SECTION 4.7

HAZARDS AND HAZARDOUS MATERIALS

This section describes federal, state and local regulations applicable to hazards and hazardous materials. It also describes the environmental setting with regard to potential hazards on the Project parcels and potential hazards created as a result of implementing the proposed Project. Two separate Phase I Environmental Site Assessments were prepared for the Project. One for the building at 2421 Enterprise Boulevard (EMG 2017a) and another for the vacant parcels (Parcels 1, 2 and 3) adjacent to Sunset Boulevard (EMG 2017b). The Phase I Environmental Site Assessments (ESAs) are provided on the attached CD of Technical Appendices as **Appendix F** of this EIR.

This section discusses potential exposure to hazardous materials and/or creation of hazards that could result from implementation of the proposed Trinity Cultivation and Manufacturing Facility. It focuses on hazardous materials and hazards requiring remediation or mechanisms to prevent accidental release. Measures are identified to reduce or avoid adverse impacts anticipated from construction and operation of the proposed Project. A discussion of cumulative impacts related to hazards and hazardous materials is also included in this section.

This analysis also addresses the potential exposure of workers to hazardous materials during operation of the Project. Employers must inform employees of hazards associated with their work and provide those employees with special protective equipment and training to reduce the potential for health impacts from the handling of hazardous materials.

Other hazards are addressed in the following sections: geologic and seismic hazards (Section 4.5, Geology and Soils); flood hazards (Section 4.8, Hydrology and Water Quality); and noise exposure (Section 4.9, Noise).

4.7.1 REGULATORY FRAMEWORK

A. FEDERAL

Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.)

The Resource Conservation and Recovery Act (RCRA) grants authority to the United States Environmental Protection Agency (EPA) to control hazardous waste from start to finish. This covers the production, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of non-hazardous solid waste. The 1986 amendments to the RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The Project parcels do not contain any underground storage tanks (EMG 2017a, p. 10; EMG 2017b, p. 11).

Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act, better known as the Clean Water Act (CWA), is a comprehensive statute focused on restoring and maintaining the chemical, physical and biological integrity of the nation's waters. Originally enacted in 1948, the CWA was amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost on an annual basis.

Primary authority for the implementation and enforcement of the CWA rests with the EPA. The CWA: authorizes water quality programs; requires federal effluent limitations and state water quality standards; requires permits for the discharge of pollutants into navigable waters; provides enforcement mechanisms; and authorizes funding for wastewater treatment work, construction grants, and state revolving loan programs; and authorizes funding to states and tribes for water quality programs. Provisions have also been added to address water quality problems in specific regions and specific waterways. The Project would be subject to the General Permit for Discharges of Storm Water Associated with Construction Activity (NPDES No. CAS000002) (Construction General Permit Order 2010-2014-DWQ, effective February

14, 2011) during construction. Operation of the Project would be covered under Industrial Storm Water General Permit Order 97-03-DWQ (General Industrial Permit) - NPDES permit (No. CAS000001).

Occupational Safety and Health Act (OSHA)

Congress passed the Occupational Safety and Health Act (OSHA) to assure safe and healthful working conditions for working men and women. OSHA assists States with ensuring safe and healthful working conditions and provides for research, information, education, and training in the field of occupational safety and health. The Project would be subject to OSHA requirements during construction and operation.

B. STATE

Title 22 of the California Code of Regulations

Hazardous Materials Defined

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. According to Title 22, Section 66260.10, of the California Code of Regulations (CCR), a hazardous material is defined as:

> *…A substance or combination of substances which because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or, (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed*.

Chemical and physical properties that cause a substance to be considered hazardous include the properties of toxicity, ignitability, corrosivity, and reactivity (Title 22, Sections 66261.20 through 66261.24). Factors that influence the health effects of exposure to hazardous materials include dosage, frequency, the exposure pathway, and individual susceptibility. The proposed Project would require use of small amounts of hazardous materials (such as diesel fuel, oil and grease for heavy equipment) during construction. However, the Project does not propose to use any hazardous materials (e.g. butane for extraction of oils) during operation.

California Environmental Protection Agency

The California Environmental Protection Agency (Cal-EPA) and the State Water Resources Control Board (SWRCB)established rules governing the use of hazardous materials and the management of hazardous waste. Applicable state laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act
- Porter-Cologne Water Quality Control Act

Department of Toxic Substances Control

The Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for the management of hazardous materials and the generation, transport, and disposal of hazardous waste

under the authority of the Hazardous Waste Control Law (HWCL). Enforcement is delegated to local jurisdictions that enter into agreements with DTSC.

California's Secretary of Environmental Protection established a unified hazardous waste and hazardous materials management regulatory program as required by Health and Safety Code Chapter 6.11. The unified program consolidates, coordinates, and makes consistent portions of the following six existing programs:

- Hazardous Waste Generations and Hazardous Waste On-site Treatment
- Underground Storage Tanks
- Hazardous Material Release Response Plans and Inventories
- California Accidental Release Prevention Program
- Aboveground Storage Tanks (spill control and countermeasure plan only)
- Uniform Fire Code Hazardous Material Management Plans and Inventories

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

The Office of the State Fire Marshal participates in all levels of the CUPA program including regulatory oversight, CUPA certifications, evaluations of the approved CUPAs, training, and education. The DTSC serves as the CUPA in Imperial County.

