Section 5.9
Hazards and Hazardous Materials

5.9.1 PURPOSE

This section describes the means by which hazardous substances are regulated from a Federal, State, and local perspective, and discusses potential adverse impacts to human health and the environment due to exposure of hazardous materials. Where significant impacts are identified, mitigation measures are identified to avoid or reduce these impacts to a less than significant level. For this EIR, the term "hazardous material" includes any material that, because of its quantity, concentration, or physical, chemical, or biological characteristics, poses a considerable present or potential hazard to human health or safety, or to the environment. It refers generally to hazardous chemicals, radioactive materials, and biohazards materials. "Hazardous waste," a subset of hazardous material, is material that is to be abandoned, discarded, or recycled, and includes chemicals, radioactive, and bio-hazardous waste (including medical waste).

5.9.2 EXISTING REGULATORY SETTING

Federal, State, and local regulatory policies and law that apply to hazards and hazardous materials are discussed below.

HAZARDOUS MATERIALS

Federal

CLEAN AIR ACT

The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes the United States Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. One of the goals of the Act was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The Act was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS, since many areas of the country had failed to meet the deadlines.

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source. For major

sources, Section 112 requires that EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category; EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk. The CAA is discussed in greater detail in Section 5.5, *Air Quality*.

CLEAN WATER ACT

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for industry. Water quality standards for all contaminants in surface waters were also established. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. The CWA is discussed in greater detail in Section 5.8, *Hydrology and Water Quality*.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed.

EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA); see discussion below.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

Authorized by Title III of the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning & Community Right-to-Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress requires each state to appoint a State Emergency Response Commission (SERC). The SERCs are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

HAZARDOUS MATERIALS TRANSPORTATION ACT

The Department of Transportation (DOT) receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act (HMTA), as amended and codified in 49 U.S.C. 5101 et seq. The DOT is the primary regulatory authority for the interstate transport of hazardous materials and establishes regulations for safe handling procedures (i.e., packaging, marking, labeling and routing).

OCCUPATIONAL AND SAFETY HEALTH ACT

Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for the Occupational Safety and Health Administration (OSHA). OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states.

RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

State of California

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

The responsibility for implementation of RCRA was given to California EPA's Department of Toxic Substances Control (DTSC) in August 1992. The DTSC is also responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and so regulate a larger number of chemicals. Hazardous wastes regulated by California but not by EPA are called "non-RCRA hazardous wastes."

UNIFIED HAZARDOUS WASTE AND HAZARDOUS MATERIALS MANAGEMENT REGULATORY PROGRAM

The "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs). The Program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs (Program Elements):

- Hazardous Waste Generation (including onsite treatment under Tiered Permitting);
- Aboveground Petroleum Storage Tanks (only the Spill Prevention Control and Countermeasure Plan or "SPCC");
- Underground Storage Tanks (USTs);
- Hazardous Material Release Response Plans and Inventories;
- California Accidental Release Prevention Program (Cal ARP); and
- Uniform Fire Code Hazardous Material Management Plans and Inventories.

The CUPA with jurisdiction over the City of Artesia is the County of Los Angeles Fire Department Health Hazardous Materials Division (HHMD).

ACCIDENTAL RELEASE PREVENTION LAW

The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and Federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the Federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the CUPA and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare a Risk Management Plan. A Risk Management Plan must contain an offsite consequence analysis, a

five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

TRANSPORTATION OF HAZARDOUS MATERIALS/WASTES

Transportation of hazardous materials/wastes is regulated by California Code of Regulations (CCR) Title 26. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State, and local governmental authorities and private persons through a State mandated Emergency Response Plan.

Due to the significant short-term risks to public health and the environment associated with hazardous waste management during transportation of wastes, specific Commercial Hazardous Waste Shipping Routes are designated with the intent of minimizing the distance that wastes are transported and the proximity to vulnerable locations.

WORKER AND WORKPLACE HAZARDOUS MATERIALS SAFETY

Occupational safety standards exist to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

Other Potential Hazardous Materials

ASBESTOS

Asbestos, a naturally occurring fibrous material, was used for years in many building materials for its fire-proofing and insulating properties. Loose insulation, ceiling panels, and brittle plaster are potential sources of friable (easily crumbled) asbestos. Nonfriable asbestos is generally bound to other materials such that it does not become airborne under normal conditions. Any activity that involves cutting, grinding, or drilling during demolition can release friable asbestos fibers unless proper precautions are taken. Inhalation of airborne fibers is the primary mode of asbestos entry into the body, which makes friable materials the greatest potential health risk.

Asbestos is a known human carcinogen and there is no known threshold level of exposure at which adverse health effects are not anticipated. Given this, the USEPA and CalEPA have identified asbestos as a hazardous air pollutant pursuant to Section 12 of the Federal Clean Air Act. Further, the California Air Resources Board (CARB) has identified asbestos as a Toxic Air Contaminant (TAC) pursuant to the California Health and Safety Code (Section 39650 et seq.).

Asbestos is also regulated as a potential worker safety hazard under the authority of CalOSHA. These rules and regulations prohibit emissions of asbestos from asbestos-related demolition or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. In California, asbestos abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services (DHS). In addition, CalOSHA has regulations to protect worker safety during potential exposure to lead and asbestos under Title 8 of the California Code of Regulations, Section 1529 (Asbestos). All demolition that could result in the release of asbestos must be conducted according to CalOSHA standards. These standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials. Young children, the elderly, and people in poor health may be more susceptible to adverse health effects from exposure to asbestos released to the environment.

LEAD

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, soils around buildings, and structures painted with lead-based paint. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million [ppm]). However, some paints manufactured after 1978 for industrial uses or marine uses legally contain more than 0.06 percent lead. Because of its toxic properties, lead is regulated as a hazardous material. Inorganic lead is also regulated as a toxic air contaminant. In California, lead abatement must be performed and monitored by contractors with appropriate certifications from the California DHS. In addition, CalOSHA has regulations to protect worker safety during potential exposure to lead and asbestos under Title 8 of the California Code of Regulations, Section 1532.1 (Lead). All demolition that could result in the release of lead must be conducted according to CalOSHA standards. These standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials. Young children, the elderly, and people in poor health may be more susceptible to adverse health effects from exposure to lead released to the environment.

POLYCHLORINATED BIPHENYLS

Polychlorinated Biphenyls (PCBs) were widely used as a coolant in electrical equipment, such as transformers, from the 1920s to the 1970s. After it was determined that PCBs could cause adverse health effects if ingested and cause cancer when the chemical underwent a chemical change as a result of fire or explosion, PCBs were banned for use in most electrical equipment in the latter part of the 1970s and 1980s.

