

4.7 PUBLIC HEALTH AND HAZARDS

This section addresses potential impacts related to hazardous materials and hazards associated with historic and current use of the project sites and surrounding areas. This section is based in part on a review of the Phase I Environmental Site Assessments (ESA) prepared for a property adjacent to Site 4 in 2004 and a Phase II ESA prepared for Site 2 in 2007. The potential for impacts on fire personnel and other emergency responders is addressed in Section 4.5, Public Services and Utilities, of this Draft EIR. The impacts of airborne toxics risks are discussed in Section 4.3, Air Quality, of this Draft EIR.

4.7.1 ENVIRONMENTAL SETTING

LAND USES AND CONDITIONS ON THE PROJECT SITES

Site 4

A Phase I ESA was prepared in 2004 for the parcel located directly to the west of Site 4 (10250 Iron Rock Way), which is currently occupied by the City Elk Grove's Corporation Yard (Kleinfelder 2004). The purpose of the ESA was to determine the environmental conditions (i.e., hazardous substances) associated with the subject property's past and current use. A recognized environmental condition is defined as "the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property."

In determining the environmental conditions of the property, the ESA also evaluated the environmental conditions of surrounding properties. This included a database search of contaminated properties within the vicinity. Site 4 was not identified as a contaminated property within this ESA. The ESA also included historical photographs of the subject property and surrounding properties, including Site 4. Based on a review of these aerial photographs, no historical development was evident on Site 4 and there was no indication that Site 4 ever included any uses that would contribute to contamination of the site.

Site 2

A Phase II ESA was prepared for Site 2 in 2007 (Taber 2007a). The City of Elk Grove requested the preparation of a Phase II Environmental Site Assessment to identify evidence of existing hazardous materials conditions that might affect the proposed Grant Line Road Widening Project at the location of Site 2. The purpose of the report was to identify the presence of hazardous materials or petroleum products on the proposed right-of-way acquisition (take area) under conditions that could substantially influence the feasibility or cost of the project and to identify the level of soil contamination at the remainder of the site (non-take area). The limits of the assessment included the entire 21-acre site.

The 21-acre site includes seven acres that are currently being used by Super Pallet, a wood pallet recycling business. This area was previously used as a truck terminal. The terminal facility consisted of a truck terminal building, a maintenance shop, diesel fuel storage and dispenser system and several other small structures. Most of the terminal facility was surrounded by asphalt paving.

The diesel fuel storage and dispenser system consisted of a 225,000-gallon diesel aboveground storage tank (AST), two 20,000-gallon and two 10,000-gallon diesel underground storage tanks (UST) and associated piping, valve and pump sheds, and a dispenser island. The diesel product was conveyed from the AST by aboveground piping, which connected to valves and meters located in the valve shed and then was conveyed, via underground piping, to the four USTs. The fuel was then pumped into the trucks from the dispenser island and from several remote pumps in the immediate vicinity of the four USTs. During the period May through June 1997, all four of the USTs as well as the foundation for the former AST, were removed.

The assessment included a review of regulatory records for the site at both the Sacramento County Environmental Management Department and the Central Valley Regional Water Quality Control Board (RWQCB). Records were reviewed to determine the nature and potential extent of contamination at the site. A site visit was also conducted to verify the locations of identified and potential contaminated areas. The site visit was used to lay out the locations for soil sampling. Soil samples were subsequently collected at the site. Five soil samples were collected at a depth three feet below the ground surface along the portion of the property fronting Grant Line Road. Twelve soil samples were collected in the non-take area at various depths in the vicinity of former above ground and underground tanks as well as a former maintenance shop and waste oil tank.

Results of the site assessment indicate that concentrations of volatile and semi-volatile compounds in site soil within the take area along Grant Line Road and the maintenance shop area were below detection limits. Detected metals concentrations appeared to be within the ranges expected for background levels. The two soil borings drilled in the vicinity of the former 225,000-gallon above ground diesel tank did not identify any impacts to subsurface soils.

The concentrations of petroleum hydrocarbons identified during the investigation in the UST area were generally consistent with those identified in previous investigations at the site. Concentrations of constituents of concern within the soils at the UST area indicated the bulk of the contamination at this location was associated with the southern ends of the former 20,000-gallon diesel USTs. In the central portion of the former diesel UST location, concentrations of up to 11,000 milligrams per kilogram (mg/kg) of Total Petroleum Hydrocarbons, as Diesel (TPH-D) were found in soils at a depth of 30 feet below grade. Soil impacts were not identified below 40 feet below grade in the current investigation; however, previous investigations identified TPH-D contamination to a depth of 60 feet below grade. A preliminary analysis indicated that, based on the identified contaminant concentrations and soil types, there is a potential for the contaminants to degrade groundwater over time. According the Phase II report, the results suggest that active remediation at the UST location would likely be required to reduce current risk levels to those acceptable for regulatory closure.

FIRE PROTECTION AND EMERGENCY RESPONSE SERVICES

The Operations Division of the Cosumnes Community Services District (CSD) Fire Department responds to hazardous materials incidents within the City of Elk Grove. The Operations Division has more than 150 sworn personnel with units devoted to fire suppression, training, and emergency medical services. The division staffs eight engine companies, one ladder truck company, six ambulances, and a command vehicle each day on a 24-hour basis. Additionally, the Operations division maintains eight grass engines and other specialty apparatus, including one heavy foam unit, a heavy rescue engine, a technical rescue trailer, a mass decontamination trailer, a mass casualty incident trailer, and a swift water rescue boat (www.yourcsd.com, accessed March 10, 2009).

WASTE STREAM COMPOSITION

Although municipal and commercial wastes consist primarily of innocuous constituents, potentially hazardous wastes could be present in the municipal solid waste (MSW) transported to the proposed transfer station or collected at the household hazardous waste (HHW) facility. Typical materials collected at a HHW facility include petroleum hydrocarbons (motor oils, transmission fluids, etc.), paints, solvents, cleaning materials, corrosives, used batteries, pesticides, and herbicides. Most of these liquid materials are limited to five gallons or less, which is the regulatory limit for private transportation. Other types of wastes that could be found in mixed wastes consist mostly of containers with small amounts of residual or unused liquids such as dilute cleaning chemicals (ammonia and bleach); corrosives (hydrogen peroxide, sodium hydroxide); irritants (lime, toluene, sodium bisulfate, sodium hydroxide); flammables/combustibles (turpentine); oxidizers (hydrogen peroxide); compressed gas (propane); poisons (pesticides, herbicides, fungicides); and reactive materials (incompatibles such as acids and bases, hydrides and water).

