated APN 053-013-019, which represents the entire eastern half of the project site approximately. The presence of LCP can only be confirmed with the implementation of a sampling and analytical testing program. If properly removed by a certified contractor, the observed potential LCPs are not considered to represent a concern to the project site or proposed project (Secor, 2006).

Water Damage and Microbiological Evaluation

Mold and mildew are considered fungi, the biological term for mold, mildew, yeast, and mushrooms. Mold is ubiquitous in the environment. In order to grow and flourish, molds require moisture and an organic food source. As such, molds may thrive in areas of water leaks or condensation such as HVAC systems, roof leaks, sprinkler systems, cooler/refrigeration units, sinks, or bathrooms.

A limited visual inspection for evidence of moisture intrusion was performed during the site visit. No indicators of water damage or microbiological growth such as stains, standing water, or mold-like substances that would indicate potential for concern were observed during the inspection (Secor, 2006).

HAZARDOUS MATERIAL RECORDS REVIEW

Database Search Report

As part of the Phase I ESA prepared for the proposed project site in May 2006, Environmental Data Resources, Inc. (EDR) performed a search of standard sources of environmental records on hazardous materials, including both federal and state lists as well as local sources of information, to determine previously identified hazardous materials on or around the proposed project site. EDR again prepared a search of these records in August 2007 to provide current information for inclusion in this Draft EIR. All potential and known hazardous materials sites within a 1-mile radius were identified. A complete list of the specific databases searched can be found in **Appendix 4.7-2**.

No hazardous materials waste sites were identified on the proposed project site; however, a total of 13 sites were identified in eight databases within 1 mile of the project site. These sites and the databases in which they were identified are presented in **Table 4.7-1** below. The locations of these sites are illustrated on **Figure 4.7-1**.

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**TABLE 4.7-1
HAZARDOUS MATERIALS SITES IN THE VICINITY OF THE PROJECT SITE**

Map No.		Site Name	Site Address	Distance	Database	Reason for Listing	Current Status
Cluster	Site						
A	A1	Arco Station #5732	3936 Mitchell Rd	< 1/4 mile	Cortese	Gasoline leaked from underground storage tank to surrounding soil	Case closed in 1997
	A2	Arco Station #5732	3936 Mitchell Rd	< 1/4 mile	RCRA-SQG FINDS HAZNET	Facility generates hazardous waste	No violations found
	A3	Arco Station #5732	3936 Mitchell Rd	< 1/4 mile	UST	Operates underground storage tanks	N/A
	A4	Arco Station #5732	3936 Mitchell Rd	< 1/4 mile	SWEEPS UST HAZNET LUST	Gasoline leaked from underground storage tank to surrounding soil	Case closed in 1997
B	B5	Thomas Masonry	3901 Brickit Court	< 1/4 mile	SWEEPS UST	Operates underground storage tanks	N/A
	B6	Thomas Masonry	3901 Brickit Court	< 1/4 mile	HIST UST	Operates underground storage tanks	N/A
	7	Anne B. Johnson	2812 E. Service Rd	< 1/4 mile	SWEEPS UST	Operates underground storage tanks	N/A
	8	Moore Rd Property	3430, 3506 Moore Rd	< 1/2 mile	SLIC	Petroleum spill occurred in 1993	Site closed by County
	9	Ceres Recycling Center	3940 Moffett Rd	< 1/2 mile	SWRCY	Active recycling facility	N/A
	10	7-11 Store #2243	3240 Mitchell Rd	< 1/2 mile	LUST Cortese	Gasoline leak from UST occurred in 1999	Remediation action (cleanup) is under way, case is closed
	11	Northern Refrigerated Transportation	3131 Roeding Rd	< 1/2 mile	HAZNET LUST Cortese SLIC HIST UST SWEEPS UST	Hazardous waste generator Diesel leak from UST occurred in 1999 Operates underground storage tanks	N/A Remediation in progress N/A
	12	East No. 1 Elementary School Site	3500 McGee Rd	< 1/2 mile	SCH ENVIROSTOR	Public school site, evaluated for soil contamination from past agricultural operations	No further action required
	13	Ceres High School Site	Service Rd/Central Ave	< 1 mile	SCH ENVIROSTOR	Public school site, evaluated for soil contamination from past agricultural operations	No further action required