Local

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The South Coast Air Quality Management District (SCAQMD) works with the California Air Resources Board (CARB) and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines. Refer to Section 4.2, *Air Quality*, for further discussion regarding toxic air emissions.

COUNTY OF LOS ANGELES FIRE DEPARTMENT

The Hazardous Materials Control Program in the Department of Health Services was established in 1981 for the inspection of businesses generating hazardous waste. In 1991, the program merged into the Fire Department and it became the Health Hazardous Materials Division (HHMD). In 1997, HHMD became a Certified Unified Program Agency (CUPA) to administer the following programs within Los Angeles County:

- Hazardous Waste Generator Program;
- Hazardous Materials Release Response Plans and Inventory Program;
- California Accidental Release Prevention Program (Cal-ARP);
- Aboveground Petroleum Storage Tank Program; and
- Underground Storage Tank Program.

It is HHMD's mission is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight.

HAZARDOUS WASTE GENERATOR PROGRAM

Hazardous wastes are any chemical wastes which are toxic, corrosive, reactive, or ignitable, as defined by State law in California Code of Regulations. Hazardous Waste includes waste oil, waste coolant, waste parts cleaner, waste photo developer, waste printing inks, waste dry cleaning solvent, waste paint, and spray booth filters. Generators are required to submit a Hazardous Waste Generator Form to their CUPA. Generators are classified by the amount of hazardous waste generated per month, as follows:

Large Quantity Generators (LQG)

- Generate at least 1,000 kg (2,200 lbs) per month; or
- Generate at least 1 kg (2.2 lbs) of acutely or extremely hazardous waste per month.
- Maximum storage time is 90 days.

Small Quantity Generators (SQG)

- Generate 100 to 1,000 kg (220 - 2,200 lbs) per month;
- May not store greater than 1 kg of acutely or extremely hazardous waste for over 90 days;
- No more than 6,000 kg (13,200 lbs) of hazardous waste may be stored onsite at any time
- Maximum storage time is 180 days;
- Maximum is 270 days if the Treatment Storage Disposal Facility (TSDF) is 200 or more miles from the generator's facility.

Conditionally Exempt Small Quantity Generators (CESQG)

- Generate no more than 100 kg (220 lbs) per month;
- Maximum storage time may not exceed 90 days after accumulation of 100 kilograms (220 lbs) or 1 kilogram (2.2 pounds) of acute or extremely hazardous waste.

Satellite Storage, LQG and SQG

- As long as the total amount of each waste stream present at each satellite accumulation point does not exceed:
  - 55 gallons in a container; or
  - 1 quart of acutely or extremely hazardous waste in a container.
- Maximum storage time is up to one year.

HAZARDOUS MATERIALS RELEASE RESPONSE PLANS AND INVENTORY PROGRAM

The Hazardous Materials Disclosure Program fulfills Federal and State Community Right-To-Know requirements and provides detailed information for use by emergency responders such as Fire Fighters and Hazardous Materials Specialists. The owner or operator of any business shall submit a Hazardous Materials Inventory and Contingency Plan if the business handles or stores hazardous materials equal to or above the following quantities:

- 55 gallons for liquids;
- 500 pounds for solids;
- 200 cubic feet for gases;
- Quantities of radioactive materials for which an emergency plan is required under Federal Regulations; and
- Regulated substances (RS) must be reported if the listed Threshold Quantity (TQ) is exceeded.

In addition, businesses subject to EPCRA (Emergency Planning and Community Right-to-Know Act) shall annually submit one signed Hazardous Material Inventory Chemical Description Form for each hazardous material subjected to EPCRA according to the following conditions:

- Hazardous chemicals equal to or greater than 10,000 lbs; or
- Extremely hazardous substances equal to or greater than 500 lbs or at the Threshold Planning Quantity (40 CFR, Pt 355 App A), whichever is lower.

CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM (CAL-ARP)

The California Accidental Release Prevention (CalARP) program's main objective is to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment. These substances are called Regulated Substances (RS), which include flammable and toxic hazardous materials listed on the Federal Regulated Substances for Accidental Release Prevention and the State of California Regulated Substances list. Businesses that handle regulated substances in industrial processes above threshold quantity levels are subject to CalARP program requirements. The CalARP program requires businesses to have planning activities that are intended to minimize the possibility of an accidental release by encouraging engineering and administrative controls. It is further intended to mitigate the effects of an accidental release, by requiring owners or operators of facilities to develop and implement an accident prevention program. Subsequently, the owner or operator may be required to develop and submit a Risk Management Plan (RMP) to the administering agency. The RMP is implemented by the business to prevent or mitigate releases of regulated substances that could have off-site consequences.

ABOVEGROUND PETROLEUM STORAGE TANK PROGRAM

Effective January 1st, 2008, Assembly Bill 1130 authorized the administration and implementation of the Aboveground Petroleum Storage Tank Program to the local CUPA. AB1130 consolidated environmental programs, fees, and inspection authority into one single regulating agency- thus, creating essentially a "One-Stop Shop." The Aboveground Petroleum Storage Act (APSA) of 1990 requires owners or operations of aboveground petroleum storage tank (APST) facilities to file a tank facility statement, to develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan, and to pay an annual fee. The purpose of this program is to protect the state's people and natural resources from aboveground petroleum storage tank spills or releases.

On Monday, January 4, 2010, HHMD mailed tank facility statements, cover letters, and a fact sheet to owners/operators of facilities having APSA program elements. The owner/operator is required to return either the tank facility statement or a supplement to their business plan containing the following criteria related to the APSA program element:

- Name and address of the tank facility;
- Contact person for the tank facility;
- Total storage capacity of the tank facility; and
- Location, size, age, and contents of each storage tank that exceeds 10,000 gallons in capacity and that holds a substance containing at least 5 percent of petroleum.

UNDERGROUND STORAGE TANK PROGRAM

An underground storage tank (UST) is any one or combination of tanks, including associated piping that is used to contain industrial solvents, petroleum products, and other hazardous substances. The tank is totally or substantially (10 percent) beneath the surface of the ground. The definition for "tank" is a stationary device constructed primarily of non-earthen materials

(e.g. wood, concrete, steel, and plastic) designed to contain an accumulation of hazardous substance. A storage tank system includes the tank, associated piping, monitoring system, and containment equipment.

The purpose of the Underground Storage Tank program is to ensure that hazardous materials stored in underground tanks are not released into the groundwater and/or the environment. Any California business that stores hazardous substances in underground storage tanks must follow the law in California Health and Safety Code, Division 20, Chapter 6.7, and the underground tank regulations in the California Code of Regulations (CCR), Title 23, Division 3, Chapter 16. HHMD has an agreement with the Los Angeles County Department of Public Works to regulate UST facilities for County's unincorporated areas and 77 cities (including Artesia). Under the UST Program, permits and fees are required for the operation, installation, modification, and removal of USTs.