Diesel fuel would be used to operate generators (one at each cultivation and manufacturing facility used only to provide back-up emergency electricity in case of a power outage). Diesel transport, use and storage would be subject to DTSC and local laws, as applicable.

SB 94

On June 27, 2017, the Governor signed SB 94 which combines the requirements of MCRSA and AUMA into a unified code. Cannabis cultivation related legislation established:

Water Code section 13276, which directs the Regional Water Quality Control Boards (RWQCBs) or the State Water Board to address discharges of waste resulting from medical and commercial cannabis cultivation, including adopting a general permit establishing waste discharge requirements, or taking action pursuant to Water Code Section 13269.

Cannabis cultivation related legislation established:

- Water Code Section 13149 authorizes the State Water Board, in consultation with the California Department of Fish and Wildlife (CDFW), to adopt interim and long-term principles and guidelines (requirements) for the diversion and use of water for cannabis cultivation. The requirements:
  - shall include measures to protect springs, wetlands, and aquatic habitats from negative impacts of cannabis cultivation; and
  - may include requirements that apply to groundwater diversions where the State Water Board determines those requirements are reasonably necessary.

- Water Code Section 13276, which directs RWQCB or the State Water Board to address discharges of waste resulting from medical and commercial cannabis cultivation, including adopting a general permit establishing waste discharge requirements, or taking action pursuant to Water Code Section 13269.
- Business and Professions Code section 26060.1(b) requires that any cannabis cultivation licenses issued by the California Department of Food and Agriculture (CDFA) include conditions requested by the CDFW and the SWRCB to ensure that individual and cumulative effects of water diversion and discharge associated with cannabis cultivation do not affect the instream flows needed for fish spawning, migration, and rearing, and the flows needed to maintain natural flow variability. The conditions shall include, but not be limited to, the principles, guidelines, and requirements established pursuant to Section 13149 of the Water Code.

These codes primarily apply to outdoor cannabis cultivation operations. The Project proposes indoor cultivation with no diversion of groundwater (see Section 4.10, Public Services and Utilities).

California Department of Public Health

The California Department of Public Health (CDPH) is one of three state licensing authorities charged with licensing and regulating commercial cannabis activity in California. CDPH is responsible for regulation of the manufacturing component of the industry, which it will do through the Manufactured Cannabis Safety Branch. In November 2017, CDPH released Emergency Regulations that outline the standards and licensing procedures for both medicinal and adult-use commercial cannabis manufacturing and products. These replace the medicinal regulations released in April 2017 developed in response to previous versions of state law.

Licensees must have written procedures for inventory control, quality control, transportation, security and cannabis waste disposal. Descriptions of these procedures or Standard Operating Procedures (SOPs) must be submitted with the annual license application. Cannabis waste cannot be sold, must be placed in a secured area, and be disposed of according to applicable waste management laws. The Project would be subject to regulations imposed by CDPH regarding cannabis waste disposal (Dorsey 2018).

C. LOCAL

County of Imperial Solid Waste Local Enforcement Agency (LEA)

State law (Public Resources Code) requires every local jurisdiction to designate a solid waste Local Enforcement Agency (LEA), which is certified by the California Department of Resources Recycling and Recovery (Cal Recycle), to enforce federal and state laws and regulations for safe and proper handling of solid waste (ICPHD 2018). The County of Imperial Solid Waste LEA is responsible for enforcement of federal, state, and local laws and regulations within the jurisdiction of the County of Imperial protect public health safety and the environment by ensuring safe and proper solid waste management practices. The proposed Project would be subject to the LEA regarding disposal of waste from the cultivation and manufacturing facilities.

City of Calexico General Plan

The Calexico General Plan has been prepared to fulfill the requirement of California law that each city adopt a comprehensive General Plan to guide physical development of the incorporated area and land outside of the municipal boundaries.

The Safety Element of the Calexico General Plan establishes policies and programs to protect the community from risk associated with geologic hazards (including earthquakes and secondary hazards),

flooding, fire (both wildland and urban), hazardous materials, the New River, peak load water supply and emergency access. The goals, objectives, and policies provide direction for development. Calexico's current General Plan dated February 2007 was adopted by the City on May 1, 2007.

Table 4.7-1 analyzes the consistency of the proposed Project with the applicable goal and objectives of the City of Calexico General Plan Safety Element. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Calexico City Council ultimately determines consistency with the General Plan.