Source: EDR, 2007

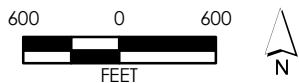
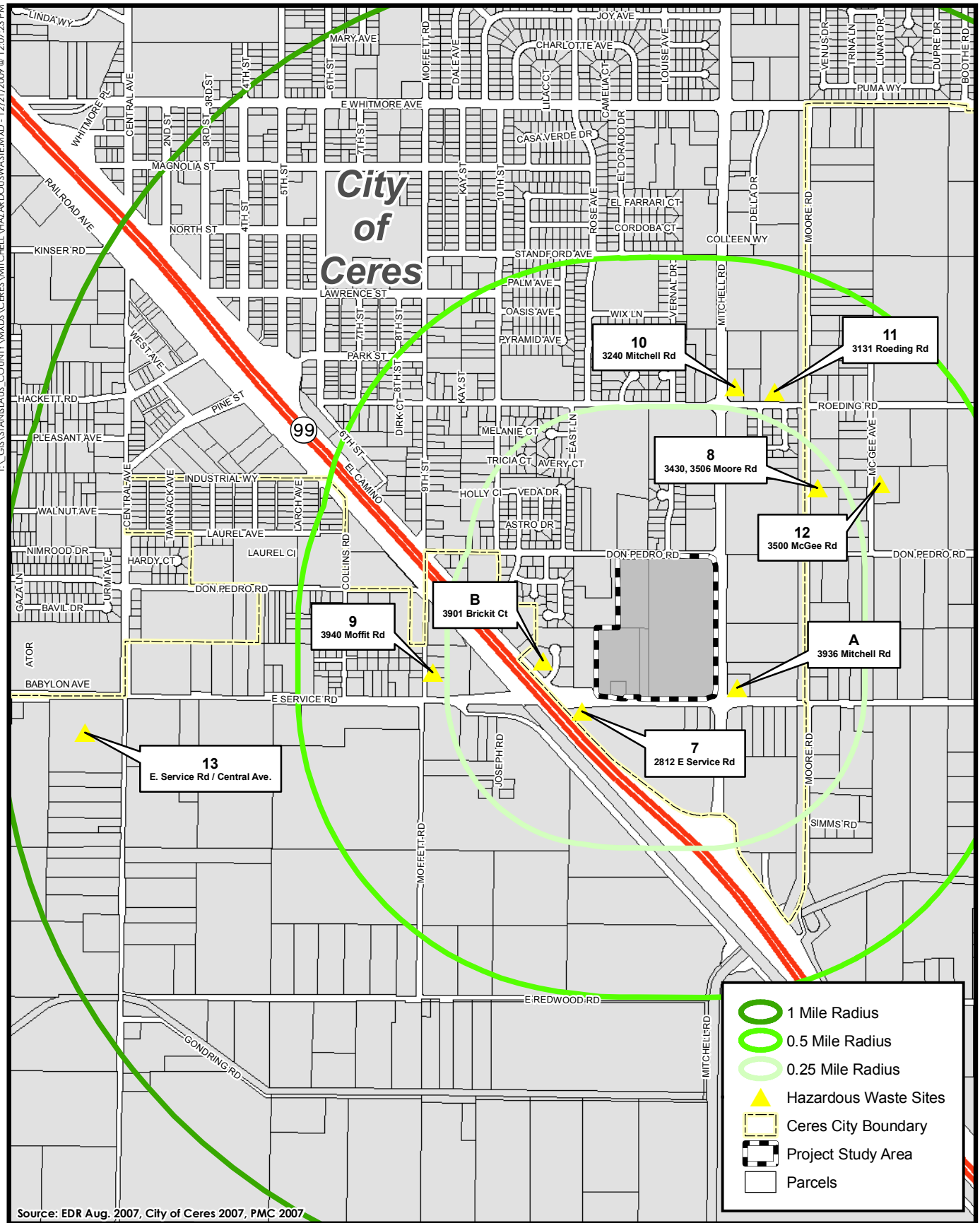


Figure 4.7-1
Hazardous Waste Sites

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Two orphan sites were also identified, for which specific locations were not available or were not clear. The Best Chiropractic Center is located on Whitmore Avenue and is listed in the HAZNET database indicating that the site generates hazardous waste. The Jerry Koffard property is located on Mitchell Road and is listed in the SWEEPS UST database indicating that one or more underground storage tanks is operated on the site. No violations were identified for either site (EDR, 2007).

HAZARDOUS MATERIALS TRANSPORT, USE, AND STORAGE

The transportation of hazardous materials within the State of California is subject to various federal, state, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery or the loading of such materials (California Vehicle Code Sections 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users. Hazardous materials are often transported through the City of Ceres area on State Route 99 and on the Union Pacific Railroad. Information on CHP requirements and regulatory authority is provided in Subsection 4.7.2, Regulatory Framework.

HAZARDOUS MATERIALS INCIDENT RESPONSE

A hazardous materials incident involves the uncontrolled release of a hazardous substance during storage or use from a fixed facility or mobile transport. The City of Ceres is a participant in a fully developed Hazardous Materials Response Team (HMRT). This team is staffed by representatives of select local fire departments and on-call environmental resources personnel.

OTHER HAZARDS

Airport Operations

There are no airports within the City limits of Ceres. The Modesto City-County Airport (aka Harry Sham Field) is located in Modesto to the north of Ceres approximately 2.25 miles from the project site. The airport operates 24 hours a day, although the tower is closed at night. The airport supports a significant private and charter aircraft business. It is also capable of serving multiple-engine propeller aircraft or jet aircraft, as large as a 737-400. At present, the airport has no commercial, large carrier jet services, though turboprop aircraft services are available.

Stanislaus County prepared an Airport Land Use Commission Plan (ALUCP) for all airports in the county, including the Modesto City-County Airport. According to this plan, the proposed project site is located within the airport's Planning Boundary Area 4 "Other Land Within the Planning Area," which is defined as lands within the planning area with potential for possible height and/or noise problems envisioned in the future. Retail stores and restaurants, such as those proposed for development on the project site, are considered compatible uses within this area. However, the proposed project will be required to comply with certain development standards contained in the ALUCP related to building orientation, use of non-reflective building materials, soundproofing, lighting, and storage of hazardous materials. For example, the ALUCP establishes imaginary surfaces which define safe flying altitudes for aircraft and prevents obstructions to navigation, such as towers, trees, utility poles, etc., from posing hazards to air traffic. The height of towers, trees and other natural or manmade obstructions must remain below the altitude of the imaginary surface.

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The City of Ceres also developed airport planning area safety zones and standards for the Modesto City-County Airport as part of the City's General Plan. According to Figure 1-4 in the General Plan, the project site is not located within any airport planning area safety zones. Additionally, the City has created an Airport Overlay Zone as part of the City's Zoning Ordinance to provide for additional property development standards for those areas of the City located within the various overflight zones of the Modesto City-County Airport. The project site has not been designated as an Airport Overlay Zone.

Railroads

The Union Pacific Railroad operates mainline rail service within the City that parallels State Route 99 and provides services to some of Ceres' light to medium industry. The railroad is located west of the project site, across State Route 99.

4.7.2 REGULATORY FRAMEWORK

Federal, state, and local regulatory agencies that oversee hazardous materials handling and a summary of significant hazardous waste management, including the statutes and regulations these agencies administer, are listed in **Table 4.7-2** below.

