4.6 HAZARDS AND HAZARDOUS MATERIALS

This section of the Program EIR addresses non-geologic and non-air quality related hazards, such as hazardous material exposure, secondary and emergency access, airport hazards, fire hazards, potential for crime, and risks from road traffic. This section was prepared based on information contained in the *Results of Site History Research and Exploratory Trenching* (Earth Systems Pacific 2011), *Cultural Resource Investigation of the Nipomo Community Park* (Parker & Associates 2002), County planning documents, responses to the NOP of the Program EIR, and discussions with CAL FIRE, the San Luis Obispo Fire Department, and the County Sheriff's Department.

4.6.1 Existing Conditions

4.6.1.1 Hazardous Materials

A hazardous material is defined by the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 CCR §25501). Worker safety and public health are potentially at risk whenever hazardous materials are used or exposed. It is often helpful to distinguish between the "hazard" associated with these materials and the "risk" they pose to human health or the environment. A hazardous material has the potential to cause damage upon accident or incidental exposure. The risk of an event is determined by a combination of the probability of exposure to hazardous materials and the severity of consequences should exposure occur (California Office of Emergency Services [OES] 1989). The likelihood of exposure to a hazardous material coupled with its inherent hazardous properties determines the degree of risk to public health or the environment. To be of high risk, exposure to a hazardous material must be both likely and have negative consequences.

The project site is located within the Nipomo urban area. Based on the results of a cultural resources field study (Parker 2002), and consultation with County staff and local residents, a historic dump site exists within the park. The dump was found to contain primarily ceramic, glass, and metal dating from the 1880s to the 1930s. Additional historical research and subsurface investigation was conducted to define the boundary and nature of deposits within the park (site history research and exploratory trenching) (Earth Systems Pacific 2011; refer to Appendix E).

The earliest reviewed aerial photo is dated 1939; no evidence of dumping is shown in the photo. Areas of dry-farmed agriculture are visible in the northern and southern portions of the park, and Pomeroy Road and West Tefft Street are present. Based on review of a 1949 aerial photograph, ground disturbance is observed within the southeastern corner of the park, along the northwest edge of a loop road, which may indicate the presence of dumping. In 1956, the loop road remains, and ground disturbance is observed on both sides of the road. The 1969 aerial photograph shows additional development within and adjacent to the park, including two baseball fields, an equestrian area, Dana Elementary School, and scattered residential development. The ground surface appears to still be disturbed in the southeast corner of the park; the loop road is no longer observed and numerous trees have been planted in this area. By 1978, additional park improvements include a third baseball field and tennis courts, and by 1989 a fourth baseball field and a network of footpaths and trails are evident. No indications of dumping are visible.

Based on a review of historic topographic maps, the 1922 and 1952 maps show a closed topographic contour indicating a basin-like depression, just west of the West Tefft Street and Pomeroy Road intersection, and similar depressions are shown elsewhere in the area north and southeast of the park. These areas are typical topographic features in a stabilized sand dune environment, and in several locations outside the park have been found to contain buried debris and waste.

State and County records indicate the presence of a landfill site known as the Old Nipomo Dump, reportedly located northeast of the library. The library was constructed in 1996, and soil vapor sampling was conducted by the California Integrated Waste Management Board (CIWMB). Low combustible gas concentrations (a maximum of 900 parts per million by volume [ppmv]) were found at several locations in the northeastern part of the library site; the highest concentrations were found in a planter area that had been recently mulched and fertilized. The CIWMB requested the County conduct additional analysis to evaluate soil conditions. Soil gas samples were collected from a depth of eight feet below grade at two locations at the rear of the library, closest to the former disposal area identified by the CIWMB. Field readings for methane ranged from 3 to 6 ppmv. Soil gas samples were collected to test for concentrations of volatile compounds that could present health risks to occupants of the building.