TABLE 4.7-1
CITY OF CALEXICO GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goal and Objectives	Consistent with General Plan?	Analysis
SAFETY ELEMENT		
8.5.1 Goal To identify and minimize, to the extent possible or feasible, the risks to persons and property caused by natural and human-induced hazards.		
8.5.1.5 Hazardous Materials		
Objective 5: To ensure the health, safety, and welfare of the residents and guests of Calexico through strict regulation and planning for the safe transport, storage and usage of hazardous materials in the Calexico area.		
Policy 5a. Discourage the transport of hazardous materials through residential and critical facilities and limit transport through heavily developed areas as much as possible. (See Truck Route designations, figure C-3, in the Circulation Element.)	Yes	The location and siting of cannabis businesses was carefully considered by the City of Calexico. While cannabis is not considered a hazardous material, cannabis facilities are limited to the Cannabis Overlay Zone (COZ) in the industrial portion of the City. Transport of diesel for the four on-site generators would be subject to DTSC and local laws as applicable and would avoid residential areas. Transport of waste trimmings from the cultivation and manufacturing process (while void of any psychoactive properties) would be by way of West Cole Boulevard and major streets and highways. Residential neighborhoods would be avoided when transporting waste to the landfill. Therefore, the proposed Project is consistent with this policy.
Policy 5b. Prohibit incompatible land uses near sites that use, store or produce hazardous materials.	Yes	As noted under Policy 5a above, the City created a COZ specifically to accommodate cannabis businesses. Land uses surrounding the proposed Project parcels are also industrial and compatible with the proposed cannabis cultivation and manufacturing facility and the transportation and distribution facility. Therefore, the proposed Project is consistent with this policy.

Airport Land Use Compatibility Plan

The Airport Land Use Compatibility Plan (ALUCP) was prepared by the County of Imperial and the County's Airport Land Use Commission in 1996. The ALUCP identifies compatibility zones around the Calexico International Airport and suggests appropriate residential densities and criteria for other uses that will reduce conflicts between airport operations and adjacent users and increases safety for those uses in proximity of the airport. The Project parcels are not located within any of the compatibility zones identified on the Calexico International Airport Compatibility Plan Figure 3B (ALUC 1996) (refer to Figure 4.1-1 in Section 4.1, Land Use).

4.7.2 ENVIRONMENTAL SETTING

A. PROJECT PARCELS

The proposed Project covers approximately 8.44 acres (including 2421 Enterprise Boulevard) located at the corner of West Cole Boulevard and Sunset Boulevard. The Phase I ESAs examined vacant APNs 059-343-003, 059-343-014, 059-343-016 and 059-343-006 as well as a reconnaissance of the building at 2421 Enterprise Boulevard (APN 059-343-018).

Phase I Environmental Site Assessments

Information contained in this section is summarized from the "Phase I Environmental Site Assessment of 2421 Enterprise Boulevard, Calexico, California" (EMG 2017a) and "Phase I Environmental Site Assessment Cole Road and Sunset Boulevard, Calexico, California 92231" (EMG 2017b). The Phase I s are provided in **Appendix F** on the attached CD of Technical Appendices of this EIR.

The Phase I ESAs were performed using methods and procedures consistent with good commercial customary practice conforming with ASTM E1527-13, Standard Practice for Environmental Site Assessments. The Phase I ESA is based on the evaluation of the information gathered, laboratory analysis of samples collected (when required), and accessibility at the time of the assessment.

- Interviews with individuals knowledgeable about the Project for the purpose of gathering information regarding the potential for contamination at the Project.
- Available pertinent documents obtained by EMG or provided by the Applicant(s).
- Reasonably ascertainable federal, state, and local records in an effort to identify sites of known or suspected hazardous waste activity located at or near the Project.
- The Project history in an attempt to identify possible ownership(s) and/or uses, as identified through review of reasonably ascertainable standard historical sources.
- The physical characteristics of the Project, as identified through review of reasonably ascertainable topographic data, wetlands, soils, geology, and groundwater data.
- Current Project conditions (as applicable) as they pertain to the presence or absence of: facility storage tanks, drums, containers (above or below ground), etc.; transformers and other electrical equipment which utilize fluid which may potentially contain polychlorinated biphenyls (PCBs); the use of hazardous materials/chemicals and petroleum products; and/or the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes.
- An evaluation of information contained in programs such as the National Priorities List (NPL), Standardized Emergency Management System (SEMS), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), State Hazardous Waste Site (SHWS), Resource Conservation and Recovery Information System (RCRIS), Shallow Water Flow (SWF), Leaking Underground Storage Tank (LUST), and other governmental information systems within

specific search distances of the Project. This evaluation was performed to identify sites that represent a recognized environmental condition. The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The search is designed to meet the requirements of ASTM Standard Practice E 1527-13. The information provided is assumed to be correct and complete.

- Visual observation of the adjacent properties to identify high-risk neighbors and the potential for known or suspected contamination to migrate onto the Project.

The assessment included a screening approach for Non-ASTM Considerations (asbestos containing material; radon gas; lead based paint; lead in drinking water; moisture conditions; wetlands; and flood zone) which are otherwise beyond the Scope of ASTM E1527-13.