**TABLE 4.7-2
SUMMARY OF HAZARDOUS MATERIALS REGULATORY AUTHORITY**

Regulatory Agency	Authority
Federal Agencies	
Department of Transportation (DOT)	Hazardous Materials Transport Act – Code of Federal Regulations (CFR) 49
Environmental Protection Agency (EPA)	Federal Water Pollution Control Act Clean Air Act Clean Water Act Resource Conservation and Recovery Act (RCRA) Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Superfund Amendments and Reauthorization Act (SARA) Federal Insecticide, Fungicide and Rodenticide Act Safe Drinking Water Act Toxic Substance Control Act
Federal Emergency Management Agency (FEMA)	Superfund Amendments and Reauthorization Act Title III
Occupational Safety and Health Administration (OSHA)	Occupational Safety and Health Act and CFR 29
State Agencies	
Department of Toxic Substances Control (DTSC) and California Environmental Protection Agency (CAL-EPA)	California Code of Regulations
Department of Industrial Relations (CAL-OSHA)	California Occupational Safety and Health Act, CCR Title 8
State Water Resources Control Board and Regional Water Quality Control Board	Porter-Cologne Water Quality Act

Regulatory Agency	Authority
	Underground Storage Tank Law
Health and Welfare Agency	Safe Drinking Water and Toxic Enforcement Act
Air Resources Board and Air Pollution Control District	Air Resources Act
Office of Emergency Services	Hazardous Materials Release Response Plans/Inventory Law
Department of Food and Agriculture	Food and Agriculture Code
State Fire Marshal	Uniform Fire Code, CR Title 19

FEDERAL

Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) provides leadership in the nation's environmental science, research, education, and assessment efforts. The EPA works closely with other federal agencies, state and local governments, and Native American tribes to develop and enforce regulations under existing environmental laws. The EPA is responsible for researching and setting national standards for a variety of environmental programs and delegates to states and tribes responsibility for issuing permits and monitoring and enforcing compliance.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program (USEPA, 2009).

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), otherwise known as Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA is authorized to implement CERCLA in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities (USEPA, 2009).

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U.S. Department of Transportation

Federal Hazardous Materials Transportation Law and Hazardous Materials Regulations

The Federal hazardous materials transportation law (Federal hazmat law), 49 U.S.C. § 5101 et seq., is the basic statute regulating hazardous materials transportation in the United States. Section 5101 of Federal hazmat law states that the purpose of the Federal hazmat law is to "protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce."

The Hazardous Materials Regulations (HMR), which are included in the Federal hazmat law, govern the transportation of hazardous materials by highway, rail, vessel, and air. The HMR address hazardous materials classification, packaging, hazard communication, emergency response information and training. PHMSA also issues procedural regulations, including provisions on registration and public sector training and planning grants (49 CFR Parts 105, 106, 107, and 110). The Pipeline and Hazardous Material Safety Administration (PHMSA) issues the HMR (PHMSA, 2009).

The Federal Motor Carrier Safety Administration (FMCSA)

The Federal Motor Carrier Safety Administration (FMCSA) issues regulations concerning highway routing of hazardous materials, the hazardous materials endorsement for a commercial driver's license, highway hazardous material safety permits, and financial responsibility requirements for motor carriers of hazardous materials (PHMSA, 2009).

Federal Aviation Administration

The Federal Aviation Administration (FAA) is responsible for the safety of civil aviation in the United States. The Federal Aviation Act of 1958 created the agency under the original name of the Federal Aviation Agency. The FAA's major responsibilities include:

- Regulation of civil aviation to promote safety;
- Encouragement of the development of civil aeronautics, including new technology;
- Development and operation of a system of air traffic control and navigation for use by both civil and military aircraft;
- Research and development of the National Airspace System and civil aeronautics; and
- Regulation of U.S. commercial space transportation.

FAA regulations, known as Federal Aviation Regulations, provide regulatory guidance for the operation, development, and construction of airports and aircraft as well as the training of and conduct of pilots of all civil types and ratings. Included in the Federal Aviation Regulations are specific regulations guiding the operation of airports and requirements on development adjacent to airports.

STATE

California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) was created in 1991 by Governor's Executive Order. The six Boards, Departments, and Office were placed within the Cal/EPA

"umbrella" to create a cabinet level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources. The mission of Cal/EPA is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality (Cal/EPA, 2009).

Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following six environmental and emergency response programs (Cal/EPA, 2009):

- The Hazardous Waste Generator (HWG) program and the Hazardous Waste Onsite Treatment activities;
- The Aboveground Storage Tank (AST) program Spill Prevention Control and Countermeasure Plan requirements;
- The Underground Storage Tank (UST) program;
- The Hazardous Materials Release Response Plans and Inventory (HMRRP) program;
- California Accidental Release Prevention (CalARP) program; and
- The Hazardous Materials Management Plans and the Hazardous Materials Inventory Statement (HMMP/HMIS) requirements.

The Secretary of Cal/EPA is directly responsible for coordinating the administration of the Unified Program. The Unified Program requires all counties to apply to the Cal/EPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements within the county. Most CUPAs have been established as a function of a local environmental health or fire department.

The Stanislaus County Department of Environmental Resources is the CUPA for Stanislaus County. Cal/EPA periodically evaluates the ability of each CUPA to carry out the requirements of the Unified Program.

Department of Toxic Substances Control

Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law. In addition, DTSC is frequently involved with the cleanup of abandoned mine sites.

California Highway Patrol

A valid Hazardous Materials Transportation License, issued by the CHP, is required by the laws and regulations of the State of California Vehicle Code Section 3200.5 for transportation of either:

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- Hazardous materials shipments for which the display of placards is required by state regulations; or
- Hazardous materials shipments of more than 500 pounds, which would require placards if shipping in greater amounts in the same manner.

Additional requirements on the transportation of explosives, inhalation hazards, and radioactive materials are enforced by the CHP under the authority of the California Vehicle Code. Transportation of explosives generally requires consistency with additional rules and regulations for routing, safe stopping distances, and inspection stops (Title 14, California Code of Regulations, Chapter 6, Article 1, Sections 1150–1152.10). Inhalation hazards are covered under similarly restrictive rules and regulations (Title 13, California Code of Regulations, Chapter 6, Article 2.5, Sections 1157–1157.8). Radioactive materials are strictly restricted to specific safe routes for transportation of such materials.