Low levels of several volatile compounds were detected in the vapor samples collected in June 1996; the concentrations were several orders of magnitude below regulatory thresholds established for these compounds and did not present a health risk. As a precautionary measure, the CIWMB recommended that a landfill gas monitoring system be installed for the library to provide ample warning in the event combustible gas levels in the building rise. Based on consultation with the California Department of Resources Recycling and Recovery (CalRecycle) (formerly CIWMB), no detections of landfill gas have been logged since 2005. Based on County staff interviews, surficial dumping has occurred at the park, and items are dealt with at that time.

Based on field observation conducted November 18, 2010, small fragments of glass and scattered ceramic and gravel fragments were observed. On February 7, 2011, subsurface exploration consisting of five excavated trenches was conducted to observe the nature of the disposed materials, and to make a preliminary evaluation of their potential to contain volatile compounds that could impact future development of the park. Encountered debris included glass fragments, brick, metal, a metal cooking pot, tea kettle, broken and intact glass bottles, concrete, and wood. Volatile organic vapors were screened in the field, and no measurable organic vapors were detected. No other indications (e.g., odors, discoloration) of organic compound (e.g., hydrocarbon) contamination were noted in the trenches.

Two areas of past dumping were identified in the study and field analysis. The location of the older dump site is not published to prevent excavation and exploration. This site is less than 5 feet in depth, and appears to have not been used after 1939. Observed materials appear to be generally non-organic; therefore, the likelihood of landfill gas is low.

The more recent dump site is on the north side of West Tefft Street, approximately 200 feet west of Pomeroy Road, and extends several hundred feet to the southwest, in the vicinity of the existing dog park, picnic area, and unimproved area between the dog park and the library (refer to Appendix E). This site contains debris to a depth of at least 8 feet, and appears to have been in operation from 1939 to 1969. Observed materials appear to be generally non-organic, and are unlikely to generate significant amounts of landfill gas. The results of soil gas testing and monitoring near the library indicate that the dump is not generating significant amounts of combustible gases.

4.6.1.2 Secondary and Emergency Access and Road Traffic Hazards

The park is currently accessible by vehicles from West Tefft Street and Pomeroy Road. Internal roads include a loop through the park, within the developed southeastern corner. The current park entrances do not align with street intersections on the opposite side of the road (Orchard Road and Juniper Street). These intersections are not signalized.

4.6.1.3 Airport Hazards

The project site is not located within an Airport Review Area, or within 2 miles of a private or public airport.

4.6.1.4 Fire Hazards

The project site is located within a high fire hazard zone, and within the State Responsibility Area for wildland fires. CAL FIRE has identified the project location as lying within the five-minute emergency response time area. The Mesa Meadows area of the project site is further identified as a Wildland Area that may contain substantial forest fire risks and hazards on the County's Wildland Fire Hazard Area Map. The Safety Element of the County General Plan describes the Nipomo area as primarily developed with low-density residential areas with interspersed supporting commercial uses. The Element notes that the fire response needs of Nipomo are increased because of the presence of various wooded and urban area interfaces. The Safety Element uses the term "urban/wildland interface" to describe an area where urban development has been located in proximity to open space, or "wildland" areas. The most common type of urban/wildland interface results when urban development occurs on the fringe of existing urban areas, adjacent to wildland vegetation. The Element specifically identifies Nipomo as an area with intermixed urban/wildland interface areas. This represents a higher risk of fire than other unincorporated communities, and the areas west of Nipomo have historically experienced a high number of smaller fires (50 to 300 acres in size).

The project was referred to CAL FIRE for review, and CAL FIRE did not identify any significant fire hazard concerns. However, the department recommended preparation of a Fire Prevention Plan for the park, including vegetation fuel management, no smoking areas, an evacuation plan, and noted emergency access and fire hydrant locations (personal communication, Robert Lewin, CAL FIRE; September 27, 2005).

Please refer to Section 4.9, Public Services and Utilities, for further discussion of fire hazards and risks within the project area.