It is noted that UST facilities must be inspected every year by the local agency. Also, all UST systems require under-dispenser containment or other approved containment system. When a UST is closed, the owner must submit soil/groundwater testing results to rule out the presence of MTBE with a closure letter.

HHMD SECTIONS AND UNITS

Inspection Section

Inspection Section staff permit and inspect hazardous material handling and hazardous waste-generating businesses to ensure compliance with federal, state and local laws and regulations. They also oversee the proper handling, treatment, transportation, and disposal of hazardous wastes generated by many industries. These inspections ensure compliance with applicable laws or regulations and assist businesses through pollution prevention and waste reduction.

Emergency Operations Section

The Emergency Operations Section provides 24-hour emergency response services to hazardous materials incidents occurring throughout Los Angeles County. Teams of hazardous materials specialists ensure that public health and safety, along with the environment, are protected from hazardous material releases. This is accomplished by identifying unknown substances, assessing threats, coordinating multi-agency responses, and mitigating spills and releases. These teams provide remediation and oversight to ensure safe and immediate recovery of the affected properties, declaring properties safe for re-occupancy, and identifying parties responsible for cleanup costs.

Special Operations Section

This section is composed of the following units:

- *Cal-ARP Unit*. The Cal-ARP Unit administers and enforces the Cal-ARP Program at businesses that handle Regulated Substances (listed flammable and toxic hazardous

materials) in quantities above threshold levels. These "high risk" facilities are capable of releasing materials which could result in significant public health impacts. Businesses regulated by this program, such as oil refineries, chemical plants, and food processors, are required to submit Risk Management Plans (RMPs) to reduce the risk of accidental releases. Cal-ARP staff review and approve all applicable plan components. Site inspections are conducted to verify compliance. This unit also investigates accidental releases of regulated substances.

- *Investigations Unit*. This Unit is a leading member agency in the Los Angeles County and Federal environmental crimes strike forces. This unit investigates criminal complaints alleging felony violations of federal and state hazardous materials and waste laws.

- *Site Mitigation Unit*. The Site Mitigation Unit reviews and approves assessment and mitigation work plans for sites contaminated with hazardous substances. These sites can be active or closed businesses where years of past mismanagement practices have resulted in various levels of contamination in impacted soils and groundwater. Unit staff oversees the work of private environmental consultants to ensure that the appropriate remedial action and cleanup standards are met to protect public health and the environment.

Administration/Planning Section

The Administration/Planning Section provides administrative, technical, educational, and operational support to all HHMD sections.

SANITATION DISTRICTS OF LOS ANGELES COUNTY

The Sanitation Districts operate a comprehensive solid waste management system serving the needs of a large portion of Los Angeles County. The Sanitation Districts service area covers approximately 800 square miles and encompasses 78 cities, including the City of Artesia. This system includes sanitary landfills, recycle centers, materials recovery/transfer facilities, and energy recovery facilities. None of these facilities are located in the City of Artesia.

There are three Sanitation Districts of Los Angeles County landfills: Calabasas Landfill; Puente Hills Landfill; and Scholl Canyon Landfill. The City of Artesia is located within the Puente Hills Landfill wasteshed area. The Puente Hills Landfill is permitted as Class III landfill and as such, accepts only non-hazardous municipal solid waste for disposal; no hazardous or liquid waste is accepted. Additionally, the Districts operate three Transfer Stations:

- Downey Area Recycling and Transfer (DART);
- Puente Hills Materials Recovery Facility; and
- South Gate Transfer Station.

The Household Hazardous Waste Collection Program gives Los Angeles County residents a legal and cost-free way to dispose of unwanted household chemicals that cannot be disposed of in the regular trash.

CITY OF ARTESIA EMERGENCY OPERATIONS PLAN

The City of Artesia adopted their Emergency Operations Plan (EOP) in 20. The EOP is a multi-hazard plan that addresses the City's planned response to extraordinary emergency situations, which are typically considered large-scale disasters. The EOP is comprised of three parts, 1) The Basic Plan; 2) The Annexes; and 3) Operational Data. The Basic Plan provides organizational and operational concepts relative to response and recovery activities during and following a disaster. The Annexes defines the functions and associated activities to be performed in an emergency. The five annexes conform to the Standardized Emergency Management System (SEMS). The Operational Data includes lists of resources, key personnel, essential facilities, contacts, and other information needed to conduct emergency operations.

5.9.3 EXISTING ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS

Hazard Versus Risk

Worker and public health are potentially at risk whenever hazardous substances are present or will be used. It is important to differentiate between the "hazard" of these substances and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to human health and the environment is determined by the probability of exposure to the hazardous substance and the severity of harm such exposure would pose. The likelihood and means of exposure, in addition to the inherent toxicity of a substance, determine the degree of risk to human health. When the risk of an activity is judged acceptable by society in relation to perceived benefits, the activity is judged to be safe.

Means of Exposure

Exposure to hazardous substances could occur in the following manner: (1) improper handling or use of hazardous substances during the course of business, particularly by untrained personnel; (2) failure of storage containment systems; (3) environmentally unsound treatment/disposal methods; (4) transportation accidents; (5) fire, explosion or other emergencies; or, (6) permitted release of hazardous substances by regulatory agencies.

The following factors influence the health effects of exposure to hazardous substances: the dose to which the person is exposed; the frequency of exposure; the duration of exposure; the exposure pathway (route by which a chemical enters a person's body); and the individual's unique biological susceptibility.

The means of exposure as outlined above would determine the way in which hazardous materials are absorbed into the body and, therefore, the bodily organs or systems affected. The major ways in which toxic substances may enter and be absorbed by the body are through the mouth (ingestion), the skin (penetration), or the lungs (inhalation). How a hazardous substance gets into the body and what damage it causes depends on the form or physical properties of the substance (i.e., liquid, solid, gas, dust, fibers, fumes or mist). A chemical may be toxic by one route and not another.

Health effects from exposure to toxic substances may be acute or chronic. Acute effects, usually resulting from a single exposure to a hazardous substance, may include damage to organs and systems in the body, and possibly death. Chronic effects, usually resulting from long-term exposure to a hazardous substance, may also include systemic and organ damage, as well as birth defects, genetic damage, and cancer.

Emergency Versus Incident

A hazardous materials "Emergency" requires emergency responders, causes danger to employees requiring immediate medical attention, can require response from different regulating agencies, and/or results in an actual or potential uncontrolled release. In contrast, a hazardous materials "Incident" is a spill or release that can be absorbed, neutralized, or otherwise controlled at the time of the release. Generally, the substance can be controlled by the employees in the immediate area or by maintenance personnel and there are no immediate safety or health hazards.

