

4.9 Hazards and Hazardous Materials

This section identifies and evaluates issues related to hazards and hazardous materials in the context of the Project and alternatives. It describes the existing environmental setting, including hazardous materials currently managed in the Project Area, and applicable regulations. It presents the criteria applied to evaluate the significance of the changes that would be caused if the Project or an alternative were approved. Areas within and near the Project Area potentially affected by hazardous materials in soil or groundwater, naturally-occurring asbestos, and wildfire hazards are identified, and the potential for creation of hazards related to fire and air traffic is evaluated.

Successful reclamation under SMARA results in mined lands that have been returned to a usable condition that is readily adaptable for alternate land uses and creates no danger to public health or safety (Pub. Res. Code §2733). Reclamation of mined lands in conformance with the reclamation performance standards set forth in Title 14 of the California Code of Regulations §3700 et seq. is intended, in part, to achieve this result. Performance standards relate, among other things, to slope stability, drainage facilities, and the removal of structures. A description of how the Project would conform to the performance standards is provided in Section 2.8 in the Project Description. Public health and safety considerations are addressed in this Section 4.9 as they relate to hazards and hazardous materials, in Section 4.3 as they relate to air quality, and in Section 4.10 as they relate to water quality.

4.9.1 Setting

Section 2.2, *Project Location*, provides general information about the Project's regional and local setting. This Section 4.9.1 provides setting information specific to hazards and hazardous materials.

4.9.1.1 Definition of Hazardous Materials

The term "hazardous materials" refers to both hazardous substances and hazardous wastes. Under federal and state laws, any material, including wastes, may be considered hazardous if it specifically is listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). The term "hazardous material" is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment (Health and Safety Code §25501(o)).

In some cases, past industrial or commercial activities on a site could have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. Hazardous materials also may be present in building materials and released during building demolition activities. If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The four basic exposure pathways through which an individual can be exposed to a chemical agent include: inhalation, ingestion,

absorption through the skin, and injection. Exposure could occur as a result of an accidental release during transportation, storage, or handling of hazardous materials. Disturbance of subsurface soil during construction activities or the stockpiling, handling, or transportation of soils also could lead to the exposure of workers or the public if those soils are contaminated by hazardous materials from previous spills or leaks.

4.9.1.2 Regional and Local Setting

This section discusses historical uses of the Project Area and nearby vicinity, current hazardous materials use at the Quarry, identified hazardous materials sites, wildfire hazards, and airports in the vicinity of the Project Area.

Historical Setting

As discussed in more detail in Section 4.5, *Cultural Resources*, the Cement Plant located adjacent to the Project Area began operations in 1939. It initially included two kilns, storage buildings, and a 2-mile conveyor to move materials from the Quarry pit to the Cement Plant for processing. In 1941, a 30-acre magnesium plant was constructed adjacent to the Cement Plant for processing of brucite into magnesium for use in incendiary bombs. This facility was changed to an aluminum plant in 1947 for manufacture of aluminum foil and aluminum extruded products until its closure in 1990. Few hazardous materials records exist from this era. Known information from regulatory agency records regarding releases from these facilities and other nearby sites is discussed below.

Existing Hazardous Materials Use

Information regarding the current storage, handling, and disposal of hazardous materials and wastes associated with the Quarry and Rock Plant operations is summarized in the inventory statements presented in the Hazardous Materials Business Plans (HMBPs) for these facilities (Lehigh, 2011a, 2011b). Gasoline, diesel, and lubricants for trucks and equipment are stored at the fuel dispensing facility located near the quarry office and maintenance building. This facility consists of one 12,000 gallon aboveground storage tank (AST) containing diesel fuel, and two mobile yard service trucks. The service trucks each contain storage tanks for diesel fuel, lubricating oil, antifreeze, waste oil and grease. Tanks range in size from 40 gallons to 1,500 gallons. Several ASTs are also present at the Rock Plant for flocculant, coagulant (NALCO, 2011) and lubricating oil. Several cylinders of compressed gases are stored at each location. As required by law, the HMBPs describe secondary containment, monitoring, emergency procedures, and employee training at the facility.