California Department of Transportation, Division of Aeronautics

The Division of Aeronautics (DoA), a division of the California Department of Transportation (Caltrans), is responsible with developing a safe, efficient, dependable, and environmentally compatible air transportation system. Their mission is similar to the FAA but on a state level. The DoA was founded in 1947 as the California Aeronautics Commission. The DoA operates within the State Aeronautics Act, Public Utilities Code Section 21001 et seq., which provides policy direction for the DoA and its sphere of influence. The DoA issues permits for and annually inspects hospital heliports and public-use airports, makes recommendations regarding proposed school sites within 2 miles of an airport runway, and authorizes helicopter landing sites at or near schools. The DoA also provides for the integration of aviation into transportation system planning on a regional, statewide, and national basis; administers noise regulation and land use planning laws that foster compatible land use around airports; encourages environmental mitigation measures to lessen noise, air pollution, and other impacts caused by aviation; and provides grants and loans for safety, maintenance, and capital improvement projects at airports.

California Emergency Response Plan

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials spills or releases is one part of this plan. The plan is managed by the State Office of Emergency Services (OES), which coordinates the responses of other agencies including CalEPA, CHP, California Department of Fish and Game, Regional Water Quality Control Board, Stanislaus County Sheriff's Department, Stanislaus County Office of Emergency Services, Ceres Police Division, and Ceres Emergency Services/Fire Division.

LOCAL

Stanislaus County Hazardous Waste Management Plan

In 1986, the California legislature passed legislation requiring each county to develop a hazardous waste management plan and requiring all cities to either adopt the county plan by reference in their general plans or adopt their own plan. The Stanislaus County Board of Supervisors has adopted the Stanislaus County Hazardous Waste Management Plan. The plan addresses waste reduction and on-site treatment, the siting of off-site hazardous waste facilities, public and industry education, transportation of hazardous wastes, cleanup of contaminated sites, and emergency response procedures. The plan also recommends a series of goals,

policies, and implementation actions to deal with hazardous waste throughout the county, including in the City of Ceres.

City of Ceres General Plan

The City of Ceres General Plan was adopted in February 1997 and serves as the overall guiding policy document for land use, development, and environmental quality for the City. The Health and Safety Element addresses a wide range of environmental hazards and provides goals, policies, and implementation programs intended to protect Ceres residents, businesses, and visitors from the harmful effects of natural and man-made hazards. **Table 4.7-3** analyzes the proposed project’s consistency with applicable City of Ceres General Plan Health and Safety Element policies. While this Draft EIR analyzes the consistency of the proposed Mitchell Ranch Center project with the City of Ceres General Plan pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15125(d), the City of Ceres would ultimately make the determination of the proposed project’s consistency with the General Plan. Environmental impacts associated with inconsistency with General Plan goals and policies are addressed under the appropriate impact discussion sections of this Draft EIR.

**TABLE 4.7-3
PROJECT CONSISTENCY WITH CITY OF CERES GENERAL PLAN POLICIES: HEALTH HAZARDS**

General Plan Policy	Consistency with General Plan	Analysis
Policy 7.C.1. The City shall require that new development meets state, county, and local fire district standards for fire protection.	Yes	The proposed project will be designed in accordance with the most recent version of the California Building Code and California Fire Code as well as City standards. Additionally, pursuant to General Plan Policy 7.C.2, the City Emergency Services Division will review the proposed project for compliance with fire safety standards.
Policy 7.F.4. The City shall review all proposed development projects that manufacture, use, or transport hazardous materials for compliance with the County Hazardous Waste Management Plan.	Yes	The proposed project will not manufacture, use, or transport a significant amount of hazardous materials and will comply with the County’s Hazardous Waste Management Plan.
Policy 7.F.9. The City shall require that applications for development projects that will generate significant quantities of hazardous wastes or utilize hazardous materials include detailed information on hazardous waste reduction, recycling, and storage.	Yes	The proposed project will not generate or utilize significant quantities of hazardous materials or wastes. During project construction, small amounts of hazardous materials may be used. During operation of the proposed project, small amounts of common household hazardous materials may be stored on-site for sale or utilized during building and landscaping maintenance. Because the proposed project will not generate or utilize significant quantities of hazardous wastes or materials, the proposed project is not subject to this policy.

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Mitchell Road Corridor Specific Plan

The proposed Mitchell Ranch Center project is located within the Mitchell Road Corridor Specific Plan, which establishes guidelines and regulations for the development of approximately 450 acres located along a 2.5-mile stretch of Mitchell Road. For example, the Mitchell Road Corridor Specific Plan stipulates that limitations shall apply only to those properties located under the Approach and/or Transitional surfaces as defined in the Stanislaus County ALUC's Land Use Plan for the Modesto City-County Airport with proposals of residential development of more than one residential unit per ten acres (the proposed project is not located within the Approach and/or Transitional surfaces of the airport nor does the project propose residential uses).

Stanislaus County Airport Land Use Commission Plan

The Stanislaus County Airport Land Use Commission adopted an Airport Land Use Commission Plan (ALUCP) in August 1978 and amended the plan in May 2004. The ALUCP describes the planning area boundaries and land use plans for each of the five airports under the Commission's jurisdiction including the Modesto City-County Airport (Harry Sham Field). The ALUCP also identifies compatible uses and building standards for land within the airport's planning boundary areas and safety zones.

As described above, the project site is located in the airport's Planning Boundary Area 4 or "Other Land Within the Planning Area." The following standards apply to development within this area, including the proposed project:

1. Usage should be airport oriented or be compatible with airport location.
2. Non-reflective materials to be used in buildings and signs where reflection would cause a flying hazard.
3. Soundproofing where appropriate to reduce noise to acceptable level according to state guidelines.
4. No electromagnetic transmissions which would interfere with operation of aircraft.
5. All bulk storage of volatile or flammable liquid should be underground.
6. Lights for any purpose shall be constructed and used in such a manner as not to create a hazard for pilots or air traffic control.

In addition to these project-specific standards, the ALUCP also contains several general policies related to the operation of the Airport Land Use Commission, its interactions with local jurisdictions, and development within the airport's planning boundaries. **Table 4.7-4** analyzes the proposed project's consistency with the policies of the Stanislaus County Airport Land Use Commission Plan. Environmental impacts associated with inconsistency with ALUCP goals and policies are addressed under the appropriate impact discussion sections of this Draft EIR.