The waste stream also could contain potentially infectious waste or biological hazards. These could include contaminated materials (bedding, clothing, diapers) and other items such as sharps (syringes, scalpels, broken glassware) that could expose individuals to pathogenic or infectious disease-causing organisms. Although these types of waste are generally considered medical wastes regulated under the California Health and Safety Code (HSC) Chapter 6.1, the residential use and disposal of such items in the MSW remains possible.

HAZARDOUS OR TOXIC CHEMICALS

A toxic chemical is one that, in relatively small quantities, is capable of producing detrimental effects in the human body. The effects may be temporary or permanent, immediate or delayed, mild or severe. The factors that influence toxicity include the following:

- ▶ Chemical factors – toxic potency (dose to effect relationship), physical characteristics (liquid, solid, gas, particle size), and chemical properties (volatility, solubility);
- ▶ Exposure factors – chemical concentrations and duration of exposure (dose); route of exposure; type or frequency of exposure, such as an exposure to a high concentration in a short time period (acute exposure) or to low concentrations over an extended period of time (chronic exposure);
- ▶ Environmental factors – carrier or contaminated medium (air, water, soil); presence of additional chemical contaminants; wind speed, temperature, air pressure; and
- ▶ Receptor factors – exposed individual's age, sex, health status.

The route of exposure to toxic substances determines how much is absorbed and which organs are exposed to the highest concentrations. The three main routes of exposure through which a toxic chemical or substance may enter the body are inhalation, absorption, and ingestion. The most common route of exposure is the respiratory system. Chemicals entering the respiratory system can cause local effects (irritation, edema, fibrosis), as well as systemic effects as the chemicals are absorbed from the air to the lungs and into the bloodstream. Some chemicals can be absorbed through the skin or cause local effects such as irritation and destruction of tissue as well as systemic effects. Ingestion, whether through direct intake or hand to mouth activity (contact with chemical on hands, food, drink or cigarettes), is generally not as efficient or as significant an exposure route as inhalation or absorption.

BIOLOGICAL HAZARDS

Examples of potentially infectious waste or biological hazards include contaminated materials or other items (e.g., sharp items). If these contaminated wastes are present, they could expose individuals to pathogenic organisms through inhalation or parenterally (i.e., through a cut or puncture in the skin) during their handling. Potentially infectious materials include items contaminated with human body fluids (blood, semen, vaginal secretions) or other body fluids (8 CCR §5193[b]).

Bioaerosols are suspended airborne particles containing microorganisms (e.g., bacteria, fungus, molds, etc.). The predominant mode of human exposure from bioaerosols is through the air, which can result in a wide range of potential adverse effects, including respiratory infections, and gastrointestinal or skin disorders.

VECTORS AND PESTS

A traditional source of concern with solid waste management facilities, including transfer stations and material recovery facilities, is the attraction the waste may have for insects, rodents, and other potential scavengers that could be a source of nuisance and/or disease transmission (collectively called vectors). Vectors include any insect or other arthropod, rodent, or other animal capable of transmitting causative agents of human disease. Insects and rodents are considered pests commonly attracted to or associated with MSW.

Invertebrates such as synanthropic flies (domestic flies) are nuisances and possible vectors in California. Flies are potential vectors transmitting diseases through indirect transmission to objects, which may then serve as an intermediate vehicle and as a potential human health hazard.

The two common rodents associated with refuse are rats and mice; both are omnivorous. Rats will eat almost anything, preferring refuse, meat, fish, and cereal grains. Mice prefer cereal grains. Rats are generally known as intermediate carriers of vectors, particularly fleas that carry a variety of infectious diseases afflicting man. Infectious agents may be transmitted mechanically through contact with rat excrement. However, rats can also infect humans through contaminated saliva injected by a bite or intermediate vectors (i.e., fleas). Similar concerns arise with mice, which may be carriers of infectious agents through excreta or through invertebrates such as mites.

FACILITIES THAT STORE, USE OR MANUFACTURE HAZARDOUS MATERIALS

The potential project sites are located in an industrial area and a variety of facilities that store, use, or manufacture hazardous materials are located near these sites. The two largest facilities are Suburban Propane, which stores propane in large aboveground tanks, and Georgia-Pacific Resins, which manufactures industrial coatings from chemicals such as formalin and formaldehyde. Both facilities are located within the city limits of Elk Grove and are surrounded by industrial, office, commercial, residential, and agricultural land uses.

Suburban Propane Facility

The Suburban Propane facility is located at 10450 Grant Line Road, between Site 4 and Site 2. The facility, one of the largest aboveground propane storage facilities in the United States, receives pressurized liquid propane at ambient temperatures from tanker trucks and railroad cars and loads ambient-temperature propane for transport offsite. The facility stores both ambient-temperature and refrigerated liquid propane. On average, approximately 120,000 gallons of propane are handled at the facility each day, 50% by tanker truck and 50% by railroad car (EDAW 2003).

The major equipment at the facility consists of four 60,000-gallon storage tanks (known as “bullet tanks”) for pressurized, ambient-temperature propane; two 12-million-gallon refrigerated, low-pressure storage tanks; loading/unloading stations for tanker trucks and railroad cars; a propane refrigeration system; a flare; and safety systems such as a water spray system in the railroad car and truck loading area. The bullet tanks (approximately 12 feet in diameter and 91 feet long) are placed horizontally on concrete supports about 5 feet above the ground. The large storage tanks for refrigerated propane are approximately 146 feet in diameter and 122 feet tall. The bullet tanks are protected from overpressure (the greater-than-normal pressure that accompanies an explosion) by multiple pressure relief valves on the top of each tank. A water spray system protects each bullet tank from excessive heating in the event of fire exposure. The refrigerated storage tanks are equipped with pressure and liquid-level gauges, liquid overflow vents, pressure relief valves, vacuum breakers, and a vent line to the facility flare (EDAW 2003).