Regulatory Agency Records of Hazardous Materials Sites in Project Vicinity

Regulatory agency records of hazardous materials sites in the vicinity of the Project Area were reviewed to identify sites where known releases have occurred that could affect soil or groundwater conditions in the Project Area. The information presented is based on database searches of the State Water Resources Control Board (SWRCB) Geotracker (SWRCB, 2011a) and the California

Department of Toxic Substances Control (DTSC) Envirostor (DTSC, 2011) databases. These databases identify the following types of facilities with known hazardous materials use or releases: federal Superfund sites; state response sites; voluntary cleanup sites; corrective action sites; leaking underground storage tank (LUST) sites; other cleanup sites; land disposal sites; military cleanup sites; permitted underground storage tank (UST) facilities; DTSC cleanup sites; and DTSC-permitted hazardous waste permits.

The Project Area was not identified on any of the regulatory agency lists searched.

The regulatory agency database search identified five entries for the neighboring Cement Plant facility under various business names, including Kaiser Cement, Kaiser Aluminum and Chemical Corp., and Hanson Permanente Cement. Two entries are for registered USTs at the facility. Two entries are closed LUST cases, and one case is an open inactive case regarding a 1987 release of stoddard solvent/mineral spirits to soil for which no additional information was available. The following discussion of the LUST cases is based on summary information and a case closure letter available on the GeoTracker website.

Between 1986 and 1993, 20 USTs were removed from the following locations at the Cement Plant: garage area, lower service station area, emergency generator area, oil house area, and upper service station area. Based on indications of fuel releases at the lower service station and emergency generator areas, soil and groundwater investigations were performed in May 1999 and March 2000. Sampling results indicated the presence of high levels of residual petroleum hydrocarbons (up to 6,000 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as diesel (TPH-diesel) in soil and up to 2,900 milligrams per liter (mg/L) TPH-diesel in groundwater) remained in place at the lower service station area. Soil and groundwater samples collected from two downgradient borings showed diminished concentrations of TPH-diesel (up to 94 mg/kg in soil and 0.11 mg/L in groundwater). The Regional Water Quality Control Board (RWQCB) closed this case on January 2001, noting that residual soil and groundwater contamination exists in the former tank area but does not appear to pose a significant risk to human health, safety, or the environment and that natural attenuation processes would reduce the contamination over time (RWQCB, 2001). Another LUST case was reportedly discovered in 1993 and closed in December 1995 (SWRCB, 2011b).

Potential Presence of Naturally Occurring Asbestos, Silica, and Trace Metals

Rock and soil often contain naturally-occurring constituents that can be hazardous to human health. Exposure to these substances most often occurs through inhalation of fugitive dust emitted during the excavation and processing of minerals. Existing data on levels of naturally occurring constituents in the rock and soil present with the Project Area are discussed below.

Asbestos

Asbestos is a common name for a group of naturally-occurring fibrous silicate minerals that are made up of thin but strong, durable fibers. Asbestos is a known carcinogen and presents a public health hazard if it is present in the friable (easily crumbled) form. Naturally-occurring asbestos

most likely would be encountered in Franciscan ultramafic rock¹ (primarily serpentinite²) or Franciscan mélange.³ The potential for occurrence of asbestos in minerals handled in the Project Area is discussed in Section 4.7, *Geology, Soils, and Seismicity*. As noted in that section, asbestos has not been identified in numerous samples of the various minerals found in the Project Area. Potential impacts related to exposure to asbestos are discussed in Section 4.3, *Air Quality*.

Crystalline Silica

Crystalline silica is a component of soil, sand, granite, and many other common minerals. Crystalline silica was identified as a Toxic Air Contaminant by the Office of Environmental Health Hazard Assessment in February of 2005. Based on published geological literature, estimates of crystalline silica percentages in the rocks present in the Project Area are presented in Section 4.7, *Geology, Soils and Seismicity*, Table 4.7-2. Potential impacts related to human exposure to crystalline silica are discussed in Section 4.3, *Air Quality*.

Trace Metal Concentrations

The results of sampling and analysis of rock/gravel samples representative of the onsite geologic materials (i.e., greywacke, greenstone, limestone, and fill materials) for the presence of trace metals are presented in Section 4.7, *Geology, Soils and Seismicity*, Table 4.7-3. Potential impacts related to exposure to trace metals as toxic air contaminants are discussed in Section 4.3, *Air Quality*. The potential for release of trace metals, primarily selenium, into surface or groundwater is discussed in Section 4.10, *Hydrology and Water Quality*.