4.6.1.5 Potential for Crime

There are 358 total law enforcement employees in the county, including 147 officers and 211 civilians (U.S. Department of Justice [USDOJ], 2011). The County Sheriff's Department currently provides law enforcement services in the unincorporated area of San Luis Obispo County, including the Nipomo area. San Luis Obispo County encompasses 3,615 square miles, of which only 66 miles are incorporated and served by City police departments. The Department's South Patrol Station is located at 1681 Front Street, in Oceano. The South Station opened in October 2002 and serves the communities of Oceano, Nipomo, Huasna, rural Arroyo Grande, New Cuyama, and Lopez Lake. Private companies in Arroyo Grande and Santa Maria also provide ambulance service to the Nipomo area. Currently, the Sheriff's Department is understaffed and, with the cumulative impact of approved development, response times most likely will increase in the project area. In commenting on the proposed project, the County Sheriff's Department reported that current average response times to the

project area generally range between five and 30 minutes, depending upon the nature of the call and the location of patrol vehicles at the time of the call.

Based on the 2010 Crime Rate Index for Nipomo, the index for all crime is lower than the state and federal average crime risk. The index score for an area is compared to the national average (100 index score); the total index score for Nipomo is 13, compared to California, which is 97 (CLRChoice, Inc.; 2010). The number of offenses known to law enforcement, documented within the county in 2010, is presented below.

Table 4.6-1. Offenses Known to Law Enforcement – San Luis Obispo County

Type of Offense	Number of Documented Incidents
Violent Crime	241
Murder / manslaughter	6
Rape	18
Robbery	18
Assault	199
Property	1,295
Burglary	437
Larceny-Theft	853
Vehicle-Theft	5
Arson	5

Source: USDOJ, 2011

The Sheriff's Department recommended implementation of several safety measures in conjunction with development of additional park facilities, including the "Crime Prevention through Environmental Design" and lighting and lighting system guidelines, which have been proven to prevent and reduce crime.

Please refer to Section 4.9, Public Services and Utilities, for further discussion of the potential for additional crime within the project area.

4.6.2 Regulatory Setting

4.6.2.1 Hazardous Materials

Federal Policies and Regulations

The EPA is the Federal agency responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials. In addition, the EPA provides oversight and supervision for some site investigation/remediation projects. For disposal of certain hazardous wastes, the EPA has developed land disposal restrictions and treatment standards. Legislation includes the Resources Conservation and Recovery Act of 1986

(RCRA), the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The Federal regulations are primarily codified in CFR Title 40. These laws and regulations include specific requirements for facilities that handle, generate, use, store, treat, transport, and/or dispose of hazardous materials, as well as for investigation and cleanup of contaminated property.

State Policies and Regulations

California regulations are equal to or more stringent than federal regulations. EPA has granted the State of California primary oversight responsibility to administer and enforce hazardous waste management programs. State regulations require planning and management to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. In California, the DTSC, a branch of CalEPA, works in conjunction with or in lieu of the EPA to enforce and implement specific hazardous materials laws and regulations. California has enacted its own legislation pertaining to the management of hazardous materials. The California legislation for which the DTSC has primary enforcement authority are the Hazardous Waste Control Act, a statute that primarily regulates the management of hazardous waste, and the Hazardous Substance Account Act, a statute that governs the cleanup of contaminated property and is modeled after CERCLA. CCR Title 22, enacted pursuant to the Hazardous Waste Control Act, establishes criteria for identifying hazardous wastes and presents hazardous waste management requirements. These regulations are reprinted in CCR Title 26, Toxics. The DTSC acts as the Lead Agency for some soil and groundwater cleanup projects. For sites where water quality is potentially endangered, the DTSC consults with the RWQCB on technical and regulatory issues. Several key laws pertaining to hazardous wastes are discussed below.

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California OES. The office coordinates the responses of other agencies, including EPA, the California Highway Patrol (CHP), RWQCBs, air quality management districts, and County disaster response offices.