The loading/unloading stations for tanker trucks and railroad cars are equipped with water deluge systems. In the event of a fire in these areas, the deluge systems should help prevent physical failure of tanker trucks and railroad cars as a result of excessive heat and internal pressure (EDAW 2003).

Georgia-Pacific Resins Facility

The Georgia-Pacific Resins facility is located at 10399 East Stockton Boulevard, to the southwest of Site 4 and northwest of Site 2. The facility produces coating resins such as industrial coatings; air-dry varnishes; and specialty coatings for drums, pails, and food cans. The manufacturing process involves quantities of formalin, formaldehyde, formic acid, and ammonium hydroxide. The largest quantity of formalin, a toxic gas that is a mixture of formaldehyde and water, at the facility is contained in Tank 105, an insulated AST constructed of welded steel with a capacity of 40,000 gallons. Formalin within the tank is heated to maintain its temperature at

about 140°F. Tank 105 is surrounded by a concrete containment structure that is large enough to hold the entire contents of the tank, a “pool area” of approximately 11,120 square feet. The material stored at the Georgia-Pacific Resins facility that would pose the largest problem following a large accidental release is formaldehyde, a colorless gas that can be toxic at certain levels by inhalation, ingestion, or physical contact (EDAW 2003).

Risk Analysis for the Suburban Propane and Georgia-Pacific Resins Facilities

Quest Consultants performed a Quantitative Risk Analysis (QRA) in 2003 of Suburban Propane’s propane terminal near Elk Grove and a formalin storage tank at the neighboring Georgia-Pacific Resins facility (Quest Consultants 2003). The objective of the study was to compute the level of risk posed to members of the public in the vicinity of the two facilities, including the two potential project sites, by potential releases of flammable liquids from the propane terminal and toxic liquids from the formalin storage tank (EDAW 2003).

For the 2003 Quest report, Quest Consultants conducted a literature review in order to identify all possible accident scenarios for the Suburban Propane and Georgia-Pacific Resins facilities. These studies analyzed the hazard types, incidence scenarios, worst-case effects and the extent of those effects, specific conditions associated with worst-case effects, and approximate probabilities associated with each scenario.

Offsite hazards to human health and property associated with incidents at the Suburban Propane and Georgia-Pacific facilities fall into five main categories (described below and discussed in more detail in the 2003 Quest report):

- ▶ Vapor cloud explosion from a release at Suburban Propane that generates an overpressure
- ▶ Thermal radiation (radiant heat), such as a pool fire
- ▶ Flash fire
- ▶ Shrapnel from a sudden, catastrophic failure of a pressure vessel
- ▶ Formaldehyde exposure from a formalin spill

4.7.2 REGULATORY SETTING

FEDERAL

U.S. Environmental Protection Agency

EPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained mainly in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR (see “Definitions of Terms” above), are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws:

- ▶ Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S. Code [USC] 6901 et seq.);
- ▶ Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.); and
- ▶ Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99–499).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. EPA provides oversight and supervision for federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Hazardous Substances

Hazardous substances are a subclass of hazardous materials. They are regulated under CERCLA and SARA (and the federal Clean Water Act for water resources). Under CERCLA, EPA has authority to seek the parties responsible for releases of hazardous substances and ensure their cooperation in site remediation. CERCLA also provides federal funding (the “Superfund”) for remediation. SARA Title III, the Emergency Planning and Community Right-to-Know Act, requires companies to declare potential toxic hazards to ensure that local communities can plan for chemical emergencies. EPA maintains a National Priority List of uncontrolled or abandoned hazardous waste sites identified for priority remediation under the Superfund program. EPA also maintains the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, which contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation.

Hazardous Wastes

Hazardous wastes, although included in the definition of hazardous materials and hazardous substances, are regulated separately under RCRA. A waste can legally be considered hazardous if it is classified as ignitable, corrosive, reactive, or toxic. Title 22, Section 66261.24 of the California Code of Regulations (CCR) (i.e., 22 CCR 66261.24) defines characteristics of toxicity. Under RCRA, EPA regulates hazardous waste from the time that the waste is generated until its final disposal (“cradle to grave”). RCRA also gives EPA or an authorized state the authority to conduct inspections to ensure that individual facilities are in compliance with regulations, and to pursue enforcement action if a violation is discovered. EPA can delegate its responsibility to a state if the state’s regulations are at least as stringent as the federal ones. RCRA was updated in 1984 by the passage of the federal Hazardous and Solid Waste Amendments, which required phasing out land disposal of hazardous waste.

U.S. Department of Transportation

The U.S. Department of Transportation (DOT), in conjunction with EPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 (49 USC 5101 et seq.) directs DOT to establish criteria and regulations regarding safe storage and transportation of hazardous materials. Hazardous materials regulations are contained in 49 CFR 171–180, and address transportation of hazardous materials, types of materials defined as hazardous, and the marking of vehicles transporting hazardous materials. In particular, 49 CFR 173, titled “Shippers’ General Requirements for Shipments and Packagings,” defines hazardous materials for transportation purposes; within this portion of the code, 49 CFR 173.3 provides specific packaging requirements for shipment of hazardous materials, and 49 CFR 173.21 lists categories of materials and packages that are forbidden for shipping. 49 CFR 177, titled “Carriage by Public Highway,” defines unacceptable hazardous materials shipments.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor is responsible for enforcement and implementation of federal laws and regulations pertaining to worker health and safety. Workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (29 CFR 1910.120).

STATE

California Environmental Protection Agency

The California Department of Toxic Substances Control (DTSC), a division of Cal/EPA, has primary regulatory responsibility over hazardous materials in California, working in conjunction with the federal EPA to enforce and implement hazardous materials laws and regulations. DTSC can delegate enforcement responsibilities to local jurisdictions.

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which is implemented by regulations described in CCR Title 26. The State program thus created is similar to, but more stringent than, the federal program under RCRA. The regulations list materials that may be hazardous and establish criteria for their identification, packaging, and disposal.

Environmental health standards for management of hazardous waste are contained in CCR Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the state, commonly called the Cortese List.