Reported Regulatory Properties

GEOTRACKER

The Geographic Environmental Information Management System (GEIMS) is a data warehouse that tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies using GeoTracker. GeoTracker and GEIMS were developed pursuant to a mandate by the California State Legislature (AB 592, SB 1189) to investigate the feasibility of establishing a Statewide GIS for leaking underground fuel tank (LUFT) sites. The GeoTracker database provides lists of the following site types, among others:

- Leaking Underground Tank (LUST) Cleanup Sites;
- Other Cleanup Sites;
- Land Disposal Sites;
- Military Sites;
- DTSC Cleanup Sites; and
- DTSC Hazardous Waste Permit.

As of February 5, 2010, the GeoTracker search results indicate there are a total of 27 sites within the City of Artesia. These are summarized, as follows:

Leaking Underground Tank (LUST) Cleanup Sites. There are a total of 25 LUST Cleanup Sites in the City, 11 of which have not received Case Closed status. The cleanup status of these remaining open status sites are as follows:

- Referred: 2 Sites;
- Remediation: 4 Sites; and
- Site Assessment: 5 Sites.

Other Cleanup Sites. There are a total of two Other Cleanup Sites in the City, with one site having received Case Closed status. The cleanup status of the other site is Site Assessment.

Land Disposal Sites. There are no Land Disposal Sites in Artesia.

Military Sites. There are no Military Sites in Artesia.

DTSC Cleanup Sites. There are a total of two DTSC Cleanup Sites in the City, both are active status.

DTSC Hazardous Waste Permit Sites. There are no Hazardous Waste Permit Sites in Artesia.

ENVIROSTOR

The DTSC's EnviroStor database is an online search and Geographic Information System (GIS) tool. EnviroStor provides access to detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. EnviroStor allows you to search for information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted or have been completed under DTSC's oversight. The EnviroStor database provides lists of the following site types:

Cleanup Sites
- Federal Superfund Sites (National Priority List);
- State Response Sites;
- Voluntary Cleanup Sites;
- School Cleanup Sites; and
- Corrective Action Sites.

Hazardous Waste Facilities
- Permitted – Operating;
- Post-Closure Permitted; and
- Historical Non-Operating.

EnviroStor provides site/facility name, site/facility type, clean-up status, address/description, any restricted use (recorded deed restrictions), past use(s) that caused contamination, potential contaminants of concern, potential environmental media affected, site history, planned, and completed activities. As of February 5, 2010, the EnviroStor search results indicate there are no sites within the City of Artesia.

Transport of Hazardous Materials/Waste

The City has designed three roadways as truck routes to provide for the regulated movement of trucks through the City: Artesia Boulevard; Pioneer Boulevard; and South Street; refer to Exhibit 5.4-3, *Truck Routes*. These transportation routes are used to transport hazardous materials (among other materials/freight) from suppliers to users. Transportation accidents involving hazardous materials could occur on any of the routes, potentially resulting in explosions, physical contact by emergency response personnel, environmental degradation, and exposure to the public via airborne exposure.

Illegal Disposal

Illegal disposal of toxic materials and hazardous materials/waste on public or private property is a criminal act due to the health and safety threat it poses. As the costs and restrictions increase for legitimate hazardous waste disposal sites, it is anticipated that illegal dumping of hazardous materials would increase proportionately.

Landfills

Landfills can have adverse impacts on surrounding properties, the ground, and groundwater below the landfill. The concern from these facilities is related to the kind of materials disposed of in them, which can consist of non-hazardous (Class III), hazardous waste (Class I), or a combination of both (Class II). There are no active or inactive landfill sites located in the City of Artesia.

Other Potential Sources of Hazardous Materials

ASBESTOS CONTAINING MATERIALS

Asbestos is a common name for a group of naturally occurring fibrous silicate minerals that are made up of strong durable fibers, which vary in size and physical shape. Asbestos is strong, incombustible, and corrosion resistant. Because of its physical properties, asbestos was used in many commercial products in construction and many other industries, since prior to the 1940's and up until the early 1970's. Asbestos is commonly found in various manmade products including insulation, ceiling and floor tiles, roof shingles, cement, and automotive brakes and clutches.

Asbestos fibers are relatively stable in the environment, because asbestos is a mineral. Asbestos fibers do not evaporate into air. Asbestos Containing Materials (ACMs) are building materials containing more than one percent (1%) asbestos (some state and regional regulators impose a one-tenth of one percent [0.10%] threshold). ACMs that can be crushed into a powder is termed "friable asbestos." When ACM become friable, there is chance that asbestos fibers can become suspended in air.

It is under these conditions that airborne asbestos fibers represent the most significant risk to human health. Asbestos particles do not migrate through soil. Asbestos fibers do not dissolve in water, but under certain conditions, could become water borne and accumulate in steam beds and sediment. Asbestos is a potential health concern, since long term, chronic inhalation exposure to high levels of asbestos can cause lung diseases including asbestosis, mesothelioma, and/or lung cancer. Many of the existing structures present within the City were built prior to 1978. Therefore, the potential for ACMs is considered high.

Several different Federal, State, and local agencies regulate asbestos. Generally, worker exposure is regulated by the Federal OSHA and its California State counterpart Cal/OSHA.

LEAD-BASED PAINTS

Until 1978, when the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead, many homes were treated with paint containing some amount of lead. It is estimated that over 80 percent of all housing built prior to 1978 contains some lead-based paint (LBP). The mere presence of lead in paint may not constitute a material to be considered hazardous. In fact, if in good condition (no flaking or peeling), most intact LBP is not considered to be a hazardous material. In poor condition, LBPs can create a potential health hazard for building occupants, especially children. Many of the existing structures present within the City were built prior to 1978. Therefore, the potential for LBPs to be found in the City is considered high.

5.9.4 SIGNIFICANCE THRESHOLDS AND CRITERIA

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form used during preparation of the project Initial Study, which is contained in Appendix A of this EIR. The Initial Study includes questions relating to hazards and hazardous materials. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, impacts involving hazards and hazardous materials resulting from implementation of the General Plan Update may be considered significant if they would:

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

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the in the project area;

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/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.

Based on these standards, the proposed project's effects have been characterized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended to avoid or lessen impacts. If a potentially significant impact cannot be reduced to a less than significant impact level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.9.5 PROJECT IMPACTS AND MITIGATION MEASURES

❑ GENERAL PLAN UPDATE POLICIES

The following Policies and Policy Actions relevant to hazards and hazardous materials have been proposed in the General Plan Update:

COMMUNITY RESOURCES AND WELLNESS ELEMENT

Community Safety

Community Policy SAF 4.1: Reduce risks associated with hazardous waste through community education and enforcement of laws and regulations.