Local Policies and Regulations

Pursuant to State law and local ordinance, the Environmental Health Services division of the County Health Agency conducts inspections to ensure proper handling, storage, and disposal of hazardous materials and proper remediation of contaminated sites. In addition, information is collected under the Business Plan Act is collected and certified by the County Environmental Health Services for emergency response purposes.

The County OES is an emergency management agency with responsibilities that include coordination of emergency and disaster preparedness planning, response, and recovery with and between local, state, and federal agencies. To address the potential for an uncontrolled hazardous material release in San Luis Obispo County, and to ensure that adequate resources are available to respond to a significant hazardous materials release, the County OES has prepared a Hazardous Materials Emergency Response Plan (updated 2003).

The County OES has also adopted an Emergency Operations Plan (revised 2008), an extension of the State Emergency Plan, which addresses the government's responsibility to preserve life, property, and the environment by anticipating and identifying events that would

require emergency management and response. The plan includes the following potential hazards and threats: earthquakes, hazardous materials, storm damage and flooding, dam or levee failure, nuclear power plant, fire, transportation emergencies, tsunami, aircraft incidents, civil disturbance, and terrorism.

4.6.2.2 Secondary and Emergency Access and Road Traffic Hazards

CAL FIRE Access Road Standards (August 2011) include standards for residential and commercial projects. Standard requirements include, but are not limited to, an all-weather surface, 24-foot width, 13-foot 6-inch vertical clearance, and no parking within the 10-foot wide through lane (each way). In addition to compliance and consistency with the 2010 California Fire Code, these standards are in place to ensure that in the event of a fire, persons can exit and emergency personnel and fire trucks can enter the location. Vegetative fuel modification is required within ten feet of the access road. Dead end road lengths are also established by these published standards.

Road traffic hazards are regulated by the County Department of Public Works, through consistency review with the Road Improvement Standards. These standards include safe sight distance at intersections, road widths, road surfacing requirements, shoulders, striping, and stormwater management.

4.6.2.3 Wildland Fire Hazards

The California PRC defines hazardous fire areas, restrictions on fire use, and minimum fire protection requirements for the state. The Code is administered by CAL FIRE, and sets forth provisions for the reduction of fire hazards and utilization of firebreaks around buildings, removal all flammable vegetation or combustible growth around buildings or electrical transmission poles and towers, and additional provisions under extra-hazardous conditions. Firebreak clearance is also required around electrical transmission poles and towers.

In addition to the PRC, several local ordinances direct fire prevention activities within San Luis Obispo County. Sections 22.50.010 through 22.50.040 of the County LUO is devoted entirely to Fire Safety and includes standards pertaining to the preparation and review of fire safety plans and application of fire safety standards. In addition, the Safety Element of the County General Plan includes goals, policies, implementation measures, and standards for pre-fire management, reduction of the threat of fires, readiness and response to fires, and loss prevention.

4.6.2.4 Crime

The County Sheriff's Department currently provides law enforcement services in the unincorporated area of San Luis Obispo County, including the Nipomo area. Upon review of the project, the Sheriff's Department recommended implementation of several safety measures in conjunction with development of additional park facilities, including the "Crime Prevention through Environmental Design" and lighting and lighting system guidelines, which have been proven to prevent and reduce crime.

4.6.3 Thresholds of Significance

As defined by the County, in accordance with CEQA Guidelines Appendix G, hazards and hazardous materials impacts would be considered significant if the project would:

1. Result in a risk of explosion or release of hazardous substances (e.g., oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances;

2. Interfere with an emergency response or evacuation plan;

3. Expose people to safety risk associated with airport flight pattern;

4. Increase fire hazard risk or expose people or structures to high fire hazard conditions; or,

5. Create any other health hazard or potential hazard.

4.6.4 Impact Assessment and Methodology

The impact analysis focuses on potential health risks associated with the proposed project, particularly from on-site and surrounding land uses where the potential for hazardous material release could be encountered and effect the project site and surrounding areas. Methodology for assessing the proposed project includes a review of existing regulatory plans and policies to determine the proposed project's consistency with these documents, as well as reliance upon the research and exploratory testing conducted by Earth Systems Pacific (2011).