California's Secretary for Environmental Protection has established a unified hazardous waste and hazardous materials management regulatory program (Unified Program) as required by Senate Bill 1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental programs:

- ▶ hazardous waste generator and hazardous waste on-site treatment programs;
- ▶ Underground Storage Tank program,
- ▶ hazardous materials release response plans and inventories;
- ▶ California Accidental Release Prevention Program (CalARPP);
- ▶ Aboveground Petroleum Storage Act requirements for spill prevention, control, and countermeasure plans; and
- ▶ California Uniform Fire Code (UFC) hazardous material management plans and inventories.

The six environmental programs within the Unified Program are implemented at the local level by local agencies—Certified Unified Program Agencies (CUPAs). CUPAs carry out the responsibilities previously handled by approximately 1,300 State and local agencies, providing a central permitting and regulatory agency for permits, reporting, and compliance enforcement (California Resources Agency 2003). The Sacramento County Environmental Management Department is the CUPA for Sacramento County. The Sacramento County Environmental Management Department's service area includes both unincorporated areas and incorporated cities, excluding the City of Elk Grove.

State Water Resources Control Board

The SWRCB has primary responsibility to protect water quality and supply. The project sites are both located within the jurisdiction of the RWQCB. As described in Section 4.8, Hydrology and Water Quality, the RWQCB is authorized by the Porter-Cologne Water Quality Control Act of 1969 to protect the waters of the state. The RWQCB provides oversight for sites where the quality of groundwater or surface waters is threatened. Extraction and disposal of contaminated groundwater due to investigation/remediation activities or due to dewatering during construction would require a permit from the RWQCB if the water were discharged to storm drains, surface water, or land.

California Integrated Waste Management Board

The California Integrated Waste Management Board (CIWMB), a division of Cal/EPA, has primary regulatory responsibility over the management of solid waste in California. CIWMB's mandated responsibility is to reduce waste, promote the management of all materials to their highest and best use, and protect public health and safety and the environment. Integrated waste management programs are primarily carried out through local enforcement agencies (LEA), which are designated by the governing body of a county or city and, upon certification by the CIWMB, are empowered to implement delegated CIWMB programs and locally designated activities. The LEA for solid waste facilities within Sacramento County is the Sacramento County Environmental Management Department, Hazardous Materials Division. The CIWMB must concur with the LEA regarding issuance of Solid Waste Facilities Permits for transfer stations.

In addition to certifying LEAs, the CIWMB's regulation of solid waste facilities includes reviewing permitting and closure/postclosure documents; providing inspection and oversight of local programs to ensure that State programs are effectively implemented; enforcing State standards and permit conditions in addition to (or in lieu of) the LEA; and administering a remediation program for orphaned, illegal, and abandoned sites.

California Department of Industrial Relations, Division of Occupational Safety and Health

The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA), assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are more stringent than federal OSHA regulations, and are presented in CCR Title 8. Standards for workers dealing with hazardous materials include practices for all industries (General Industry Safety Orders); specific practices are described for construction, and hazardous waste operations and emergency response. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

California Office of Emergency Services

The California Office of Emergency Services (OES) issued the State of California Multi-Hazard Mitigation Plan (Multi-Hazard Mitigation Plan) (California Office of Emergency Services 2004) in September 2004. The federal Disaster Mitigation Act required all state emergency services agencies to issue such plans by November 1, 2004, for the states to receive federal grant funds for disaster assistance and mitigation under the Stafford Act (44 CFR 201.4). The overall intent of the Multi-Hazard Mitigation Plan is to reduce or prevent injury and damage from natural hazards in California, such as earthquakes, wildfires, and flooding. The plan identifies past and present hazard mitigation activities, current policies and programs, and mitigation goals, objectives, and strategies for the future (California Office of Emergency Services 2004).

California Department of Transportation and California Highway Patrol

The California Department of Transportation (Caltrans) and California Highway Patrol (CHP) enforce and monitor U.S. Department of Transportation hazardous materials and waste transportation laws and regulations in California. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP. When transporting explosives, inhalation hazards, and highway route-controlled quantities of radioactive materials, safe routing and safe stopping-places are required, as described in 26 CCR, Section 13 et seq. A route map must be carried in the vehicle.

LOCAL

City of Elk Grove General Plan

The following policies from the Safety Element of the City of Elk Grove General Plan are most relevant to the proposed project:

- ▶ **Policy SA-1:** *The City will seek to maintain acceptable levels the risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Elk Grove.*
- ▶ **Policy SA-2:** *In considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shall consider the hazards posed by reasonably foreseeable events. Evaluation of such hazards shall address the potential for events at facilities to create hazardous physical effects at offsite locations that could result in death, significant injury, or significant property damage. The potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable as defined in Policy SA-3. Absent substantial evidence to the contrary, a “hazardous physical effect” from an event shall be a level of exposure to a hazardous physical effect in excess of the levels identified in Policy SA-4.*
- ▶ **Policy SA-3:** *For the purpose of implementing Policy SA-2, the City considers an event to be “reasonably foreseeable” when the probability of the event occurring is as indicated in the table below. (The table identifies the following probability of occurrence per year as between 100 in one million and 10 in one million [10^{-4} to 10^{-5}] for Industrial Uses involving continuous access and the presence of limited number of people but easy evacuation, e.g., open space, warehouses, manufacturing plants, etc.)*
 - **SA-3-Action 1:** *As part of the environmental review process for proposed projects, the City shall analyze potential safety-related impacts resulting from or affecting new development which could cause or be affected by reasonably foreseeable events. This analysis shall include the potential for events to occur at the facility, and the potential for hazardous physical effects to result from such events with respect to the hazards listed in Table SA-A.*
- ▶ **Policy SA-4:** *The Maximum Acceptable Exposure standards shown in Table SA-A shall be used in determining the appropriateness of either:*
 - (1) *Placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or*
 - (2) *Siting a hazardous facility that could expose other nearby uses to hazardous physical effects.*
 - *Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shall be considered to result in a significant, adverse impact for the purposes of CEQA analysis.*
- ▶ **Policy SA-7:** *The City of Elk Grove will work to identify and eliminate hazardous waste releases from both private companies and public agencies.*
- ▶ **Policy SA-8:** *Storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law.*
 - **SA-8-Action 1:** *Regularly review the City’s codes to ensure that City regulations reflect the most up-to-date standards for the storage, handling, and use of hazardous and toxic materials.*