Policy Action SAF 4.1.1: Continue to publicize and conduct household hazardous waste roundups in conjunction with the County of Los Angeles.

Policy Action SAF 4.1.2: Enforce Federal, State and local laws and regulations relating to the use, storage, transport and cleanup of hazardous materials to prevent unauthorized discharges.

Policy Action SAF 4.1.3: Educate residents and businesses about the dangers of hazardous materials by urging minimum use and proper storage, management and disposal of hazardous materials.

Community Policy SAF 7.1: Develop a Citywide Disaster Preparedness Plan

Policy Action SAF 7.1.1: Ensure that adequately trained staff is available to provide essential emergency public services.

Policy Action SAF 7.1.2: Work cooperatively with the Public Safety Commission, community organizations, adjacent jurisdictions and regional agencies to prepare Artesia for emergencies.

Policy Action SAF 7.1.3: Coordinate with regional, State and Federal agencies to prepare for and respond to potential terrorism threats.

Community Policy SAF 7.2: Provide community members with information and education on disaster preparedness.

Policy Action SAF 7.2.1: Promote public education and awareness regarding individual fire prevention and safety, earthquake safety, and other emergency preparedness topics through information resources, programs and seminars in conjunction with the County of Los Angeles and other partners.

SUSTAINABILITY ELEMENT

Environmental and Public Health

Community Policy SUS 6.2: Protect and enhance environmental and public health by reducing or eliminating the use of hazardous and toxic materials; minimizing pollutants entering the air, soil, and water; and lessening the risks which environmental problems pose to human health and prosperity.

Policy Action SUS 6.2.1: Control pests and maintain healthy landscaping in City parks and facilities through an integrated pest management program that eliminates the need for pesticides.

Policy Action SUS 6.2.2: Reduce and eliminate the use of harmful chemicals in City maintenance and operation practices.

Policy Action SUS 6.2.3: Develop protocol to ensure that no one geographic or socioeconomic group in the City is being unfairly affected by environmental pollution.

Policy Action SUS 6.2.4: Continue to promote, spread awareness about, and provide opportunities for proper disposal of household hazardous waste.

❑ EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with Section 15128, *Effects Not Found to Be Significant,* of the *CEQA Guidelines*, the following briefly discusses the reasons that various possible significant effects of the Project were determined not to be significant and were therefore not discussed in detail.

Threshold: *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

Threshold: *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

There are no public airports or public use airports located within 2.0 miles of the City of Artesia. Additionally, there are no private airstrips within the City's vicinity. The two closest air facilities to the City are the Los Alamitos Armed Air Forces Reserve Center located approximately nine miles to the south, and the Fullerton Municipal Airport located approximately nine miles to the east. Therefore, the *General Plan Update* would not result in a safety hazard for people residing or working in the project area. No impact would occur in this regard.

Threshold: *Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.*

The City of Artesia is 99 percent urbanized and the surrounding cities, Cerritos and Norwalk, are entirely urbanized, as well. There are no wildlands located adjacent to urbanized areas or residences intermixed with wildlands in the City. Therefore, the General Plan Update would not expose people or structures to a significant risk involving wildland fires.

❑ POTENTIALLY SIGNIFICANT IMPACTS

ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS

■ **FUTURE DEVELOPMENT IN THE CITY COULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC AND THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS.**

Impact Analysis: Many types of businesses utilize various chemicals and hazardous materials, and their routine business operations involve chemicals that are manufactured, warehoused, or transported. Currently, there are a variety of existing business operations in the City that use, store, or transport hazardous substances, as well as generate hazardous waste.

Additionally, the incremental growth in non-residential uses associated with the proposed General Plan Update involves an additional 416,017 square feet of commercial uses. The possibility exists that future commercial development in the City would require or engage in operations that involve the routine transport, use, or disposal of hazardous materials, potentially creating a significant hazard to the public and/or environment. The secondary activities that would occur with commercial and residential uses (e.g., building and landscape maintenance) would also involve the use of hazardous materials.

The types and quantities of hazardous materials utilized by the various types of businesses that could locate in the City would vary and, as a result, the nature of potential hazards would also be varied. Such substances can range from common automobile oil and household pesticides to chlorine, dry-cleaning solutions, ammonia, or substances used in commercial and industrial operations. Cleaning and degreasing solvents, fertilizers, pesticides, and other materials used in the regular maintenance of buildings and landscaping would also be utilized in the secondary activities associated with commercial and residential uses. Since the proposed General Plan Update does not involve any specific development projects, no specific type of hazard associated with the anticipated growth in commercial uses can be identified and the likelihood of a hazard presenting a serious health or safety to the public cannot be determined at this time. The exposure of persons to hazardous materials could occur in the following manners:

- Improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel;
- Transportation accident;
- Environmentally unsound disposal methods; or
- Fire, explosion, or other emergencies.

Therefore, both residential and non-residential development that occurs within the City could create a significant hazard to the public and the environment through the routine transport, use, or disposal of hazardous materials. Consequentially, this increased presence in hazardous materials in the City would increase the potential for human exposure to these substances, with possible public health and safety consequences.

All future development within the City would be subject to compliance with existing regulations, standards, and guidelines established by the Federal, State, and local agencies related to storage, use, and disposal of hazardous materials. Specifically, future development within the City would be subject to compliance with the environmental programs administered by the HHMD. The Hazardous Waste Generator Program requires that generators submit a Hazardous Waste Generator Form to their CUPA. Generators are classified as LQG, SQG, CESQG, or Satellite Storage, according to the amount of hazardous waste generated per month. Compliance with the Hazardous Materials Release Response Plans and Inventory Program requires the owner or operator of any business that handles or stores hazardous materials equal to or above the reportable quantities to submit a Hazardous Materials Inventory and Contingency Plan. Compliance would ensure that all hazardous wastes that would be generated by Artesia businesses be properly handled, recycled, treated, stored, and disposed. The Contingency Plan would be required, in order to assure that businesses have appropriate procedures and policies in place, and employees and contractors have adequate training for responding to a hazardous

materials incident at the facility. In addition, businesses subject to EPCRA are required to annually submit one signed Hazardous Material Inventory Chemical Description Form for each hazardous material subjected to EPCRA. Compliance with the Aboveground APST Program would protect people and natural resources from aboveground petroleum storage tank spills or releases, and compliance with the UST Program would ensure that hazardous materials stored in underground tanks are not released into the groundwater and/or the environment. Compliance with these programs would assist in mitigating a release or threatened release of a hazardous material and minimize any potential harm or damage to human health or the environment. Continued compliance with the City's Emergency Operations Plan would also be required.