Regulatory Review

EMG obtained a regulatory database report from a commercial database provider in an effort to determine if any of the Project parcels are on a listed regulatory site and whether there are any mappable regulatory database sites within the search distances specified by ASTM E1527-13. EMG attempted to field-verify the locations of the identified regulatory sites, as well as confirm distances and locations relative to the Project parcels using available mapping software. Therefore, the distances and/or directions noted in this discussion may not match the Database Report. In addition, EMG reviewed the unmappable sites in the database report, cross-referencing addresses and site names.

In accordance with ASTM E1527-13, regulatory files and/or records associated with standard environmental record sources may be obtained and reviewed when the files and/or records are reasonably ascertainable, the files/records are expected to contain significant information for the purpose of identifying recognized environmental conditions, and an alternative source of the information is not available. Furthermore, review of regulatory files and/or records may be limited by the scope of work. Unless otherwise noted, further review of regulatory agency files and/or records is not considered to be warranted based on the general nature of the regulatory database listing, the level of detail provided in the regulatory database, the availability of information from alternative sources, and/or the low likelihood that the agency files and/or records will contain information indicating the presence of a recognized environmental condition.

Site Reconnaissance

A site reconnaissance was performed by EMG Staff Andrew Zahurak on July 25, 2017. The reconnaissance included visual observation of surficial conditions at APNs 059-343-003-000; 059-343-014-000; 059-343-016-000; 059-343-006-000 and observation of adjoining properties to the extent that they were visible. The reconnaissance also included inspection of 2421 Enterprise Boulevard.

Adjacent Property Use

The adjacent properties were visually observed for evidence of recognized environmental conditions, such as property uses likely to result in a release, and visual evidence of surface migration of releases. Lands to the north, south and west of the Project parcels are vacant; properties to the east are developed with 2411 MTZ Tire Shop; 2421 Enterprise (vacant industrial building); and CAM Trucking at 2452 Enterprise Boulevard. No environmentally suspect uses, such as gasoline stations or dry cleaners were identified. No visual evidence of a release, such as staining or monitoring wells, was observed. No releases were reported on the regulatory database review for the adjacent properties. Based on the information above, no recognized environmental conditions or Recognized Environmental Concerns (RECs) were identified (EMG 2017a, p. 14-15).

Site Observations

Hazardous Substances and Petroleum Products

Accessible interior (2421 Enterprise Boulevard) and exterior areas of the Project parcels were observed for the presence of hazardous materials and petroleum products (EMG 2017a, p. 11; EMG 2017b, p. 9).

EMG evaluated any observed manways, vent pipes, fill connections, concrete pads, and unknown saw cuts to determine if underground storage tanks (USTs) are present at the Project, or if USTs were historically located on any of the Project parcels. In addition, the Key Site Manager and other property management personnel were interviewed regarding the presence of USTs at the Project.

EMG observed the Project parcels for the presence of potentially polychlorinated biphenols (PCB)-containing equipment such as electrical transformers and hydraulic lifts. Equipment installed after 1979 is unlikely to contain PCBs.

EMG observed the parcels for visual evidence of petroleum and natural gas pipelines, such as pipeline markers. None of the following features were identified on any of the parcels: drums and containers; USTs; aboveground storage tanks; oil cooled transformers; hydraulic elevators; hydraulic lifts; other hydraulic equipment; petroleum or natural gas pipelines (EMG 2017a, p. 11; EMG 2017b, p. 9).

Waste Generation, Storage and Disposal

Visual observation for the generation, treatment, storage, and disposal of wastes was performed. The areas of waste generation and storage were observed for evidence of current and past releases. General waste disposal procedures were evaluated to determine if any deficiencies exist that are likely to result in a release to the Project parcels. None of the following were identified on any of the Project parcels: waste generation; septic systems; sewer lift stations; grease traps; oil water separators; unknown drums or containers; waste disposal ponds or lagoons (EMG 2017a, p. 13; EMG 2017b, p. 10).

Surface Areas

The interior and exterior surface areas were observed for environmentally significant features such as wells, sumps, staining, and pits. No signals of surface staining, unusual or noxious odors, landfilling, stressed vegetation, stormwater retention/detention basins or domestic water wells were identified on any of the Project parcels (EMG 2017, p. 14; EMG 2017b, p. 12).

Vapor Migration

Indoor air quality concerns are generally excluded from the scope of ASTM E1527-13 and the Phase I ESAs. However, the migration of vapors caused by a release of hazardous substances or petroleum products to the environment can represent a recognized environmental condition under certain conditions.

For the purposes of the Phase I ESAs, the potential for migrating vapors to represent a recognized environmental condition (applicable to 2421 Enterprise Boulevard) was evaluated using a limited screening method based on technical guidance documents from the US EPA and ASTM E2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. In addition, screening tools created by regulatory agencies may be used to evaluate the significance of a release with respect to the vapor migration and/or vapor intrusion potential. EMG's vapor migration screening was not a human health risk assessment and is not intended to comply with regulatory requirements that might exist for the evaluation of vapor migration (EMG 2017a, p. 23; EMG 2017b, p. 22).