- **SA-8-Action 2:** *Secondary containment and periodic examination shall be required for all storage of hazardous and toxic materials, consistent with the requirements of state or federal law.*
- **SA8-Action 3:** *As part of the review and approval of development plans and building permits, ensure that secondary containment is provided for hazardous and toxic materials.*
- **SA8-Action 4:** *Prior to site improvements for properties that are suspected or known to contain hazardous materials and sites that are listed on or identified on any hazardous material/waste database search shall require that the site and surrounding area be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, state, and federal regulations.*
- ▶ **Policy SA-9:** *The City shall seek to ensure that all industrial facilities are constructed and operated in accordance with up-to-date safety and environmental protection standards.*
- ▶ **Policy SA-10:** *Industries which store and process hazardous or toxic materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City of Elk Grove.*
 - **SA10-Action 1:** *Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the city. To the extent feasible, uses requiring substantial transport of hazardous materials should be located to direct such traffic away from the city's residential and commercial areas.*

4.7.3 IMPACTS AND MITIGATION MEASURES

METHOD OF ANALYSIS

This analysis considers the range and nature of foreseeable hazardous materials use, storage, and disposal resulting from the proposed project and identifies the primary ways that these hazardous materials could expose individuals or the environment to health and safety risks. Local and State agencies would be expected to continue to enforce applicable requirements to the extent that they do so now.

The following reports documenting potential hazardous conditions at the project sites were reviewed for this analysis:

- ▶ Land use plans for the proposed project sites;
- ▶ Available literature, including documents published by city, county, State, and federal agencies;
- ▶ Applicable elements from the City General Plan;
- ▶ Prior Environmental Impact Reports for the area;
- ▶ *Phase II Site Assessment Report, Kalwani Property, 10401 Grant Line Road, Elk Grove, California (Taber 2007a);*
- ▶ *Remediation Cost Estimate Report Draft, Kalwani Property, 10401 Grant Line Road, Elk Grove, California (Taber 2007b);*
- ▶ *Phase I Environmental Site Assessment, 10250 Iron Rock Way, Elk Grove, California (Kleinfelder 2004);*
- ▶ *Initial Site Assessment Grant Line Road Widening Project, New Survey Road Access Road, Elk Grove, California (Blackburn Consulting 2007)*

The information obtained from these sources was reviewed and summarized to establish existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. In determining the level of significance, the analysis assumes that development in the project area would comply with relevant federal, State, and local ordinances and regulations.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a public health and hazards impact is considered significant if implementation of the proposed project would do any of the following:

- ▶ 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 or through the routine transport, use, or disposal of hazardous materials;
- ▶ result in safety hazards to people residing or working in the project area;
- ▶ 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;
- ▶ be located within an airport land use plan, within two miles of a public airport, or in the vicinity of a public airstrip, such that a safety hazard would result 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; or,
- ▶ 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.

No schools are located within one-quarter mile of the project sites. The closest school to the project sites is the Florence Markofer Elementary School, which is located approximately one mile to the northwest of Site 4. Due to the distance from the project sites, no impacts on this school or any other school within the City would be anticipated with project implementation. Therefore, the project's effects on schools will not be evaluated further in this Draft EIR.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.7-1 *Exposure to Known and Unknown Hazardous Materials. Excavation and construction activities on the project sites could result in the exposure of construction workers and the general public to hazardous materials, including petroleum hydrocarbons, pesticides, herbicides, and fertilizers; contaminated debris; elevated levels of chemicals that could be hazardous; or hazardous substances that could be inadvertently spilled or otherwise spread. This impact is considered **significant**.*

Development of the project would involve site grading, excavation for utilities, trenching, backfilling, and the construction of proposed facilities that could result in the exposure of construction workers and the general public to hazardous materials, including petroleum hydrocarbons, pesticides, herbicides, and fertilizers; contaminated debris; elevated levels of chemicals that could be hazardous; or hazardous substances that could be inadvertently spilled or otherwise spread. Site 2 is known to contain contaminated soils associated with prior land uses on the site. According the Phase II report for this site, active remediation at the underground storage tank location would likely be required. This remediation would be necessary prior to project development. Even with remediation,

there is the potential that site construction activities could expose currently unknown hazardous materials. This potential exists for both potential project sites. Site 2 also contains structures that would require removal with site development. These structures could include asbestos-containing building materials and lead-containing materials (e.g., paint, sealants, pipe solder), which could become friable or mobile during demolition activities and come into contact with construction workers. Because the release of hazardous materials into the environment could result in a safety hazard for people residing or working in the project area, this impact would be **significant**.

Mitigation Measure 4.7-1 Exposure to Known and Unknown Hazardous Materials

Construction monitors trained in the identification of hazardous materials will be present during the excavation and site development phase of the project. Monitors will observe all excavation, trenching, and grading for the potential presence of hazardous materials and petroleum products. If during site preparation and construction activities previous undiscovered or unknown evidence of hazardous materials contamination is observed or suspected through either obvious or implied measures (e.g., stained or odorous soil, unknown storage tanks, etc.), construction activities shall immediately cease in the area of the find.

City of Elk Grove staff shall be immediately consulted and the project contractor shall contract with a qualified consultant registered in DTSC's Registered Environmental Assessor Program to assess the situation. If necessary, risk assessments shall include a DTSC Preliminary Endangerment Assessment or no further action determination, or equivalent. Any required remediation shall include a DTSC Remedial Action Work Plan or equivalent. Based on consultation between the Registered Environmental Assessor and DTSC, remediation of the site shall be conducted consistent with all applicable regulations.

Level of Significance after Mitigation

Implementation of the above mitigation measures would reduce potential hazards associated with exposure to known or unknown contaminated soil or other hazardous materials by identifying the necessary procedures to follow if materials are discovered. Therefore, this impact would be reduced to a less-than-significant level.