Representative samples of the primary rock types found in the Quarry pit were collected and analyzed for metals as part of the 2010 screening for Asbestos Containing Materials (ACMs) (McC Campbell, 2010). As part of this analysis, these detected concentrations were compared with the Environmental Screening Levels (ESLs) established by the RWQCB and were found not to exceed the ESLs set forth for protection of construction workers.

Vectors

Vectors are organisms, such as rodents and insects, which can spread disease by carrying and transferring disease-causing organisms (also called “pathogens”) such as bacteria, viruses, and parasites. Certain vectors, such as mosquitoes, breed in standing water. Large areas of standing water such as ponds, sluggishly moving streams, and drainage ditches provide ideal habitat for breeding mosquitoes.

Of the sedimentation basins identified in Table 2-12 in Section 2.7.11.5 of the Project Description, 21 are located within the Project Area. According to Mr. Victor Romano, Operations Supervisor at

¹ Ultramafic rocks are formed in high-temperature environments well below the surface of the Earth.
² Serpentine is a naturally-occurring group of minerals that can be formed when ultramafic rocks are metamorphosed during uplift to the Earth’s surface. Serpentinite is a rock consisting of one or more serpentine minerals. This rock type is commonly associated with ultramafic rock along earthquake faults. Small amounts of chrysotile asbestos, a fibrous form of serpentine minerals, are common in serpentinite.
³ Mélange is a mixture of rock materials of differing sizes and types typically contained within a sheared matrix.

the County Vector Control District (SCCVCD), there are no reported mosquito issues related to the operation of storm water ponds and basins in the Project Area (Romano, 2011).

Wildfire Hazards

The California Department of Forestry and Fire Protection (CalFIRE) has identified moderate, high, and very high fire hazard areas (CalFIRE, 2007) and fire-threatened communities at the wildland-urban interface (County of Santa Clara, 2009). The Project Area is in a high fire hazard severity zone, and so is subject to certain fire safety requirements, which are intended to limit the rate at which a fire could spread and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

Airports

The closest airports to the Project Area are Moffett Field and San Jose International Airport, located approximately 6 miles and 9 miles away, respectively. No private airstrips occur in the vicinity of the Project Area.

4.9.1.3 Regulatory Setting

Hazardous materials and hazardous wastes are subject to numerous federal, state, and local laws and regulations intended to protect public health and safety and the environment. The U.S. Environmental Protection Agency (U.S. EPA), Cal-EPA, DTSC, RWQCB, and the Bay Area Air Quality Management District (BAAQMD) are the major federal, state, and regional agencies that enforce these regulations. The main focus of the federal and California Occupational Safety and Health Administration (OSHA) is to prevent work-related injuries and illnesses, including from exposures to hazardous materials; CalFIRE implements fire safety regulations. In accordance with Chapter 6.11 of the California Health and Safety Code (§25404, et seq.), local regulatory agencies enforce many federal and state regulatory programs through the Certified Unified Program Agency (CUPA) program, including:

- Hazardous materials business plans (Health and Safety Code §25501 et seq.);
- State Uniform Fire Code requirements (Uniform Fire Code §80.103, as adopted by the state fire marshal pursuant to Health and Safety Code §13143.9);
- Underground storage tanks (Health and Safety Code §25280 et seq.);
- Aboveground storage tanks (Health and Safety Code §25270.5(c)); and
- Hazardous waste generator requirements (Health and Safety Code §25100 et seq.).

The County Department of Environmental Health (SCCDEH), Hazardous Materials Division, is the CUPA agency for oversight of hazardous materials storage and cleanup of underground fuel leaks in the County.

Use and Storage of Hazardous Materials and Fuels

State and federal laws require detailed planning and management to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to reduce risks to human health and the environment. Businesses that handle specified quantities of chemicals are required to submit a hazardous materials business plan in accordance with community right-to-know laws. This plan allows local agencies to plan appropriately for a chemical release, fire, or other incidents. A HMBP is in place for the Quarry pit (Facility ID # FA0255153) (Lehigh, 2011a), the Rock Plant (Facility ID #FA0255158) (Lehigh, 2011b), and for the Garage (Facility ID # FA0255158) (Lehigh, 2011c).