TABLE 4.7-4
PROJECT CONSISTENCY WITH THE STANISLAUS COUNTY AIRPORT LAND USE COMMISSION PLAN

ALUCP Policy	Consistency with ALUCP	Analysis
4. Discourage owners and operators of airports and governmental jurisdictions from locating new uses that concentrate large numbers of people (i.e., schools, hospitals, shopping centers, high intensity recreational uses, etc.) and commercial and industrial uses that involve the handling of corrosive, explosive or flammable materials under Federal Aviation Regulation Part 77 approach surfaces and extended approach surfaces within the planning area.	Yes	The proposed project site is located within the planning area of the Modesto City-County Airport but not within the approach or extended approach surfaces of the airport. As the project site is not within the approach or extended approach surfaces of the airport, ALUCP Policy 4 does not apply to the proposed project.
6. Advise against the establishment of any use within the planning area which will: <ul style="list-style-type: none"> - Create electrical interference with navigational signals or radio communications between the aircraft and airport; - Make it difficult for pilots to distinguish between airport lights and others; - Result in glare in the eyes of pilots using the airport; - Impair visibility in the vicinity of the airport or otherwise in any way create a hazard or endanger the landing, take-off, or maneuvering of aircraft intending to use the airport; or, - Permit structures or trees to a height in excess of established height limitations. 	Yes	The proposed project does not include any uses that would create electrical interference with airport equipment. All lighting proposed for installation on the project site will be directed downward and shielded. This will prevent interference with aircraft and pilots in the area. All proposed project structures will comply with the height restrictions (35 feet maximum) contained in the Mitchell Road Corridor Specific Plan. Additionally, the project site is located just over 2 miles from the airport, further minimizing the proposed development's impact on approaching aircraft.
9. Encourage jurisdictions to make sure that when a land use changes, it would change from an incompatible use to a compatible one.	Yes	The proposed project does not involve a change in land use or zoning designations. Both the existing and proposed land uses on the project site are compatible uses within the Modesto City/County Airport's Planning Boundary Area 4. The reader is referred to Section 4.9, Land Use of this Draft EIR for a full discussion of land use plans in relation to the proposed project.

4.7.3 PROJECT IMPACT ANALYSIS

STANDARDS OF SIGNIFICANCE

Based on the State CEQA Guidelines Appendix G thresholds of significance, the proposed project would create a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

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- 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, create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The analysis contained in the Initial Study prepared for the proposed project (**Appendix 1.0-1**) determined that implementation of the proposed project would have no impact or a less than significant impact related to private airstrips, implementation of the Ceres Emergency Operations Plan, and risk of wildland fires. Therefore, these issues will *not* be addressed further in this section of the Draft EIR.

METHODOLOGY

The following evaluation of the proposed project's potential to create hazards to the public health or the environment through the use, storage, or transport of hazardous materials is based primarily on the project description and information provided by the project applicant, a review of existing applicable regulations, and information regarding the locations of nearby public schools.

The analysis of the proposed project's impacts related to identified hazardous materials sites in the area, past agricultural operations, lead-based paints, and abandoned wells and irrigation infrastructure is based primarily on the Phase I Environmental Site Assessment prepared for the project site by Secor International. In addition, this analysis was supplemented with an updated search of all federal, state, regional, and local government hazardous materials databases performed by Environmental Data Resources, Inc. and correspondence with the Turlock Irrigation District.

Finally, the evaluation of the proposed project's potential to create a public safety hazard due to its proximity to an operating airport was based on a review of the Stanislaus County Airport Land Use Commission Plan for the Modesto City-County Airport, as well as correspondence with Stanislaus County ALUC staff.

IMPACTS AND MITIGATION MEASURES**Use, Storage, and Transport of Hazardous Materials**

Impact 4.7.1 Implementation of the proposed project would require the use and transportation of limited amounts of commonly used hazardous materials including solvents, paints, gasoline, fertilizers, and pesticides during project construction and operation. Impacts related to upset of these materials would be **less than significant**.

The proposed project would require the use of a limited amount of hazardous materials during all phases of construction. Heavy machinery used during site preparation may require lubrication and maintenance, and various other construction-related chemicals may be used, such as adhesives, solvents, and paints. Use of these types of materials is not unusual during construction. Additionally, the proposed retail stores will likely store and sell limited quantities of hazardous materials commonly used in homes (such as paints, oil, fertilizers) and there is the potential for the operation of a medical clinic within the proposed Walmart. Other common hazardous materials, such as fertilizers, pesticides, and gasoline, will likely be used during landscaping and maintenance activities. In order to use, store, and sell these materials on site, they will require transport from other areas. Use and storage of such materials may expose nearby residents, as well as employees and patrons of local businesses and the proposed project, to hazardous materials in the event of a hazardous materials spill. Children are especially susceptible to hazardous chemicals and inhalants. Nine schools are located within 1 mile of the project site with one school, Whitmore Charter School, located 0.25 mile east of the site, at 3435 Don Pedro Road. In addition, a site for a future elementary school has been identified just north of the project site across Don Pedro Road.

However, the proposed project would ultimately result in development of a commercial use which is not associated with transport or use of large quantities of hazardous materials. Therefore the project is not likely to generate or attract hazardous materials amounts that exceed the thresholds for regulated substances or otherwise negatively impact school children. In regard to the siting of the future elementary school identified just north of the project site, the California Department of Education (CDE) establishes standards for school sites pursuant to Education Code Section 17251 and adopts school site regulations, which are contained in the California Code of Regulations, Title 5, commencing with Section 14001. Certain health and safety requirements for school site selection by the regulations, including a potential school site's proximity to airports, high-voltage power transmission lines, railroads, and major roadways. School siting regulations also restrict the presence of toxic and hazardous substances and hazardous facilities and hazardous air emissions within one-quarter mile of a proposed school site.

The Walmart portion of the proposed project will use naturally or integrally colored concrete finishes instead of the more commonly used carpet or vinyl tile finishes. The use of concrete flooring will significantly reduce the use of chemical cleaners, wax and wax strippers and also addresses the environmental concerns associated with the manufacturing and disposal of these materials which commonly contain polyvinyl chloride.