IMPACT 4.7-2 *Exposure to Hazardous Materials during Project Construction. Use of various paints, solvents, cements, glues, and fuels is expected during construction of the proposed project. Construction workers could be exposed to hazardous materials as a result of improper handling or use; accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies, resulting in adverse health effects. However, all allowable uses would be subject to compliance with federal, state, and local hazardous materials regulations, and would be monitored by the state (e.g., Cal/OSHA, DTSC, CHP) and/or local jurisdictions. Therefore, the potential for human exposure to hazardous materials during construction would be considered a less-than-significant impact.*

Hazardous materials would be used in varying amounts during construction of the proposed project. Construction and maintenance activities would use hazardous materials, such as fuels (gasoline and diesel); oils and lubricants; paints and paint thinners; and glues; cleaners (which could include solvents and corrosives in addition to soaps and detergents). Construction workers and the general public could be exposed to hazards and hazardous materials as a result of improper handling or use during construction activities (particularly by untrained personnel); transportation accidents; or fires, explosions, or other emergencies. Construction workers could also be exposed to hazards associated with accidental releases of hazardous materials, which could result in adverse health effects.

The proposed project would be required to comply with regulations on the transportation of hazardous materials codified in 49 CFR 173 and 49 CFR 177 and CCR Title 26, Division 6. These regulations, which are under the jurisdiction of Caltrans and the CHP, provide specific packaging requirements, define unacceptable hazardous materials shipments, and prescribe safe-transit practices by carriers of hazardous materials. Compliance with these regulations would reduce the risk of exposure to humans and the environment related to the transportation of hazardous materials.

Hazardous materials regulations, which are codified in CCR Titles 8 and 22, and their enabling legislation set forth in Chapter 6.5 (Section 25100 et seq.) of the California Health and Safety Code, were established at the State level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. Construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; and construction vehicles shall be inspected daily for leaks. Off-site activities (e.g., utility construction) would also be required to comply with these regulations. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including the Cosumnes CSD Fire Department.

Contractors would be required to comply with Cal/EPA's Unified Program; regulated activities would be managed by Sacramento County Environmental Management Department, the designated CUPA for Sacramento County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California UFC hazardous material management plans and inventories). Such compliance would reduce the potential for accidental release of hazardous materials during construction of the proposed project. As a result, it would lessen the risk of exposure of construction workers and the public to accidental release of hazardous materials, as well as the demand for incident emergency response.

Compliance with federal, State, and local hazardous materials regulations and codes, would reduce to a **less-than-significant** level impacts related to hazards for construction workers and the general public involving the release of hazardous materials into the environment or through the routine transport, use, or disposal of hazards materials.

Mitigation Measure 4.7-2 Exposure to Hazardous Materials during Project Construction

No mitigation measures would be necessary.

IMPACT **Exposure to Hazardous Materials during Project Operations.** *The proposed project would use and accept many materials, some of which are considered hazardous, during the course of its daily operations. Compliance with federal, State, and local hazardous materials regulations, which would be monitored by the State and/or local jurisdictions, would reduce impacts associated with the use, transport, and storage of hazardous materials during operation of the project. Therefore, impacts related to creation of significant hazards to the public or the environment would be less than significant.*

The transfer station would prohibit acceptance of hazardous waste delivered or mixed in with MSW loads. However, due to the unique nature of the transfer station and the associated HHW facility, there is a potential that hazardous materials may be transported in MSW loads to the site. If such materials are found and can be attributed to a specific vehicle, the driver would be required to remove the hazardous materials. In addition, the proposed project includes implementation of a Hazardous Waste Load Checking Program, which would consist of the random selection of vehicles, dumping of their loads in a designated area, sorting and visually inspecting the load for hazardous materials by a trained spotter. If hazardous wastes are found, specific notification, future load inspection, and appropriate handling, storage, and disposal procedures would be implemented.

Occasionally hazardous materials are discovered on the tipping floor of a transfer station. The spotters working in the transfer station would be trained to recognize hazardous materials and to deal with them appropriately. Such materials would be segregated in bins kept on or near the tipping floor for that purpose. They would be kept in locked storage and recorded on a manifest until they can be removed from the site by a licensed hauler. Depending on the quantities and types of materials found, materials found on the tipping floor may be stored in the HHW facility until removed.

Most of the material brought to the HHW facility would be common household items that require special recycling or disposal approaches, such as paint, batteries, used oil and oil filters, and aerosol cans, as well as

smaller quantities of pesticides, herbicides, solvents, antifreeze and similar materials. The facility would not accept explosives, radioactive materials, or medical waste. The materials would be stored temporarily inside the designated HHW area in segregated containers that separate incompatible substances. All household hazardous waste would be removed at regular intervals by licensed haulers and transported to off-site facilities for recycling or disposal. The process of isolating and only temporarily storing hazardous materials at the site combined with transporting the materials to regulated off-site facilities in accordance with applicable local, state and federal requirements would minimize the project's potential to create a hazard to the public or the environment.

As with construction, operation of the proposed project is required to be consistent with federal, State, and local laws and regulations addressing hazardous materials management and environmental protection, including, but not limited to 49 CFR 173 and 177, and CCR Title 26, Division 6 for transportation of hazardous materials, and CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code for routine use of hazardous materials. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including Caltrans, the CHP, the Sacramento County Environmental Management Department, and the Cosumnes CSD Fire Department.

The project also includes a truck and equipment maintenance center with a fueling facility. The Sacramento County Environmental Management Department, as the local CUPA, oversees hazardous materials registrations, UST programs, aboveground petroleum storage tank spill prevention control and countermeasure plans, risk management plans, and some fire safety planning. Additionally, businesses are regulated as employers by Cal/OSHA and are therefore required to ensure employee safety. Specific requirements include identifying hazardous materials in the workplace, providing safety information to workers that handle hazardous materials, and adequately training workers.

The transfer station/MRF and HHW facility would be required to implement the following requirements related to accidental releases and spills of hazardous substances:

- ▶ In accordance with California Integrated Waste Management Board (CIWMB) and Local Enforcement Agency (LEA) requirements, transfer operations must minimize contact with the solid waste stream, provide security, protect public health, and require use of appropriate safety equipment by facility personnel.
- ▶ The operator must develop emergency response and contingency planning in accordance with the requirements of the Waters Bill (AB 2185) and the Emergency Planning and Community Right-to-Know Act.
- ▶ Operations must be in compliance with DTSC and CUPA hazardous waste generator requirements for facility and storage area security, personnel training, emergency equipment and control measures, contingency plans, and emergency preparedness plans.
- ▶ Operations must be in compliance with OSHA and Cal/OSHA standards and methods to protect worker safety, including requirements for preparing an Injury and Illness Prevention Program, Hazardous Communication Program, Respiratory Protection Program, and identifying appropriate measures and protective equipment necessary to control exposure to hazardous substances.
- ▶ Operations must be in compliance with the California UFC Part VII standards and design requirements for hazardous storage areas, including spill control and secondary containment.