Asbestos

EMG performed a screening to document the presence of known and/or suspect asbestos containing materials (ACM) at the 2421 Enterprise Boulevard. This screening approach is not a comprehensive (i.e.,

AHERA-Style) asbestos survey, nor is it intended to fulfill the NESHAP requirements for demolition or renovation purposes. All materials listed in Appendix G of the United States Environmental Protection Agency (USEPA) publication Managing Asbestos in Place (the "Green Book") are considered suspect.

Some non-friable building products, such as sheet vinyl floor tile, vinyl floor tile, floor tile mastic, asbestos-cement board, and roofing materials can still be manufactured with asbestos and installed in the United States (U.S.). However, U.S. manufacturers have largely excluded asbestos fibers from their building products since 1981. In addition to a visual assessment, EMG reviewed documentation provided to determine if asbestos has been documented previously at the Project parcels. No suspect ACM were identified on the vacant parcels. Because 2421 Enterprise Boulevard was developed after 1981, it is unlikely that asbestos would be present in quantities that would require further assessment or (EMG 2017a, p. 25; EMG 2017b, p. 25).

Radon Gas

Radon originates from the natural (radioactive) breakdown of uranium in soil, rock and water and is the second leading cause of lung cancer in the U.S. Radon can move up through the ground and into living spaces through cracks and other holes in the foundation. The USEPA has developed the EPA Map of Radon Zones to assist National, State, and local organizations in implementing radon-resistant building codes. This map assigns each county in the U.S. to one of three zones based on radon potential. The USEPA uses a continuous exposure level of 4.0 pCi/L (picoCuries per liter of air) as an action level at which additional action is recommended.

The USEPA Radon Zones are defined as:

- Zone 1 (Highest potential) - Average indoor radon screening level greater than 4 pCi/L
- Zone 2 (Moderate potential) - Average indoor radon screening level between 2 and 4 pCi/L.
- Zone 3 (Lowest potential) - Average indoor radon screening level less than 2 pCi/L.

For the purposes of the Phase I ESAs, the radon zone and the use of the Project parcels have been used to determine the level of risk associated with radon. However, the USEPA and the Surgeon General recommend testing all homes for radon, regardless of geographic location.

The Project parcels are located in USEPA Radon Zone 3 (EMG 2017a, p. 25; EMG 2017b, p. 25).

Radon sampling was not performed based on the non-residential use of the existing building at 2421 Enterprise Boulevard (EMG 2017a, p. 25).

Lead Based Paint

All paint applied prior to 1978 is considered suspect. The basis for this determination is taken from the Lead Paint Poisoning Act passed by the Congress of the United States that banned the use of lead paint starting January 1, 1978. This screening approach does not comply with Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing. This approach does not constitute a pre-occupancy survey or the basis of attainment of "Lead Free" certification. Generally, due to the date of construction, the potential use of lead-based paint was minimized due to regulatory requirements and sound business practice. Based on the date of construction (1996) of the existing building at 2421 Enterprise Boulevard (EMG 2017a, p. 3), and the Scope of Work, no samples were collected and no further action or investigation is recommended regarding lead-based paint (EMG 2017a, p. 26; EMG 2017b, p. 25).

Lead in Drinking Water

Lead is commonly used in household plumbing materials and water service lines. Exposure to lead in drinking water above the USEPA action level can result in adverse health effects in children and adults. Lead is rarely found in source water but enters tap water through corrosion of plumbing materials. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water. The USEPA action level for lead-in-drinking water is 15 parts per billion (ppb). According to the information from the local water utility, the water supplied to 2421 Enterprise Boulevard is within federal, state and local drinking water quality standards. In addition, construction of 2421 Enterprise Boulevard occurred after the 1986 ban on lead drinking water piping, lead solder, and flux on copper drinking water piping. No further action or investigation is recommended regarding lead in drinking water at the Project parcels (EMG 2017a, p. 26; EMG 2017b, p. 26).

Flood Zone

The Federal Emergency Management Agency (FEMA) identifies flood hazards, assesses flood risks and partners with states and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. Flood hazard mapping is the basis for the National Flood Insurance Program (NFIP) and flood insurance requirements. FEMA maintains and updates data through Flood Insurance Rate Maps (FIRMs) and risk assessments. FIRMs include statistical information such as data for river flow, storm tides, hydrologic/hydraulic analyses and rainfall and topographic surveys. Review of the FIRM indicated that the Project parcels are located in Zone X, minimal risk areas outside the one percent and 0.2 percent annual chance floodplains. No base flood elevations or base flood depths are shown within these zones (EMG 2017a, p. 27; EMG 2017b, p. 26).

4.7.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines, as listed in Appendix G. The Project would result in a significant impact to hazards and hazardous materials if it would result in any of the following:

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

b) 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.

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

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

e) 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.

f) 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.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

h) 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.

B. Issues Scoped Out as Part of the Initial Study

Several criteria were eliminated from further evaluation as part of the Initial Study Checklist.