Future development anticipated by the General Plan Update would increase the number of persons in the City exposed to potential hazards involving the routine transport, use, or disposal of hazardous materials. While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to maintain risk to acceptable levels. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations, which would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with the proposed General Plan Update would be less than significant. In addition, it is a General Plan Update Goal to minimize the threat to public health and safety and the environment associated with the transport, use, storage, and disposal of toxic and/or hazardous materials. To this end, all future development would be subject to compliance with the General Plan Update Policies and Policy Actions outlined above, which would further minimize potential impacts involving the routine transport, use, or disposal of hazardous materials.

Mitigation Measures: No mitigation is required.

Level of Significance After Mitigation: Less Than Significant.

CONSTRUCTION-RELATED ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS

- **SHORT-TERM CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE PROPOSED GENERAL PLAN UPDATE COULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT THROUGH ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS.**

Impact Analysis: One of the means through which human exposure to a hazardous substance could occur is through accidental release. Incidents that result in an accidental release of a hazardous substance into the environment can cause soil, surface water, and groundwater contamination, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, the hazardous substances can migrate into the soil or enter a local stream or channel causing contamination of soil and water. Human exposure to contaminated soil or water can have potential health effects on a variety of factors, including the nature of the contaminant and the degree of exposure.

Construction activities associated with future development within the City could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions. Hazardous material issues may exist relating to commercial/industrial sites, agricultural areas, and old buildings. Existing structures may need to be demolished prior to construction of new buildings. Demolition of structures could expose construction personnel and the public to hazardous substances such as asbestos containing materials (ACM) or lead-based paints (LBP), depending on the age of the structure. In addition, the disturbance of soils and demolition of structures could expose construction workers or employees to health or safety risks in the event contaminated structures and/or soils are encountered during construction. Exposure could occur from ACM or LBP in older buildings, or unknown contaminants that have not previously been identified. It is noted that State Route 91 (SR-91) traverses the City. The potential exists for accidental release of hazardous materials associated with SR-91. The potential impacts associated with accidental release of hazardous materials are discussed below.

Demolition. Specific development projects have not been identified. However, it is assumed that existing buildings would be demolished as uses are redeveloped within the City. Given the age of some of the City's buildings, it is likely that these buildings could contain LBP, ACM, and/or other contaminants. As a result, construction workers and the public could be exposed. Further, the potential exists that construction activities may release potential contaminants that may be present in building materials (e.g., mold, lead, etc.). Federal and State regulations govern the renovation and demolition of structures where ACMs and LBPs are present. All demolition that could result in the release of ACMs or LBPs must be conducted according to Federal and State standards. The National Emission Standards for Hazardous Air Pollutants (NESHAP) mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. If ACM material is found, abatement of asbestos would be required prior to any demolition activities. Compliance with the recommended mitigation regarding the requirement for an asbestos survey and asbestos abatement, as well as compliance with SCAQMD Rule 1403, would reduce potential impacts to a less than significant level.

Soil and Groundwater Contamination in Unknown Contaminated Sites. Grading and excavation for future development within the City could expose construction workers and the public to unidentified hazardous substances present in the soil or groundwater. Exposure to contaminants could occur if the contaminants migrated to surrounding areas or if contaminated zones were disturbed at the contaminated location. Exposure to hazardous substances is considered potentially significant. Additionally, the potential exists for unidentified underground storage tanks (USTs) to be present on a development site. Removal activities could pose risks to workers and the public. Potential risks would be minimized by managing the tank according to existing HHMD's standards. Potential impacts to groundwater would be dependant on the type of contaminant, the amount released, and depth to groundwater at the time of the release.

Also, short-term construction/remediation processes may involve substantial amounts of excavation and grading, potentially creating water quality impacts due to off-site runoff (in which the runoff may contain contaminated soils). If groundwater contamination is identified, remediation activities would be required by the Regional Water Quality Control Board (RWQCB), prior to the commencement of construction activities. Standard short-term erosion

control measures and applicable Best Management Practices (BMP's) would be implemented to ensure that runoff is properly contained on-site and that impacts in this regard are reduced to less than significant levels.

State Route 91. Aerially deposited lead (ADL) may be encountered within state right-of-way soil. The California Department of Transportation (Caltrans) has sampled sediment adjacent to traffic lanes in major metropolitan areas and determined that lead from leaded gasoline emissions is present within these areas. Elevated lead levels have been found to be highest at the surface (zero to six inches) and decreases with depth. Levels are usually highest immediately adjacent to the traveled way and decreases with distance from the road.

Remediation would occur prior to future development on or adjacent to affected portions of a proposed development site. The HHMD Site Mitigation Unit reviews and approves assessment and mitigation work plans for sites contaminated with hazardous substances. Potential future development would require appropriate discretionary review, including evaluation of site-specific conditions and, if deemed necessary, would incorporate a Remedial Action Plan (RAP) to ensure proper site cleanup prior to potential future project implementation.

Remediation activities could expose workers, residents, and potential future project occupants to a variety of potentially hazardous materials. Although remedial processes are yet to be determined, site remediation activities are strictly controlled by Federal, State, and local requirements, and the majority of identified contaminants are petroleum-based (which are not considered "toxic" or acutely hazardous). Toxic or hazardous materials would be handled in strict accordance with existing regulations. Therefore, compliance with the required mitigation measures and regulations/approvals as administered by the RWQCB, SCAQMD, and DTSC is expected to reduce potential impacts to less than significant levels. Moreover, all remedial activities would be subject to a County-approved RAP, which must demonstrate compliance with applicable Federal and State regulations. Additionally, all future development would be subject to compliance with the General Plan Update Policies and Policy Actions outlined above, which would further minimize potential impacts involving hazards to the public or environment through accident conditions involving the release of hazardous materials during the construction phase.

Despite compliance with General Plan Update Policies and Policy Actions, identified remediation procedures, and regulatory framework, the potential still exists for the unexpected discovery of areas of contamination. In the event such wastes are uncovered, they may threaten the health of workers and the general public. Therefore, mitigation is required to reduce potentially significant impacts to less than significant levels.

Mitigation Measures:

HAZ-1 Prior to issuance of a Grading Permit, a Phase I Environmental Site Assessment shall be prepared in accordance with ASTM Standards and Standards and Practices for AAI, in order to investigate the potential existence of site contamination. Any site specific uses shall be analyzed according to the Phase I Environmental Site Assessment (i.e., auto service stations, agricultural lands, etc.). The Phase I Environmental Site Assessment shall identify Specific Recognized Environmental

Conditions (RECs) (i.e., asbestos containing materials, lead-based paints, polychlorinated biphenyls, etc), which may require remedial activities prior to construction.