The proposed project would be required to comply with all applicable federal, State, and local regulations pertaining to safe-transit practices, workplace safety, spill prevention, explosions, fires, and other hazardous materials-related concerns. Typically, staff in the HHW collection facility would be required to wear Tyvek suits or work uniforms, steel toed boots, safety glasses with side shields, and puncture resistant gloves with an inner liner. Respiratory protection may be required for employees performing hazardous characterization testing or bulking of certain materials. The facility's Operations, Health and Safety Plans would detail the specific personal protective equipment required for each level of employee at the facility.

The Sacramento County Environmental Management Department and the Cosumnes CSD Fire Department, and other agencies would be required to enforce compliance, including issuing permits and tracking and inspections of hazardous materials transportation and storage. Restrictions on smoking and welding in the building, and installation of fire suppression systems (sprinklers, alarms, etc.) would minimize the risk of fire. In addition, existing regulatory requirements would ensure that the proposed project does not pose a significant hazard to off-site receptors or the nearby general public. As a result, operation of the proposed project would not create a significant hazard to the general public or the environment involving the release of hazardous materials into the environment or through the routine transport, use, or disposal of hazardous materials. Therefore, this impact is considered **less than significant**.

Mitigation Measure 4.7-3 Exposure to Hazardous Materials during Project Operations

No mitigation measures would be necessary.

IMPACT 4.7-4 **Exposure to Vectors and Pests.** *Implementation of the proposed project could increase the potential for human contact with vectors and pests. Potential impacts associated with increased human contact with vectors and pests would be considered less than significant.*

The potential for pests as nuisances and possible disease carriers, or vectors exists at solid waste facilities. However, facility operations must be in compliance with OSHA and Cal/OSHA standards and methods to protect worker safety. The standards include preventing, insofar as practicable, the entrance or infestations of insects, rodents, or other vermin in enclosed workplaces. Consistent with standard operating conditions for a transfer station, an effective program of extermination and control is required to be instituted whenever their presence is detected.

The proposed project would also be required to implement CIWMB and LEA requirements and standards related to vector and pest control. A vector control program would be required that includes minimizing the propagation of vectors through building design (i.e., operations to take place within an enclosed building), daily cleaning of the facility of loose materials and litter, removing all received solid waste within 48 hours, and using pest control companies to implement extermination procedures when necessary.

Insect and rodent infestations can create a nuisance and potential health hazard to workers, users of the transfer station, and the general public and businesses immediately adjacent to the facility. However, compliance with regulatory requirements and strict adherence to the provisions of facility programs and plans would control the potential for creating a pest or vector control problem at the potential project sites. Therefore, the potential for increased human contact with vectors and pests with implementation of the proposed project would be **less than significant**.

Mitigation Measure 4.7-4 Exposure to Vectors and Pests

No mitigation measures would be necessary.

IMPACT 4.7-5 **Exposure to Hazards Associated with Suburban Propane and Georgia-Pacific Resins Facilities.** *According to a report prepared in 2003 by Quest Consultants, there is currently greater than one chance in a million that several hazards associated with these facilities could occur that would affect nearby areas, including the potential project sites, as a result of either an accidental incident or an intentional act (e.g., terrorism, vandalism). However, the proposed project would not substantially change the risk of these events occurring. Therefore, this impact would be less than significant.*

The proposed project site is located near the Suburban Propane and Georgia-Pacific Resins facilities. Although the risk of a release of toxic or hazardous materials from either of these facilities is remote, such a release would pose substantial risks to people in the area. A release of propane at the Suburban Propane terminal has the

potential to result in a hazardous fire, and a vapor cloud explosion could result in exposure to a blast wave. Potential risks associated with release of formalin (a solution of water and formaldehyde) from the Georgia-Pacific Resins facility include exposure to toxic gas in the form of a toxic vapor cloud. Such risks could arise either from an accidental incident or from an intentional act (e.g., terrorism, vandalism).

City of Elk Grove General Plan Policy SA-3 defines “reasonably foreseeable” events within industrial areas as events with between 10 and 100 chances in 1 million per year of occurring. Given this definition, nearly all offsite hazards associated with accidents are regarded as unlikely and not reasonably foreseeable (i.e., there is less than ten chances in 1 million per year of occurrence). Two accidental events would have greater than ten chances in 1 million per year of occurring:

- ▶ offsite hazards associated with overpressure from rupture of 3-inch refrigerated propane piping at Suburban Propane (62.5 chances in 1 million per year, to 0.5 mile); and
- ▶ offsite hazards associated with overpressure from rupture of 6-inch refrigerated propane piping at Suburban Propane (14 chances in 1 million per year, to 0.75 mile).

Quest Consultants (2003) identifies that the risk levels identified for these two events were overstated in the original analyses as a result of various factors that do not represent the most likely conditions in the area (i.e., not consistent with other report findings or large-scale experimental data).

Because of growing concerns about terrorism since the thwarted plot to sabotage Suburban Propane in 2000 and the September 11, 2001 terrorist attack, the 2003 Quest report also evaluated the probability of an intentional act (e.g., terrorism, vandalism) at the Suburban Propane and Georgia-Pacific Resins facilities. Intentional acts at large chemical and fuel facilities are rare in the United States and there are currently no reliable historical release data on such events. In its effort to determine the probability of an intentional act at such a facility, Quest Consultants estimated the frequency of historical events, beginning with the first bombing of the World Trade Center in February 1993. Using EPA data, Quest Consultants determined that the Suburban Propane and Georgia-Pacific Resins facilities are among 12,711 similar facilities with the potential to affect 100 or more people. The annual probability of a successful terrorist-induced failure at any one of these 12,711 facilities—not necessarily Suburban Propane or Georgia-Pacific Resins—was calculated to be approximately eight chances in 1 million.