Criterion "d" was eliminated because the Agency Database Record Search undertaken as part of the Phase I ESAs (EMG 2017a; EMG 2017b) revealed that none of the Project parcels are on a hazardous materials list pursuant to California Government Code Section 65962.5.

Criteria "e" and "f" were eliminated because the Project parcels are approximately two miles north of the Calexico International Airport and are outside of the airport land use compatibility zones shown on the Calexico International Airport Compatibility Plan (refer to Figure 4.1-2 in Section 4.1, Land Use). Therefore, no safety hazard is identified for people working in the Project area.

Criterion "g" was eliminated because an Emergency Response Plan has been prepared as part of each application and includes an Evacuation Plan. Thus, the proposed Project would not impair the implementation of, or physically interfere with, any adopted emergency response plans or emergency evacuation plans.

Criterion "h" was eliminated because the Project parcels are not in or near an area of urban/wildland interface. The Project parcels are within an industrial portion of the City of Calexico with no threat of wildland fire. Thus, the Project would not expose people or structures to significant risk of loss injury or death involving wildland fire.

C. Methodology

The analysis of hazardous materials is twofold: those potentially existing on the Project parcels and those that would be used as part of construction and operation of the proposed Project.

Potential existing hazards were assessed based on information contained in the "Phase I Environmental Site Assessment of 2421 Enterprise Boulevard, Calexico, California" (EMG 2017a) and "Phase I Environmental Site Assessment Cole Road and Sunset Boulevard, Calexico, California 92231" (EMG 2017b). The Phase I ESAs are provided in **Appendix F** on the attached CD of Technical Appendices of this EIR.

Some hazardous materials would be used on a short-term basis during construction. Others would be stored on-site for use during operations and maintenance. Therefore, this analysis was conducted by examining the choice and amount of chemicals to be used; the manner in which the chemicals would be used and stored; and the manner by which any hazardous materials would be transported to and from the Trinity Cannabis Cultivation and Manufacturing Facility.

D. Project Impacts and Mitigation Measures

Hazardous Materials Transport, Use, Disposal and Accidental Release

Impact 4.7.1 The proposed Project does not involve the use of large quantities of hazardous materials during construction or operation. However, each of the four cultivation and manufacturing facilities would be equipped with a diesel generator that would require occasional refueling which presents the possibility of leaks and spills. This is considered a **potentially significant impact**.

Transport

Small quantities of hazardous materials such as diesel fuel, oil and grease for heavy equipment would be used during construction. Therefore, the likelihood of an accidental release during construction is anticipated to be **less than significant**.

During operation, sludge will be generated from evaporated wastewater. The sludge would be hauled to a landfill for disposal and is not considered hazardous waste. Therefore, the likelihood of an accidental release during transport, or residual contamination following accidental release, is not anticipated throughout Project operation and impacts are considered **less than significant**.

The Project proposes to cultivate and manufacture cannabis without the use any harmful hazardous materials such as butane. However, the Project does include one liquid cooled diesel engine generator set at each of the four cannabis cultivation and manufacturing facilities to provide back-up emergency electricity in case of a power outage. Each tank holds 524 gallons of diesel and would require transport of diesel fuel to each parcel to fill the refuel the tanks on occasion. Transport of diesel is subject to federal and state regulations. Impacts associated with an accidental release of hazardous materials during transport are considered **less than significant.**

Waste generated from the cultivation process will be in the form of "Waste Bio-Mass" that will be placed in a roll-off dumpster. The residual leaves ("fan" and "trim" material) and extraction biomass material will dry out and begin to disintegrate quickly. The byproduct will have had most of its moisture content and oil content stripped from it and will degrade in the same manner as regular waste from the cultivation process. The waste bio-mass will be void of psychoactive properties as well as any contaminants. Approximately 500 pounds of waste biomass may be generated every 2 months (Irwin, pers. comm., 2018e) requiring infrequent trips for disposal. The Applicant(s) will submit a "Special Waste Profile (Profile) to Republic Services. The waste will be taken to the Imperial Landfill. Waste must remain in Imperial County (Leon, pers. comm., 2018d). The likelihood of an accidental release during transport is anticipated to be **less than significant**.

Use and Storage

Manufacture of cannabis oil can involve the use of a solvent such as butane, ethanol, isopropanol, or propane, to extract tetrahydrocannabinol (also known as THC, the active ingredient in cannabis) from the flowers, leaves, and stems of the plants. The resulting mixture of solvent and THC is then filtered and collected. Afterwards, the mixture is heated to evaporate the solvent and acquire the desired oil. None of the cultivation and manufacturing facilities will employ this method. Each facility will operate without the use of any harmful hazardous materials. Oil extraction will use a method of low heat and pressure. This extraction method is used to provide a safe, clean, non-harmful consumer product rather than using other volatiles such as butane or propane to extract oils. A hydraulic press using electricity may also be used to extract oils from the cannabis. Another non-hazardous extraction method uses a chilled alcohol rinse.