The HMBP for the Quarry pit, for example, provides information about business activities and the owner and operator; a hazardous materials inventory; a description of emergency procedures, including an evacuation plan, emergency contacts, emergency reporting procedures and related protocol, post-incident reporting requirements, an earthquake vulnerability assessment, hazard mitigation/prevention/abatement information, and a list of emergency equipment; as well as employee training and record-keeping information. A facility map and aboveground separation, containment, and monitoring plan also are provided. The hazardous materials business plans for the Rock Plant and Garage provide similar types of information.

Hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

Aboveground Storage of Petroleum Products

The Aboveground Petroleum Storage Act of 1990 and Assembly Bill 1130 (2008) require the owner or operator of a tank facility with an aggregate storage capacity greater than 1,320 gallons to file a storage statement with the local CUPA and prepare a spill prevention, control, and countermeasure (SPCC) plan. The plan must identify appropriate spill containment or equipment for diverting spills from sensitive areas, as well as discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and personnel training. Because the Quarry operates ASTs with a total storage capacity greater than 1,320 gallons, an SPCC plan is required.

Underground Storage Tanks

State laws governing USTs specify requirements for permitting, monitoring, closure, and cleanup of these facilities. Regulations set forth construction and monitoring standards for existing tanks, release reporting requirements, and closure requirements. In the Project Area, SCCDEH has regulatory authority for permitting, inspection, and removal of USTs. Any entity proposing to remove a UST must submit a closure plan to the County prior to tank removal. Upon approval of the UST closure plan, the County would issue a permit, oversee removal of the UST, require additional subsurface sampling if necessary, and issue a site closure letter when the appropriate removal and/or remediation has been completed. There are no USTs associated with the Project;

however, these regulations are relevant due to the number of USTs that have been removed from the neighboring property in the past.

Soil and Groundwater Contamination

Within the County, remediation of contaminated sites generally is performed under the oversight of the SCCDEH, or in some instances, the RWQCB and/or the DTSC. At sites where contamination is suspected or known to have occurred, the site owner is required to perform a site investigation and perform site remediation, if necessary. Site remediation or development also may be subject to regulation by other agencies. For example, if a project required dewatering near a hazardous waste site, the project sponsor might be required to obtain a permit from the municipal sewer agency before discharging the water to the sewer system, or a National Pollutant Discharge Elimination System (NPDES) permit from the RWQCB before discharging to the storm water collection system.

Pesticide and Herbicide Use

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), amended in 1996, authorizes the U.S. EPA to register or license pesticides (including herbicides) for use in the United States. Pesticides must be registered both with the USEPA and the state before distribution. Pesticides used in the Project Area must comply with applicable federal requirements. Under the FIFRA, the California Department of Pesticide Regulation (CDPR) is vested with primary responsibility to enforce pesticide laws and regulations in California. Pesticide rules are found in different sections of California codes and regulations, including: the Food and Agriculture Code, Business and Professions Code, Health and Safety Code, and the Labor Code. In general, the CDPR regulates pesticide sales and use statewide, while local use is enforced through the County Agricultural Commissioners. Many agricultural pesticides require a permit from the County Agricultural Commissioner before they may be purchased or used. The Agricultural Commissioner also enforces regulations to protect both ground and surface water from pesticide contamination. In the County, the Integrated Pest Management Division monitors pesticide applications to ensure they are performed in a safe and effective manner and that worker safety requirements are followed; inspects application equipment, pesticide storage sites, employee training documents and business pesticide use records; and investigates complaints and pesticide-related illnesses.

Worker Safety Requirements

The federal Occupational Safety and Health Administration (OSHA) and the California Occupational Safety and Health Administration (Cal-OSHA) are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. Federal regulations pertaining to worker safety are contained in Title 29 of the Code of Federal Regulations (CFR), as authorized in the Occupational Safety and Health Act of 1970. They provide standards for safe workplaces and work practices, including standards relating to hazardous materials handling. In California, Cal-OSHA assumes primary responsibility for developing and enforcing workplace safety regulations; Cal-OSHA standards generally are more stringent than federal regulations.