The proposed project is required to comply with federal, state, and local regulations regarding the storage, handling, transport, disposal, and cleanup of hazardous materials. Proposed facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. Federally, the Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to

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control the generation, transportation, treatment, storage, and disposal of hazardous waste. The Hazardous Materials Regulations (HMR) included in the Federal hazmat law govern the transportation of hazardous materials by highway, rail, vessel, and air and address hazardous materials classification, packaging, hazard communication, emergency response information and training. The Federal Motor Carrier Safety Administration (FMCSA) issues regulations concerning highway routing of hazardous materials, hazardous materials endorsements for a commercial driver's license, highway hazardous material safety permits, and financial responsibility requirements for motor carriers of hazardous materials. The Stanislaus County Department of Environmental Resources is the CUPA for Stanislaus County and is responsible for consolidating, coordinating, and making consistent the administrative requirements, permits, inspections, and enforcement activities of state standards regarding the transportation, use, and disposal of hazardous materials in Stanislaus County including the City of Ceres, as discussed under the Regulatory Framework subsection above.

Considering that the proposed project would involve limited quantities of hazardous materials and considering the level of protection afforded by the various requirements, restrictions, and policies enforced by agencies with jurisdiction over hazardous materials on the project site, the release of any such substance is unlikely and the impact is considered **less than significant**.

Mitigation Measures

None required.

Hazardous Materials Sites

Impact 4.7.2 The project site is located near multiple sites and facilities that have been identified as handling or storing hazardous materials. Spills and leaks of hazardous materials have been reported at some of these locations. These materials could pose a hazard to residents in the vicinity as well as to employees and patrons of the proposed project. This impact is **less than significant**.

A search of government hazardous materials databases determined that no reported hazardous materials sites are located on the project site. However, a pole-mounted transformer (associated with the parcel designated as APN 053-013-018) was observed at the south-central boundary of the project site adjacent to Service Road. Electrical transformers and similar equipment may contain polychlorinated biphenyls (PCBs) in hydraulic or dielectric insulating fluids. The federal Toxic Substances Control Act (TSCA) generally prohibited the domestic manufacture of PCBs after 1979; therefore, there is a potential for the dielectric fluid in electrical and hydraulic equipment manufactured prior to that date to contain PCBs (Secor, 2006). Another pole-mounted transformer was observed at the southwest corner of the parcel designated as APN 053-013-017, approximately 150 feet east of the southwest corner of the project site. As this parcel has been neglected, it is doubtful that power is still being provided to the property. A third pole-mounted transformer was observed across Don Pedro Road, north of the northern border of the proposed project. It appears that this transformer provides power to parcel designated as APN 053-012-068. Several pole-mounted transformers were located east of Mitchell Road and did not appear to be associated with the project site. The observed transformers are in good condition with no evidence of releases or staining (Secor, 2006). Turlock Irrigation District (TID) would provide electric service to the project site and is responsible for the operation, maintenance and repair of transformers and electrical facilities within its service area boundaries. PCB content in equipment can only be detected and confirmed by sampling and analysis of the mineral oil coolant within the individual pieces of equipment. TID is subject to EPA

regulations regarding PCB transformers and is required to notify EPA of any PCB related activities or incidences. Therefore, the presence of the transformers does not represent a significant environmental risk to the project site (Secor, 2006).

Several hazardous materials sites were identified in close proximity to the site (see **Table 4.7-1**). The results of the database search were reviewed for reported release sites in the vicinity of the proposed project site that were considered to have a potential to adversely impact the project site. Reported release sites identified in the regulatory agency database search report were evaluated with respect to the nature and extent of a given release, the distance of the reported site from the project site, and the position of a reported release site with respect to known or expected local and/or regional groundwater flow direction (according to the Preliminary Hazards Report, see **Appendix 4.7-2** prepared for the proposed project site, the general topographic gradient of groundwater in the vicinity is in a northwest direction). Generally, reported release sites located within one-quarter mile up gradient, one-eighth mile cross gradient, or adjacent down gradient are considered to have a potential to impact the proposed project site; these sites were further assessed by reviewing agency records and/or interviewing agency personnel. Sites that were listed in the database search report but not identified as a release site (e.g., a site listed as a hazardous waste generator but not as having had a release) and sites that were listed as being "closed" were not considered to have a potential to have impacted the proposed project site.

Based on the above criteria, none of the sites listed in the database search report were considered to have potentially impacted the project site, with the possible exception of a single site.

Northern Refrigeration Transportation, located approximately 0.25 to 0.5 mile to the northeast and up gradient of the project site, is identified on a number of databases that monitor hazardous materials spills and underground storage tanks, including the HAZNET, Cortese, SLIC, HIST UST, and SWEEPS UST databases. In 1999 this facility reportedly experienced a release of diesel fuel from an underground storage tank to the surrounding soil that subsequently contaminated groundwater. According to the County staff managing this site, a remediation plan has been prepared and cleanup and monitoring of the site are currently under way. Although remediation is not complete, the site is not expected to pose any risk to the proposed project as groundwater flows northwest from the contaminated site, away from the project site. Additionally, monitoring well samples taken southwest of the contaminated site (in the direction of the project site) have shown no signs of contamination from the diesel spill (Minami, 2008).

In addition, the Northern Refrigeration Transportation site is listed as a generator of aqueous solutions, which is a solution in which the solvent is water, with less than 10 percent of total organic residues that are reportedly disposed of via transfer station. Aqueous solutions dissolve in water and therefore break down rapidly in the environment. No violations related to the ongoing hazardous material generation and disposal at the site have been reported. Based upon the distance and groundwater gradient, the site is considered to have a low potential to represent an environmental concern to the project site or proposed project (Secor, 2006).

As previously described, a review of the California Statewide Radon Survey indicated that the project site is located in Zone 3, which by EPA standards is considered "low potential," with levels of radon less than 2.0 pCi/L (Secor, 2006).

The relationship of the proposed project to hazardous materials sites is considered a **less than significant** impact.

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Mitigation Measures

None required.