These data were used to estimate the probability of an intentional act that would result in an initial event that would, in turn, lead to an offsite hazard. The probability of an offsite hazard was then determined based on historical accidental release data, published data sources, and the use of event trees to cover the range of possibilities that could occur as the result of the initial intentional act (Quest Consultants 2003). Given this definition, all offsite hazards associated with intentional acts are regarded as unlikely and not reasonably foreseeable (i.e., there is less than ten chances in 1 million per year of occurrence).

Both of the potential project sites are located within 0.5 mile of Suburban Propane and Georgia-Pacific Resins facilities, which places them within the area identified as being at risk. However, hazards associated with Suburban Propane and Georgia-Pacific Resins exist today and the proposed project would not change the potential for these risks to occur. The proposed project would introduce new employees and customers associated with the proposed project to the area, which would increase the number of people exposed to a potential hazard event. However, by zoning the potential project sites for industrial uses, the City has determined that industrial land uses are an appropriate use adjacent to these facilities. Furthermore, the Quest Consultants report identified that for the two risks that would have a probability greater than ten chances in 1 million per year of occurring, that the risk was overstated. Therefore, this impact is considered **less than significant**.

Mitigation Measure 4.7-5 Exposure to Hazards Associated with Suburban Propane and Georgia-Pacific Resins Facilities

No mitigation measures would be necessary.

IMPACT 4.7-6 **Safety Hazards Associated with Airport Operations.** *The potential project sites would not be exposed to excessive safety hazards associated with operations at the Elk Grove Airport. Therefore, this impact would be considered less than significant.*

Both of the project sites are located within approximately 1.5 miles of the Elk Grove (Sunset Sky ranch) Airport, which is located near the intersection of Grant Line and Bradshaw roads. However, on January 25, 2006, the Sacramento County Board of Supervisors decided not to renew the Use Permit for the airport. Although the airport is still currently operating, its continued operation is in question due to ongoing litigation. The airport's use is limited to relatively small planes and the project sites are not located within the airport's designated safety zones. Therefore, the proposed project would not result in safety hazards in relation to airport operations and this impact would be considered **less than significant**.

Mitigation Measure 4.7-6 Safety Hazards Associated with Airport Operations

No mitigation measures would be necessary.

IMPACT 4.7-7 **Emergency Response Plans and Wildland Fire Risks.** *Implementation of the proposed project would not be anticipated to affect emergency response plans or result in significant wildland fire risks. Therefore, this impact would be considered less than significant.*

The project is not anticipated to affect emergency response plans or result in significant wildland fire risks because emergency response vehicles would have fairly direct access to the sites from SR 99 and Grant Line Road, the City's Police Department and the Cosumnes CSD Fire Department would review the site design and circulation layout as part of the project review process to ensure adequate emergency access is provided, and fire suppression infrastructure (e.g., fire hydrants) would be incorporated into the site design in order to minimize fire hazards, consistent with City and CSD requirements. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and would not expose people or structures to a significant risk of loss, injury, or death involving wildland. This impact would be considered less than significant.

Mitigation Measure 4.7-7 Emergency Response Plans and Wildland Fire Risks

No mitigation measures would be necessary.

IMPACT 4.7-8 **Illegal Dumping and Litter.** *Implementation of the proposed project could potentially alter the pattern of illegal dumping in the City if people delivering waste to the facility decide to dump their loads in the local area rather than pay for proper disposal. Also, vehicles delivering garbage to the transfer station that are not covered with a tarp could generate litter along the site access routes. The potential for illegal dumping and litter generation within the area of the project sites would be considered a public health/safety hazard for the local public. This impact would be considered significant.*

Illegal Dumping

Implementation of the proposed project has the potential to alter the pattern of illegal dumping in and around the area of the two potential project sites. People self-hauling loads of trash to the proposed transfer station may elect to dump their loads rather than properly pay to dispose of the waste materials. Because there is less illegal dumping observed on primary access routes and major thoroughfares that are adjacent to residential and commercial developments, it is anticipated that dumping would continue generally on isolated roads in semi-rural locations or in poorly lit blighted urban areas.

The City currently has two different contractors that collect illegally dumped materials. Allied Waste collects the majority of illegally dumped material placed in the public right-of-way within the City that is not a safety hazard;

MCE picks up material that has some type of hazard associated with its collections. Debris ranges from construction debris to refrigerators. The illegally dumped materials rarely contain any hazardous wastes, other than occasional small quantities of HHW.

Litter Generation

Waste would be hauled to the potential project sites in collection vehicles and various other trucks and privately-owned vehicles. While state law requires that waste loads be covered, incidental litter may be created by the passage of these loads. Vehicles hauling waste and recyclables along the site access roads could result in increased litter generation along these routes. This increase in litter may result in some level of annoyance for people in the local area and could be considered a health hazard if substantial litter generation occurs.

The potential for illegal dumping and litter generation to occur within the area of the potential project sites would be considered a nuisance and potential public health/safety hazard for the local public. This impact would be considered **significant**.

Mitigation Measure 4.7-8 Illegal Dumping and Litter

- ▶ City Code Enforcement shall monitor illegal dumping in the project area on a monthly basis for the first year of operations. If illegal dumping increases along the site access routes, Code Enforcement shall increase sweeps of the area by the City's illegal dumping contractors. In addition, the City shall develop, in consultation with the Elk Grove Police Department, an illegal dumping enforcement program that includes implementing a surveillance program along site access routes and increased fines for perpetrators.
- ▶ Perimeter fencing shall be installed with slates.
- ▶ All transfer trucks shall be tightly covered before leaving the transfer station building.
- ▶ All loads brought to the facility are to be brought in covered vehicles. This is a requirement of State law, and signs at the facility will remind users of the requirement.
- ▶ Employees of the facility will make regular litter pick-up "sweeps" of the site access roads and surrounding areas, as needed.
- ▶ The facility will be appropriately maintained to ensure the accumulation of litter does not occur on the site.
- ▶ The paved areas on the site will be swept on a regular basis.

Level of Significance after Mitigation

Implementation of the above mitigation measures would reduce potential illegal dumping and litter associated with project implementation. Therefore, this impact would be reduced to a less-than-significant level.