HAZ-2 Prior to potential remedial excavation and grading activities, impacted areas shall be cleared of all maintenance equipment and materials (e.g., solvents, grease, waste-oil), construction materials, miscellaneous stockpiled debris (e.g., scrap metal, pallets, storage bins, construction parts), above ground storage tanks, surface trash, piping, excess vegetation and other deleterious materials. These materials shall be removed off-site and properly disposed of at an approved disposal facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. In the event concentrations of materials are detected above regulatory cleanup levels during demolition or construction activities, the project Applicant shall comply with the following measures in accordance with Federal, State, and local requirements:

- Excavation and disposal at a permitted, off-site facility;
- On-site remediation, if necessary; or
- Other measures as deemed appropriate by the County of Los Angeles Fire Department Health Hazardous Materials Division.

HAZ-3 Prior to structural demolition/renovation activities, should these activities occur, a Certified Environmental Professional shall confirm the presence or absence of ACM's and LBPs. Should ACMs or LBPs be present, demolition materials containing ACMs and/or LBPs shall be removed and disposed of at an appropriate permitted facility.

HAZ-4 Areas of exposed soils within Caltrans right-of-way that would be disturbed during excavation/grading activities shall be sampled and tested for lead prior to ground disturbance activities on a project-by-project basis, so that any special handling, treatment, or disposal provisions associated with aerially deposited lead may be included in construction documents (if aerially deposited lead is present).

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated.

LONG-TERM ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS

- **OPERATIONS OF FUTURE DEVELOPMENT WITHIN THE CITY IN ACCORDANCE WITH THE PROPOSED GENERAL PLAN UPDATE COULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT THROUGH ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS.**

Impact Analysis: Operations of future land uses within the City in accordance with the General Plan Update could 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. The specific potential future increase in the amount of hazardous materials transported within and through the City, as a result of implementation of the proposed General Plan Update cannot be predicted, since specific development projects are not identified. The analysis presented below examines the potential nature and magnitude of risks associated with the accidental release of hazardous materials often used during operations of typical commercial developments. Typical incidents that could result in accidental release of hazardous materials involve:

- Leaking underground storage tanks;
- Spills during transport;
- Inappropriate storage;
- Inappropriate use; and/or
- Natural disasters.

If not cleaned up immediately and completely, these and other types of incidents could cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

Leaking Storage Tanks. Chemicals and wastes stored in aboveground or underground storage tanks would follow guidelines mandated by the California State Water Resources Control Board. Aboveground tanks storing hazardous chemicals would have secondary containment to collect fluids that are accidentally released. Underground storage tanks and connecting piping would be double-walled and would have monitoring devices with alarms installed to constantly monitor for unauthorized releases in accordance with Federal and State standards.

Off-Site Transport. Transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. The potential exists for licensed vendors to transport hazardous materials to and from the City's new commercial sites. Accidental releases would most likely occur in the commercial areas/industrial areas and along transport routes leading to and from these areas. The City's street setback requirements minimize the direct damage that may occur from transportation-related hazardous waste spills. Additionally, the USDOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 of the Code of Federal Regulations, and implemented by Title 13 of the CCR. Appropriate documentation would be provided for all hazardous waste that is transported in connection with specific project-site activities, as required for compliance with existing hazardous materials regulations.

Future developments would be subject to compliance with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste. Compliance with all applicable Federal, State, and local laws related to the transportation of hazardous materials would reduce the likelihood and severity of accidents during transit, thereby ensuring that a less than significant impact would occur in this regard.

Storage and Handling. Hazardous materials must be stored in designated areas designed to prevent accidental release to the environment. California Building Code (CBC) requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable Federal, State, and local laws related to the storage of hazardous materials would be required to maximize containment and provide for prompt and effective clean-up, if an accidental release occurs, thereby ensuring that a less than significant impact would occur.

Hazardous materials use would present a slightly greater risk of accident than hazardous materials storage. However, for those employees who would work with hazardous materials, the amount of hazardous materials that are handled at any one time are generally relatively small, reducing the potential consequences of an accident during handling. Specific project-site activities must comply with Federal, State, and local laws to eliminate or reduce the consequence of hazardous materials accidents.

Major hazardous materials accidents associated with industrial and retail-commercial uses are infrequent, and it is not anticipated additional emergency response capabilities would be necessary, in order to respond to the potential incremental increase in the number of incidents that could result from future development within the City. Notwithstanding, the County of Los Angeles HHMD Emergency Operations Section provides 24-hour emergency response services to hazardous materials incidents occurring throughout Los Angeles County. Teams of hazardous materials specialists ensure that public health and safety, along with the environment, are protected from hazardous material releases. Additionally, all future development within the City would be subject to compliance with the CalARP, which requires any business that handles more than threshold quantities of a Regulated Substance (RS) to develop a Risk Management Plan (RMP). The RMP is implemented by the business to prevent or mitigate releases of regulated substances that could have off-site consequences. Additionally, as discussed above, all future development within the City would be subject to compliance with the Hazardous Waste Generator Program, which requires that all hazardous wastes that would be generated by Artesia businesses be properly handled, recycled, treated, stored, and disposed. Compliance with the Underground Storage Tank Inspection Program would ensure that hazardous materials stored in underground tanks are not released into the groundwater and/or the environment, and compliance with the Aboveground Petroleum Storage Tank (APST) Program would protect people and natural resources from aboveground petroleum storage tank spills or releases. Compliance with the Hazardous Materials Release Response Plans and Inventory Program requires a chemical inventory form (on a Hazardous Material Inventory Chemical Description Form) to disclose hazardous materials stored, used, or handled on site. Preparation of a Contingency Plan would be required, in order to ensure that businesses have appropriate procedures and policies in place and employees and contractors have adequate training for responding to a hazardous materials incident at the facility. Compliance with these programs would assist in mitigating a release or threatened release of a hazardous material and minimize any potential harm or damage to human health or the environment. Compliance with the City's Emergency Operations Plan would also be required.

Oversight by the appropriate agencies and compliance with measures established by Federal, State, and local regulatory agencies is considered adequate to offset the negative effects related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials in the City. Additionally, all future development would be subject to compliance with the General Plan Update Policies and Policy Actions outlined above, which would further minimize potential impacts involving hazards to the public or environment through accident conditions involving the release of hazardous materials during ongoing operations.

In summary, compliance with the established regulatory framework and recommended mitigation measures would ensure that these potential impacts are less than significant by requiring compliance with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and handling through the implementation of established safety practices, procedures, and reporting requirements.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 through HAZ-4 outlined above.

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated.