Hazards Associated with Past Agricultural Operations

Impact 4.7.3 The project site has been used for agricultural production in the past. Pesticide application associated with these past operations may have impacted the project site. This impact is **potentially significant**.

The project site and surrounding area have been used extensively for agricultural production in the past and have been subject to repeated pesticide use. From at least 1957 until approximately 1972, the project site was used for agricultural production. Based on a review of aerial photographs from 1957 to 1972, the project site appears to have been used for agricultural uses (alfalfa, row crops). The adjacent properties surrounding the project site also appear to have been used for agriculture (Secor, 2006).

Typical fertilizers and pesticides associated with agricultural operations at that time include but are not limited to ammonium sulfate, herbicides such as Ordram, MCPA, Vaxadram, and Roundup, and manure. In addition, DDT (a pesticide) and other persistent organochlorines may have been used on the project site during agricultural operations. Because the site has been historically used for agricultural operations, residual pesticide contamination may exist in on-site soils as well as in groundwater. Further site review is needed to determine the specific contaminants and the extent and level of pesticides that exist on the project site. The American Society for Testing and Materials (ASTM) International has established standards for acceptable thresholds for pesticide residue in soil. Organized in 1898, ASTM International is one of the largest voluntary standards developing organizations in the world. ASTM International is a not-for-profit organization that provides a forum for the development and publication of voluntary consensus standards for materials, products, systems, and services. As used in ASTM International, a standard is a document that has been developed and established within the consensus principles of the organization (City of Ceres) and which meets the requirements of ASTM International procedures and regulations. Full consensus standards are developed with the participation of all parties who have a stake in the standards' development and/or use. Developers of commercial real estate can satisfy requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) using ASTM standards for environmental site assessments.

The following mitigation is required.

Mitigation Measure

MM 4.7.3 A Phase II Environmental Site Assessment report shall be prepared to determine the extent and exact nature of any pesticide or chemical residues present on the project site. Soils shall be taken from throughout the site to test pesticide contamination (chlorinated pesticides using EPA Test Method 8081 and 8082). If samples reveal concentrations of pesticide residue in excess of acceptable thresholds, actions shall be taken to remediate soil contamination to within ASTM International standards. Such actions could include excavation and disposal of contaminated soils from the site or bioremediation. A qualified Phase II Environmental Assessor shall be retained to develop and carry out a remediation plan, if necessary.

<i>Timing/Implementation:</i>	<i>Prior to issuance of grading permits</i>
<i>Enforcement/Monitoring:</i>	<i>City of Ceres Development Services Department Building Division.</i>

Implementation of mitigation measure **MM 4.7.3** would identify the nature and extent of contamination, if any, on the project site and require its removal or treatment prior to construction activities, thereby eliminating potential exposure of people to hazardous substances. The impacts after mitigation would be **less than significant**.

Lead-Containing Paints

Impact 4.7.4 The existing structures on the project site were constructed prior to implementation of regulations on lead-containing paints (LCPs) and therefore may contain LCPs on internal and external surfaces. These materials could pose a hazard to construction workers and residents in the vicinity as well as to employees and patrons of the proposed project if not properly managed during demolition. This impact is **less than significant**.

Potential lead-containing paints were observed in the abandoned house at the western border of the project site on the parcel designated as APN 053-013-019. The house was reportedly constructed in the 1940s. The presence of lead-containing paint can only be confirmed with the implementation of a sampling and analytical testing program. However, if properly removed by a certified contractor, the observed potential lead-containing paint would not represent a concern to the project site or proposed project.

The house was demolished after the Phase I ESA was completed for the project site. The demolition was carried out by contractors certified for handling and disposing of LCPs, and the materials were properly managed and disposed (Secor 2006). As there are no longer any structures on the site observed to contain potential LCPs, there is no potential for exposure of persons to risks associated with such paints. This impact is **less than significant**.

Mitigation Measure

None required.

Abandonment of Wells, Irrigation Infrastructure, and Septic Systems

Impact 4.7.5 The project site contains several old septic systems, wells for domestic and irrigation purposes as well as abandoned irrigation facilities. If not properly abandoned, these facilities could create a physical hazard. This impact is **potentially significant**.

One water well and four irrigation wells of unknown age were observed to be associated with the parcel designated as APN 053-012-068 during the site visit (northwest portion of the proposed project site). Furthermore, it can be assumed that other wells associated with the three buildings that have recently been demolished potentially exist on the project site. Additionally, an irrigation pipeline belonging to Improvement District 454 runs from east to west at the approximate midpoint of the project site. This pipeline, and any other irrigation facilities that may be discovered on the project site, have been abandoned and may be removed and plugged in accordance with Turlock Irrigation District standards (TID, 2007). If properly abandoned, the wells and irrigation facilities will not represent a concern to the project site or proposed project.

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No evidence of any cesspools or any leach fields and septic tanks other than what would have been associated with homesites were observed during the site visit (Secor, 2006). However, it is reasonable to assume that potential exists for the occurrence of cesspools, leach fields, and/or septic tanks due to the historic rural residential use of the site.

Mitigation Measures

MM 4.7.5a The project applicant shall obtain a permit from the City of Ceres Development Services, Building Division Department for the destruction and closure of all wells on the project site in accordance with Chapter 13.05 of the City's Municipal Code. The project applicant shall destroy all wells in accordance with the conditions of the permit and with the California Water Well Standards contained in Department of Water Resources Bulletins 74-81 and 74-90, prior to project construction.

Timing/Implementation: Prior to issuance of grading permits

Enforcement/Monitoring: City of Ceres Development Services Department – Engineering Division.

MM 4.7.5b The project applicant shall remove and plug all irrigation facilities on the project site to the satisfaction of Turlock Irrigation District standards prior to project construction.

Timing/Implementation: Prior to issuance of grading permits

Enforcement/Monitoring: City of Ceres Development Services Department – Engineering and Planning Divisions, Turlock Irrigation District

MM 4.7.5c Prior to issuance of grading permits, any and all septic tanks on the project site shall be abandoned under permit from the Stanislaus County Department of Environmental Resources.