Potential hazards and public safety issues associated with development of the Master Plan include increased risk for fire hazard, adequate secondary and emergency access, potential for crime, risks from road traffic, and exposure due to a known historic dump onsite. These impacts are discussed below.

4.6.5 Project-specific Impacts and Mitigation Measures

4.6.5.1 Risk of Explosion, Release of, or Exposure to Hazardous Substances

Transport, Use, or Disposal of Hazardous Materials

During construction of elements included in the Master Plan, the use of large equipment would require fuels and oils. In the event of a leak or spill, the subsequent discharge would expose persons to these materials. Implementation of standard BMPs would minimize the potential for accidental exposure.

Operation of the project would include the continued use of regulated chemicals, fuels, and oils for the continued operation and maintenance. All materials would be transported, stored, and used according to existing regulations.

HM Impact 1 **Use of large equipment in close proximity to the public and sensitive receptors may result in exposure to hazardous materials, including oils and fuel.**

HM/mm-1 *Prior to initiation of construction, the General Services Agency shall ensure that all required BMPs are shown on applicable grading or construction plans. In addition, the General Services Agency shall designate personnel to insure compliance and monitor the effectiveness of the required BMPs, which shall include:*

a. *Prior to construction, staging and refueling areas shall be designated on applicable plans.*

b. *Equipment refueling shall be done in non-sensitive areas at least 100 feet from any residence, school, and library, and such that any spills can be easily and quickly contained and cleaned up. Any necessary remedial work shall be done immediately to avoid surface or ground water contamination.*

c. *Prior to commencement of grading/construction activities, the County shall ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.*

Residual Impact

The use of large equipment presents a potential risk related to hazardous material leaks or spills. Implementation of mitigation, including BMPs, would reduce the potential impact to a *less than significant level* (Class II).

Release of Hazardous Materials into the Environment

Field monitoring of the dumps indicate that volatile organic vapors were not present in the trenched areas. Landfill gas monitoring at the site of the existing library did not detect landfill gas. These results and the nature of the encountered debris indicate that volatile organic compounds are not likely to affect proposed development; however, they could contain non-volatile contaminants such as metals, long-chain hydrocarbons, or asbestos that could present a health or disposal concern if they are disturbed. Due to the nature of undocumented dumping, conditions throughout the dump area may not be uniform. Proposed improvements in this area would include the library expansion, skatepark or community pool, access road, and associated parking. Site specific testing would be necessary prior to development of these structures and improvements. Further testing and remediation would be implemented pursuant to existing regulations, and in compliance with CalRecycle and the CCR.

HM Impact 2 **Disturbance of the former (more recent) dump site along West Tefft Street may result in the disturbance or exposure of non-volatile hazardous materials including metals, long-chain hydrocarbons, or asbestos.**

HM/mm-2 *Prior to initiation of ground disturbance or construction within 400 feet of the edge of West Tefft Street, within the Nipomo Community Park, the General Services Agency shall ensure compliance with the following measures:*

a. *Upon identification of a structure footprint or area of disturbance, exploratory trenches or borings shall be excavated to determine the presence or absence of dumped materials. Samples of the debris and soil shall be collected for laboratory analysis to evaluate whether the materials present any health or environmental concerns.*

b. *Soil gas testing shall be conducted in and around any proposed building footprint to determine whether landfill gas is present, and*

whether it could accumulate in the finished building. Depending on the results of the soil gas testing, it may be necessary to incorporate design features that will prevent gas accumulation. Measures may include controlling the gas pressure (i.e., passive or active venting to reduce gas concentrations under the structure, venting around the perimeter of the structure, and crawl- space venting); eliminating available entry pathways or leaks (i.e., improving plumbing and caulking to reduce cracks and gaps will reduce entry pathways, install a low-permeability liner around the underground portion of the structure); and, installation of a landfill gas monitoring system.