Plant growing medium known as "rockwool cubes" are non-hazardous and would be used during the cultivation process. Rockwool cubes are produced by heating gypsum rock to extremely high temperatures and then spun like cotton candy, followed by compression to form 6-inch by 6-inch cubes. The resulting rockwool cubes provide a neutral medium for cultivation.

Each of the four cannabis cultivation and manufacturing facilities would be outfitted with a diesel generator to provide back-up emergency electricity in case of a power outage. Each generator includes a 524-gallon capacity tank approximately 15.5 feet long, 52-inches wide and 23 inches in height. The tank is double-walled and will be filled by a mobile diesel fueling service. The diesel fuel tanks proposed at

each of the four cannabis cultivation and manufacturing facilities presents a potential for leaks as well as spills during refueling. This is considered a **potentially significant impact.**

Disposal

Plant matter waste which consists of "trim", excess stalks and "fan" leaves left over from cultivation are non-psychoactive. "Trim" is the part of the plant that is trimmed from the final product. Trim will be stored securely inside the processing location. Oils and compounds will be extracted without the use of volatile compounds as describe above. Following extraction, the remnant plant material will go through a "mulch" process.

Fan leaves are non-producing growth leaves that have no useable value. These leaves contain little or no THC and are processed throughout the growing cycle and removed both throughout the cycle and during the harvest phase. Fan leaves are compostable and safe for landfill disposal (Rhoades, pers. comm., 2018b). Under the current proposed regulations, residual waste from the cultivation process must be in a non-recognizable cannabis form for waste removal. The Applicant(s) would dry the fan leaves, mulch the dried leaves to the equivalent of wood chips/compost, and place this end product into a roll-off waste container. The Applicant(s) will submit a "Special Waste Profile (Profile) to Republic Services. The waste will be taken to the Imperial Landfill. Waste must remain in Imperial County (Leon, pers. comm., 2018d).

At the end of the plants' lifecycle, the rockwood cubes are rinsed of any nutrients or fertilizers. The end-product is a natural gypsum rock compound that is accepted at regular landfills.

Lastly, reclaimed wastewater would be reduced using a thermal evaporator to achieve a concentrated waste stream at a 1:4 waste ratio. The dried sludge remaining after evaporation would be trucked off site and be taken to an approved landfill in accordance with the County of Imperial Solid Waste LEA and the City of Calexico.

Mitigation Measures

MM 4.7.1 To reduce and avoid the potential for leaks from the diesel fuel tanks and spills during the re-fueling process at each cultivation and manufacturing facility, the City of Calexico Planning Department shall require one or more of the following measures:

- Install a 5-gallon spill/fill catch basin
- Install a high-level fill switch
- Install an alarm for Hi, Low, Leak, Full Fuel
- Install an overfill protection valve
- Install a fuel supply check valve

Timing/Implementation: As a condition of Project approval/during construction
Enforcement/Monitoring: City of Calexico Planning Department.

Significance After Mitigation

Implementation of mitigation measure MM 4.7.1 requires installation of features to reduce and avoid the potential for diesel leaks and spills. Following implementation of these measures, impacts associated with accidental release during hazardous materials transport, use, and disposal would be reduced to **less than significant.**

Create a Hazard Through Reasonably Foreseeable Upset/Release of Hazardous Materials

Impact 4.7.2 The Project parcels were historically used as agricultural land but are currently vacant land and an existing building at 2421 Enterprise Boulevard. No evidence of recognized

environmental conditions of any kind was identified as part of the Phase I ESAs prepared for the Project. Therefore, the potential for the Project parcels to create a hazard through reasonably foreseeable upset or release of hazardous materials is considered a **less than significant impact**.

According to the Phase I ESAs, each of the proposed Project parcels was historically used for agricultural production dating back to 1937. The Phase I ESAs prepared for the vacant parcels and 2421 Enterprise Boulevard indicated that there were no recognized environmental conditions or concerns requiring remedial action. Following construction, the potential for on-site storage and use of hazardous materials would be limited to the diesel in association with the four generators (refer to Impact 4.7.1).

Each cultivation and manufacturing facility as well as the Transportation and Distribution Facility would implement a Security and Control Plan that includes protocols for the handling of cultivation and manufacturing waste by-products. The majority of the waste product (plant root ball, extracted cannabis plant material and stems, etc.) has no THC or other cannabinoids of significance remaining. All waste by-products of the cannabis cultivation and manufacturing process will be handled with extreme care and diligence (Security and Control Plan, 2017, p. 10). All waste plant material will be visually inspected and must be rendered harmless by designated personnel before it is loaded into waste disposal containers. Each employee will log an entry regarding each inspection. All waste containers will be maintained within the secure facility and will be equipped with locks and tamper resistant seals until they are removed by an authorized waste disposal company (Security and Control Plan, 2017, p. 11). Each facility will be required to comply with the provisions of the Security and Control Plan as well as all state regulations regarding waste and by-products disposal. Therefore, impacts associated with creating a hazard through reasonably foreseeable upset or release of hazardous materials is considered **less than significant**.

Mitigation Measures

None required.

Significance After Mitigation

Note applicable.