State regulations concerning the use of hazardous materials in the workplace are included in Title 8 of the California Code of Regulations, which contain requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal-OSHA also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees.

At sites known or suspected to have soil or groundwater contamination, construction workers must receive training in hazardous materials operations and a site health and safety plan must be prepared. The health and safety plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

Wildland Fire

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors⁴ on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code § 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period – from April 1 to December 1 (Public Resources Code §4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (Public Resources Code §4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code §4431).

Emergency Response

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies. The County Office of

⁴ A spark arrestor is a device that prohibits exhaust gases from an internal combustion engine from passing through the impeller blades where they could cause a spark. A carbon trap is commonly used to retain carbon particles from the exhaust.

Emergency Services coordinates response to hazardous materials emergencies within and within the vicinity of the Project Area. Emergency Response Team members respond and work with local fire and police agencies, emergency medical providers, California Highway Patrol (CHP), California Department of Fish and Game, and California Department of Transportation (Caltrans).

Hazardous Materials Transportation

The U.S. Department of Transportation regulates hazardous materials transportation on all interstate roads. Within California, the state agencies with primary responsibility for enforcing federal and state regulations and for responding to transportation emergencies are the CHP and Caltrans. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.

Hazardous Structural and Building Components

Asbestos

Like federal laws, state laws and regulations also pertain to building materials containing asbestos. Inhalation of airborne fibers is the primary mode of asbestos entry into the body, and friable (easily crumbled) materials the greatest health threat. These existing laws and regulations prohibit emissions of asbestos from asbestos-related manufacturing, 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 governmental agencies prior to beginning renovation or demolition that could disturb asbestos.

Before renovating or demolishing buildings containing asbestos, contractors licensed to conduct asbestos abatement work must be retained. Asbestos abatement contractors must follow state regulations where there is asbestos-related work involving 100 square feet or more of asbestos containing material (8 Cal. Code Regs. §1529, §341.6 et seq.). BAAQMD and the State Occupational Safety and Health Administration (OSHA) must be notified 10 days prior to initiating construction and demolition activities. Asbestos encountered during demolition of an existing building must be transported and disposed of at an appropriate facility. The contractor and hauler of the material are required to file a Hazardous Waste Manifest which details the hauling of the material from the site and the disposal of it. Health and Safety Code §19827.5 precludes local agency issuance of a demolition or alteration permit until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

Polychlorinated Biphenyls (PCBs)

In 1979, the U.S. EPA banned the use of PCBs in most new electrical equipment and began a program to phase out certain existing PCB-containing equipment. The use and management of PCBs in electrical equipment is regulated pursuant to the Toxic Substances Control Act (15 USC

§2601 *et seq.*). This act and its implementing regulations generally require labeling and periodic inspection of certain types of PCB equipment and set forth detailed safeguards to be followed for disposal of such items.

Lead and Lead-Based Paint

Waste soil containing lead is classified as hazardous if the lead exceeds a total concentration of 1,000 parts per million (ppm) and a soluble concentration of 5 ppm (22 Cal. Code Regs. §66261.24). Hazardous soil would be subject to the regulations for hazardous waste transport and disposal described above.

Regulations to manage and control exposure to lead-based paint are described in Title 29 of the Code of Federal Regulations §1926.62 and in Title 8 of the California Code of Regulations §1532.1. These regulations cover the demolition, removal, cleanup, transportation, storage and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring and compliance to ensure the safety of construction workers exposed to lead-based material.

Vector Control

The County Vector Control District is a County public health program that controls and monitors disease-carrying insects such as mosquitoes and ticks, and other harmful pests such as yellow jackets and rats. Primary services include:

- Detection of the presence/prevalence of vector borne disease through planned tests, surveys and samples;
- Inspection and treatment of known mosquito and rodent sources;
- Response to customer initiated service requests for identification, advisory, and/or control measures for mosquitoes, rodents, wildlife, and miscellaneous invertebrates (ticks, yellow jackets, cockroaches, bees, fleas, flies, etc.); and
- Promotion of public awareness through outreach and educational services.