HAZARDOUS MATERIALS IN PROXIMITY TO A SCHOOL

- **FUTURE DEVELOPMENT WITHIN THE CITY COULD EMIT OR HANDLE HAZARDOUS EMISSIONS WITHIN ONE-QUARTER MILE OF AN EXISTING SCHOOL.**

Impact Analysis: Schools are located within and adjacent to the City; refer to Section 5.11.3, *Schools*. As discussed previously, the incremental growth in non-residential uses associated with the proposed General Plan Update involves an additional 3.6 million square feet of commercial uses. Hazardous materials could be used during construction of commercial uses within the City, including the use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products (used in the maintenance of pumps, pipes, and equipment), and diesel and other fuels (used in construction and maintenance equipment and vehicles). Additionally, future commercial development may include businesses that utilize chemicals and hazardous materials, and their routine business operations involve chemicals that are manufactured, warehoused, or transported. The secondary activities that would occur with commercial and residential uses (e.g., building and landscape maintenance) would also involve the use of hazardous materials. Therefore, the possibility exists that construction or routine operations associated with future commercial development in the City would involve transport, use, or disposal of hazardous materials, within one-quarter mile of an existing school.

Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, disclosure to the HHMD (on a Hazardous Material Inventory Chemical Description Form) is required for any business that uses, handles, or stores hazardous materials or waste materials equal to or in excess of the basic quantities. Among other requirements,

businesses must also prepare a Contingency Plan, in order to assure that businesses have appropriate procedures and policies in place and employees and contractors have adequate training for responding to a hazardous materials incident at the facility. The short- and long-term transport, use, and disposal of hazardous materials would be subject to a wide range of laws and regulations intended to minimize potential health risks associated with their use or the accidental release of such substances. Compliance with existing regulations and General Plan Update Policies and Policy Actions outlined above would minimize the risks to schools associated with the exposure to hazardous materials. This impact would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance After Mitigation: Less Than Significant.

HAZARDOUS MATERIAL SITES

- **FUTURE DEVELOPMENT WITHIN THE CITY COULD BE LOCATED ON A HAZARDOUS MATERIALS SITE CREATING A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT.**

Impact Analysis: As indicated above, there are various hazardous material sites located within the City. Potential hazards to construction workers and the public may occur from construction activities on existing sites that may be contaminated. Future development of any of these documented hazardous materials sites would require prior remediation and cleanup under the supervision of the DTSC, in order to meet Federal, State, and local standards. Since the proposed General Plan Update does not include any specific development projects, future development would be evaluated on a project-by-project basis to determine if such sites are listed on a current regulatory hazardous materials site list. The recommended mitigation measures would reduce potential impacts in this regard to less than significant levels.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 through HAZ-4 outlined above.

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated.

EMERGENCY EVACUATION PLAN

- **FUTURE DEVELOPMENT WITHIN THE CITY COULD INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EVACUATION PLAN.**

Impact Analysis: The City's Emergency Operations Plan anticipates that all major streets within the City would serve as evacuation routes. Construction activities associated with future development in the City could temporarily impact street traffic adjacent to the proposed development sites during the construction phase due to roadway improvements and potential

extension of construction activities into the right-of-way. This could reduce the number of lanes or temporarily close certain street segments. Any such impacts would be limited to the construction period and would affect only adjacent streets or intersections. With implementation of the recommended mitigation, which would ensure that temporary street closures would not affect emergency access in the vicinity of future developments, impacts would be less than significant. All future developments would be required to provide sufficient emergency access, as required by the Zoning Code.

City highways and arterial streets that connect to the Artesia Freeway (State Route 91) and San Gabriel River Freeway (Interstate 605) would serve as potential evacuation routes, in the event of a disaster. The City's highways and arterial streets maintain right-of-way widths of 80 to 100 feet and form a grid pattern throughout Artesia at one-half mile intervals. This pattern would continue to ensure that various evacuation routes are accessible to residents, in the event of a disaster. Additionally, the City's Emergency Operations Plan would continue to be implemented. As such, future development within the City would not interfere with an adopted emergency response plan and/or the emergency evacuation plan and less than significant impacts would occur. Moreover, the General Plan Update has identified as a Goal to maintain effective emergency and disaster preparedness on the part of the City and its community members, in order to minimize the social and economic impacts a natural or urban disaster could have on Artesia. To this end, all future development in the City would be subject to compliance with the General Plan Update Policies and Policy Actions outlined above, which would ensure future development within the City would not interfere with an adopted emergency response plan or evacuation plan.

Mitigation Measures:

HAZ-5 Prior to construction, future developers shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:

- At least one unobstructed lane shall be maintained in both directions on surrounding roadways.
- At any time only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions.
- If construction activities require the complete closure of a roadway segment, the developer shall provide appropriate signage indicating detours/alternative routes.

HAZ-6 The City Planning Department shall consult with the City's Police Department to disclose temporary closures and alternative travel routes, in order to ensure adequate access for emergency vehicles when construction of future projects would result in temporary land or roadway closures.

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated.

5.9.6 CUMULATIVE IMPACTS

- **FUTURE DEVELOPMENT RESULTING FROM IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE COULD RESULT IN CUMULATIVE IMPACTS RELATED TO HAZARDS AND HAZARDOUS MATERIALS.**

Impact Analysis: For this topic, the cumulative impacts are analyzed in terms of impacts within the City of Artesia. An increase in population within the City of Artesia would occur from implementation of the proposed General Plan Update. This may increase demand on the City's public health and safety services. New mixed residential development may be located in proximity or adjacent to uses involving hazardous materials, which would increase the amount of persons exposed to threats and also increases the likelihood the City health and safety services would be utilized. Additionally, new non-residential development may consist of additional facilities that use, store, produce or transport hazardous wastes, and therefore would utilize City and County health and safety services and increased exposure to residents who may also be employees of those businesses. As noted above, impacts related to hazards and hazardous materials would be reduced to less than significant with implementation of the policies and implementation measures of the General Plan Update, as well as implementation of the recommended mitigation measures.

As with projects resulting from buildout of the proposed General Plan Update, regional projects would be required to evaluate their respective public health and safety impacts on a project-by-project basis. Development occurring within the region would be required to comply with Federal, State, and local regulations regarding the use, disposal and transport of hazardous materials. The additional contribution of the proposed General Plan Update would be less than significant regarding public health and safety impacts at a cumulative level. Thus, implementation of the proposed General Plan Update would not result in cumulatively considerable public health or safety impacts with implementation of recommended mitigation measures.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 to HAZ-6.

Level of Significance: Less Than Significant With Mitigation Incorporated.

5.9.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant impacts related to hazards or hazardous materials have been identified following implementation of the recommended mitigation measures and compliance with the Federal, State, and local regulatory requirements, and General Plan Update Policies.

5.9.8 SOURCES CITED

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