Timing/Implementation: Prior to issuance of grading permits

Enforcement/Monitoring: Stanislaus County Department of Environmental Resources and City of Ceres Development Services Department – Engineering Division

Implementation of mitigation measures **MM 4.7.5a**, **MM 4.7.5b**, and **MM 4.7.5c** would ensure proper abandonment and destruction of all wells, irrigation infrastructure, and septic tanks prior to construction activities, thereby eliminating potential exposure of people to related physical hazards. This impact after mitigation would be **less than significant**.

Airport Hazards

Impact 4.7.6 Implementation of the proposed project would result in the construction of a regional commercial center and the gathering of people in proximity to an operating airport, potentially resulting in a hazard to people or structures on the ground resulting from an aircraft incident or accident. This is a **less than significant** impact.

As described above, the project site is located within the Modesto City-County Airport Planning Boundary Area 4 and is approximately 2.25 +/- miles south of the airport. The uses proposed for the site, including retail stores and restaurants, are compatible uses within this planning boundary, as the potential for aircraft incidents or accidents in the area is low and large gatherings of people are acceptable. As detailed in the regulatory setting above, the County's Airport Land Use Commission Plan contains several standards for commercial development within Planning Boundary Area 4 related to building orientation, use of non-reflective building materials, soundproofing, lighting, and storage of hazardous materials. For example, the Airport Land Use Commission Plan establishes imaginary surfaces which define safe flying altitudes for aircraft and prevents obstructions to navigation, such as towers, trees, utility poles, etc., from posing hazards to air traffic. The height of towers, trees and other natural or manmade obstructions must remain below the altitude of the imaginary surface. The Airport Land Use Commission Plan further mandates all bulk storage of volatile or flammable liquid be underground and lights for any purpose shall be constructed and used in such a manner as not to create a hazard for pilots or air traffic control. The proposed project is in compliance with these standards.

The City of Ceres also developed airport planning area safety zones and standards for the Modesto City-County Airport as part of the City's General Plan. According to Figure 1-4 in the General Plan, the project site is not located within any airport planning area safety zones. Additionally, the City has created an Airport Overlay Zone as part of the City's Zoning Ordinance to provide for additional property development standards for those areas of the City located within the various overflight zones of the Modesto City-County Airport. The project site has not been designated as an Airport Overlay Zone.

Refer to Section 4.10, Noise, for a full consideration of noise impacts associated with the Modesto City-County Airport. Finally, no electromagnetic transmissions would be generated on the project site and only small amounts of common household hazardous materials would be stored on site. The proposed project is consistent with the applicable standards of the County's Airport Land Use Commission Plan and would result in minimal risk to people and structures on the project site from airport operations. This impact is considered **less than significant**.

Mitigation Measures

None required.

4.7.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

In general, the cumulative setting for hazards associated with the proposed project consists of existing and future uses in the City of Ceres with development as planned under the City of Ceres General Plan Land Use Element. Cumulative impacts associated with hazardous materials and human health risks from increased development may include, but are not limited to, impacts on transportation, air quality, hydrology and water quality, and biological resources. The cumulative impacts associated with these potentially affected resources are analyzed in the applicable sections of this Draft EIR.

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CUMULATIVE IMPACTS AND MITIGATION MEASURES

Risk of Exposure to Hazardous Materials

Impact 4.7.7 Implementation of the proposed project in addition to cumulative development associated with buildout of the General Plan may result in cumulative hazardous risk impacts. This is considered a **less than cumulatively considerable** impact.

Implementation of the proposed project would result in potential short-term impacts during construction activities associated with exposure to hazards such as contaminated soils, abandoned water wells, and an irrigation pipeline on the project site. However, hazards and hazardous materials impacts associated with the proposed project would be site-specific and would not contribute to cumulative hazardous impacts. Cumulative development in the region is not anticipated to result in significant hazards or hazardous materials impacts to the project site.

As described in this section, with proper implementation of mitigation measures incorporated herein, the proposed project would not contribute to an increase in the potential for exposure to hazards associated with soil contamination or the potential risk of upset as a result of current or past land uses. The proposed project will not combine with any planned growth in the area to form a hazards impact greater or more significant than the proposed project impact alone. Therefore, the cumulative hazards impacts are considered **less than cumulatively considerable**.

Mitigation Measures

None required.

REFERENCES

- American Society for Testing and Materials (ASTM) International. Website: *Standards Worldwide*. <http://www.astm.org/FAQ/> (accessed December 18, 2009).
- California Department of Toxic Substances Control. 2009. www.dtsc.ca.gov/ (accessed 2009).
- California Environmental Protection Agency (Cal/EPA). 2009. <http://www.calepa.ca.gov/> (accessed December 18, 2009).
- City of Ceres. 1995. *Mitchell Road Corridor Specific Plan*.
- City of Ceres. 1997. *City of Ceres General Plan Policy Document*.
- City of Ceres. 2003. *City of Ceres Emergency Operations Plan*.
- Colorado Radon Removal. Website: *What is a Pico Curie?* <http://www.colorado-radon-removal.com/Radon-Articles/What-is-a-Pico-Curie.html> (accessed December 17, 2009).
- Education Data Partnership. 2007. *Education Data Partnership Website*. <http://www.ed-data.k12.ca.us/welcome.asp> (accessed November 2007).
- Environmental Data Resources Inc (EDR). 2007. *The EDR Radius Map with GeoCheck: Mitchell Ranch Center Project Site*.
- Minami, Amber. 2008. Hazardous Materials Specialist, Stanislaus County. Personal communication. June 11.
- Secor International Incorporated. 2006. *Phase I Environmental Site Assessment Report*.
- Stanislaus County Airport Land Use Commission (ALUC). 1978 (amended 2004). *Airport Land Use Commission Plan*.
- State Water Resources Control Board. 2008. *GeoTracker*. <http://geotracker.swrcb.ca.gov/> (accessed June 2008).
- Turlock Irrigation District (TID). 2007. Letter from Arie W. Vander Pol, Civil Engineering Technician with Turlock Irrigation District, to Danny Yeung with PMC. September 18.
- United States Environmental Protection Agency (USEPA), Radon. 2009. <http://www.epa.gov/radon/> (accessed July 6, 2009).

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