4.9.2 Baseline

The baseline for purposes of analyzing potential impacts related to hazards and hazardous materials are the conditions as they occurred in June 2007. The HMBP in effect between 2005, when it was adopted, and March 4, 2008, includes the baseline year (Hanson Permanente Cement Company, 2005). According to the hazardous materials and hazardous waste inventory statements included in the HMBP, the facility stored up to 16 55-gallon drums of lubricating oil at any time. Waste oils were collected in two service trucks with individual capacities of 1,100 gallons and 300 gallons. Annually, an estimated 6,300 gallons of waste oil were shipped off-site to recycling/disposal facilities. In addition, approximately 5,200 gallons of grease were collected in 55-gallon drums and shipped off-site for disposal each year.

The County Airport Land Use Commission (ALUC) had adopted a Comprehensive Land Use Plan (CLUP) that covered the four public use airports in the County: Palo Alto, San Jose International Airport, Reid-Hillview Airport, and South County. In recent years, it has adopted airport-specific CLUPs to replace the countywide CLUP for these four airports. The closest air field to the Project Area, at approximately 6 miles distant from the site, was in 2007 and remains Moffett Federal Airfield. No CLUP had yet been adopted for Moffett Federal Airfield as of June 2007; indeed, an administrative draft CLUP was released in 2011 and has not yet been approved. The County Emergency Operations Plan also was in place in June 2007, as indicated by the County Board of Supervisors' approval of an update to that plan on March 18, 2008 (County of Santa Clara, 2008).

4.9.3 Significance Criteria

Consistent with the County of Santa Clara Environmental Checklist and Appendix G of the CEQA Guidelines, the Project would have a significant impact if it would:

- 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 that is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment;
- e) Be located within an area covered by an airport land use plan referral area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, or in the vicinity of a private airstrip, and would result in a safety hazard for people residing or working in the project area;
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- g) 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;
- h) Provide breeding grounds for vectors;
- i) Result in a safety hazard due to proposed site plan (i.e., parking layout, access, closed community, etc.);
- j) Involve construction of a building, road or septic system on a slope of 30% or greater; or
- k) Involve construction of a roadway greater than 20% slope for a distance of 300 feet or more.

4.9.4 Discussion of Criteria with No Impact Related to Hazards and Hazardous Materials

As outlined below, the Project would have no impact related to criteria c), d), e), f), g), i), j), or k). The potential for the Project to cause impacts related to the remaining hazards and hazardous materials criteria is addressed in Section 4.9.5.

c) The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school.

Impacts related to potential hazardous emissions are analyzed in Section 4.3, *Air Quality*.

The Quarry pit and Rock Plant HMBPs indicate that hazardous materials and wastes have been and continue to be present in the Project Area (Lehigh, 2011a, 2011b, and 2011c; Hanson Permanente Cement Company, 2005). However, no schools are located within 0.25-mile of the Project Area. The nearest school to the Project Area is approximately 0.95-mile to the northeast – the Monarch Christian School, located at 2420 N. Foothill Boulevard in Los Altos. Other area schools are farther away. For example, the Waldorf School of the Peninsula is located approximately 1.4 miles northeast of the Project Area and Monte Vista High School is located approximately 1.7 miles to the east. No schools are proposed to be constructed within 0.25-mile of the Project Area. Because no schools exist or are proposed within 0.25-mile of the Project Area, implementation of the Project would cause no impact related to criterion c).

d) The Project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, could create a significant hazard to the public or the environment.

The Project Area is not listed on any regulatory agency lists of hazardous materials sites. Therefore, the Project would not be implemented on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5. Accordingly, the Project would cause no impact related to criterion d).

e) The Project is not located within an area covered by an airport land use plan or, where such a plan has not been adopted, within an area covered by a public airport land use plan or within the vicinity of private airstrip, and so would not result in a safety hazard for people residing or working in the project area.