Emit Hazardous Emissions within One-Quarter Mile of a School

Impact 4.7.3 The proposed Trinity Cannabis Cultivation and Manufacturing Facility is located slightly less than one-quarter mile from the Small World Montessori School. The proposed use is allowable within the COZ and is more than 600 feet away from the School consistent with the requirements of the Calexico Municipal Code regarding commercial cannabis activity. In addition, the Project include engineering control systems to eliminate emissions. Therefore, impacts associated with emitting hazards within one-quarter mile of a school are considered **less than significant**.

The Small World Montessori School is a private pre-school and kindergarten located at 450 Portico Boulevard, approximately 850 feet to the northeast of the northeast corner of 2421 Enterprise Boulevard. The School has approximately 32 students and two teachers (Private School Review 2018). The includes a building and an outdoor play area.

The proposed Trinity Manufacturing and Cultivation Facility would be subject to State regulations regarding emissions, including odor control. Any odor emitted from each of the four cultivation and manufacturing facilities must be within the thresholds specified by the State. The Project seeks to achieve zero odor emissions using the engineering controls system incorporated into the design of each

cultivation and manufacturing facility. The Project will also apply odor mitigation practices to eliminate as much odor cross contamination as possible.

An Odor Control Plan has been prepared for each of the four cultivation and manufacturing facilities. Each individual location within the facility that would generate odor from the production or processing of cannabis will have internal "Odor Mitigation Activate Carbon Filters" running continuously to dilute and absorb smells and odors within the flowers rooms, vegetative state rooms the curing and drying room, and the trimming and packaging room.

Each cultivation and manufacturing facility will be outfitted with a "SKYPLUME" exhaust system. This system is a high velocity air disbursement fan system which manages and disburses odor via high speed exhaust fans forcing any residual odor high into the air above each facility to disburse odors by dilution with outside air at high speeds. The distance of the School as well as the technology employed to disburse emissions generated by the Project would result in a **less than significant impact** with regard to emitting hazards within one-quarter mile of a school.

Mitigation Measures

None required.

Significance After Mitigation

Note applicable.

4.7.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The geographic scope of the cumulative setting for hazards and hazardous materials is a one-mile radius from the edge pf the Project parcels. One mile is the standard ASTM standard search distance for hazardous materials. This geographic scope encompasses an area larger than the Project parcels and provides a reasonable context wherein cumulative projects in the vicinity of the proposed Project could affect hazards and hazardous materials. Based on Table 3.0-1 (Proposed, Approved and Reasonably Foreseeable Projects in the City of Calexico) in Chapter 3.0, Introduction to the Analysis and Assumptions Used, there are two other projects from the list of cumulative projects within the geographic scope. This includes the Town Center Industrial park to the west across Sunset Boulevard and the Calexico MegaPark approximately one-half mile to the northeast.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Hazards and Hazardous Materials Impact

Impact 4.7.4 The proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the City of Calexico, would increase the density of development in the Portico Industrial Park, thus potentially increasing the potential for the presence hazards and use of hazardous materials. However, this is considered to be a **less than cumulatively considerable impact**.

Two of the cumulative projects listed in Table 3.0-1 (Town Center Industrial Park and Calexico Mega Park) are within a one-mile radius of the proposed Project. Thus, these projects are considered within the geographic scope for the consideration of cumulative effects from hazardous materials. Existing RECs are mitigated on a project-by-project basis. None of the Project parcels had any RECs or conditions identified as part of the Phase I ESAs (EMG 2017a, p. 15; EMG 2017b, p. 12-13). Mitigation measure MM 4.7.1 would reduce hazards resulting from accidental spill or release of diesel fuel associated with refueling the diesel generators.

Each cultivation and manufacturing facility must handle cannabis waste and by-products in accordance with the protocols established in the Security and Control Plan for each cultivation and manufacturing facility. In addition, all state laws, provisions of the County of Imperial Solid Waste LEA and the City of Calexico will be adhered to when disposing of waste generated by each cultivation and manufacturing facility.

The Project is located in an industrial portion of the City consistent with the provisions of the COZ. Each cultivation and manufacturing facility includes an exhaust system that will dilute and disburse odor emissions high into the air (refer to Section 4.2, Air Quality). The system will ensure that the public, including children at the Small World Montessori School, are not affected by odor emissions.

For all of the reasons identified above, the proposed Project's contribution to cumulative hazardous materials impacts is **considered less than cumulatively considerable**. Likewise, the proposed Project would have a **less than cumulatively considerable impact** related to cumulative hazardous materials impacts.

Mitigation Measures

Implement mitigation measure MM 4.7.1.

Significance After Mitigation

Implementation of project-specific mitigation measures would address hazardous materials transport, use, disposal and accidental release through requiring installation of safety features such as a fill catch basin or overfill check valve (MM 4.7.1) to reduce the hazard of a spill or leak associated with on-site diesel generators. Therefore, following implementation of these mitigation measures, cumulative impacts associated with hazards and hazardous materials would be **less than cumulatively considerable**.