c. *Prior to removal or relocation, soil and debris shall be tested for contaminants of potential concern to identify disposal or placement restrictions. Testing shall include analysis for metals, long-chain (semi-volatile) hydrocarbons, and semi-volatile organic compounds. Additional testing may be required depending on the specific nature of the materials to be removed from the site.*

Residual Impact

The presence of potentially hazardous materials has been documented during subsurface testing. Compliance with existing state regulations and implementation of this mitigation measure would include additional testing and remediation, which would reduce impacts associated with subsurface hazardous materials exposure to a *less than significant level* (Class II).

Exposure to Hazardous Emissions

The NCP is located immediately adjacent to the Dana Elementary School. As noted above, potential hazards include the use of large equipment, the potential for accidental exposure to construction-related oils and fuels, and the disturbance of soil and debris within a known dump site. The dump site is located to the immediate north of the school property, and as noted above, landfill gas has not been detected in the existing library structure. Based on implementation of BMPs, further soil testing and remediation (if required) pursuant to existing regulations, and long-term monitoring of interior gas levels within structures, the potential impacts to the school site would be less than significant, and no additional mitigation is required.

Hazardous Materials Sites

Section 65962.5(a)(1) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: ....(1) [a]ll hazardous waste facilities subject to corrective action pursuant to §25187.5 of the Health and Safety Code ("HSC")." The hazardous waste facilities identified in HSC §25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC §25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is a very small and specific subgroup of facilities and they are not separately posted on the DTSC or CalEPA's website. No facilities within or in the vicinity of the project site are included on the list.

4.6.5.2 Emergency Response or Emergency Evacuation Plan

Based on review of the County's Emergency Operations Plan (2008), and associated mitigation and response plans, US 101 is an emergency evacuation route. Implementation of the Master Plan would not impair implementation of any response or mitigation plan, and would not interfere with emergency evacuation, because no element would block or emergency responders or the public. No significant impact would occur.

4.6.5.3 Risk Associated with Airport Flight Pattern

The project site is not located with an airport land use plan or within 2 miles of a public or private airport or airstrip; therefore, no impact would occur.

4.6.5.4 Fire Hazard Risk

The project site is within a high fire hazard zone, and within the State Responsibility Area for wildland fires. While the site is not located adjacent to wildlands, the ridge traversing the park and slope adjacent to Osage Road supports oak woodland. During preliminary scoping, the proposed project was referred to CAL FIRE for review. CAL FIRE did not identify any significant fire hazard concerns; however, the department recommended preparation of a Fire Prevention Plan for the park, including vegetation fuel management, no smoking areas, and evacuation plan, and noted emergency access and fire hydrant locations (personal communication, Robert Lewin, CAL FIRE; September 27, 2005). All vegetative fuel management would comply with current guidelines and regulations (i.e., 100-foot buffer from all structures). Proposed on and off-site transportation and circulation improvements would facilitate access into the park in the event of a fire or similar emergency, and would also facilitate exit from the park. Existing and proposed access points including Camino Caballo, Osage Street, Pomeroy Road, and West Tefft Street would provide numerous options for vehicles, pedestrians, equestrians, and bicyclists. Based on the design of the park, proposed access improvements, and compliance with the California Fire Code, the project would not result in a significant impact related to fire risk.

4.6.6 Cumulative Impacts

Potential hazards in this EIR are location-specific to the extent that they may result in significant impacts on the localized environment, but they are not "cumulative" in the sense normally applied in CEQA documents. Further, the impacts identified in this section are associated with relatively short-term construction activities and the continued monitoring of the known dump site, and anticipated testing and remediation activities at that site will reduce potential exposure to hazards during construction and use of future structures and park facilities. The mitigation measures that have been identified for the proposed project would apply cumulatively as well. Cumulative impacts would be *less than significant* (Class III). No additional mitigation is required.