The Project Area is not located in an area covered by an airport land use plan, a public airport land use plan, or within the vicinity of private airstrip. Because the Project Area is not within an area covered by an airport land use plan or a public airport land use plan and is not within the vicinity of private airstrip, no airport-related safety hazard for people residing or working in the Project Area would result. Further, based on the intended future open space use of the Project Area, it is not expected that anyone would reside or work within the Project Area once reclamation is complete. Therefore, the Project would cause no impact related to criterion e).

f) The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Project would not impair implementation of or physically interfere with the County Emergency Operations Plan (County of Santa Clara, 2008), which was adopted by the County Board of Supervisors on March 18, 2008. The proposed reclamation activities would not result in the complete or partial closure of public roadways, interfere with any identified evacuation route, restrict access for emergency response vehicles, or restrict access to critical facilities such as hospitals or fire stations. The Project Area is located entirely on private property that is not designated in the County's Emergency Operations Plan for use in emergency response or evacuation. Consequently, the Project would cause no impact related to criterion f).

g) The Project would not 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.

CalFIRE defines "wildland fire" broadly to encompass "any fire occurring on undeveloped land" (CalFIRE, 2011). The wildland-urban interface commonly is described as the area where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels (CalFIRE, 2011). Most of the reclamation-related activities proposed as part of the Project would be substantially similar to existing operations, including materials movement by haul truck and conveyor, compaction, grading, revegetation, and related monitoring (revegetation test plots have been managed and monitored in the Project Area for decades). The same equipment types used to conduct the existing mining operations would continue to be used to implement the Project. Although the use of fuels and construction equipment for reclamation-related activities could produce a spark or flame near areas of high wildland fire risk, this is the same risk that exists under baseline conditions.

Existing regulations governing the use of construction equipment in fire-prone areas would continue to apply. These regulations restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that has an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. As reclamation proceeds to completion, the storage of fuel and use of construction equipment that could produce a spark or flame would be reduced and eventually cease, lowering the potential for fire hazards in the Project Area. Phase 3 of reclamation also would involve the dismantling and removal of existing buildings and structures. Tasks relating to this work are different than the tasks that occur under baseline conditions. However, the same protections that apply to reduce equipment-related fire hazards associated with sparks and flame also would reduce equipment-related risks associated with dismantling and removal activities. Because there would be no change in the exposure of people or structures to risks involving wildland fires relative to baseline conditions, the Project would cause no impact related to criterion g).

i) The Project would not result in a safety hazard due to proposed site plan (i.e., parking layout, access, closed community, etc.).

Implementation of the Project would consist of backfilling, grading, slope stability work, revegetation, and other reclamation activities to make mined lands suitable for open space use. No new parking area is proposed, no new access points are proposed, and no residential uses are present in the Project Area. The Project does not include a “site plan” as such. Safety hazards related to the placement and stability of backfill material are addressed in Section 4.7, *Geology, Soils, and Seismicity*. Because the Project would not result in a safety hazard due to proposed site plan, no impact would result in connection with criterion i).

j, k) The Project would not involve construction of a building, road or septic system on a slope of 30% or greater or a roadway greater than 20% slope for a distance of 300 feet or more.

The Project would not involve construction of any buildings, roads, or septic systems. Therefore, the Project would not cause impacts related to the construction of such infrastructure on steep slopes. Consequently, no impact would result related to criteria j) or k).

4.9.5 Impacts and Mitigation Measures

a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact 4.9-1: The Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant Impact*)

Project construction activities associated with the placement of overburden and contouring of the site would remain the same as current operations and would not involve the additional use, transport or disposal of hazardous materials. As discussed in the Setting, the fuel dispensing facility near the Quarry office has a 12,000-gallon diesel fuel AST and two service trucks with ASTs for the storage of diesel fuel, lubricating oil, antifreeze and waste oil, as well as small quantities of paints and cleaners. Several ASTs also are located at the Rock Plant. Use of the fuel dispensing facility would continue under the Project. When reclamation activities conclude, fuel tanks and other hazardous materials containers would be transported by licensed haulers to an approved disposal or recycling facility in accordance with laws and regulations. For example, prior to closure of any AST used to hold hazardous material, the Applicant would be required to obtain a tank closure permit from SCCDEH and follow its tank closure guidelines. Guidelines outline appropriate tank cleaning methods and methods to make tanks previously containing flammable materials safe for removal. Tank removal must be witnessed by a representative of SCCDEH HMCD, who may determine that soil sampling is required. In addition, a closure application for aboveground hazardous materials storage facilities may also be required. Adherence to state and local regulations would reduce the potential for releases due to transportation and disposal of hazardous materials, and would require soil investigation and remediation if indications of hazardous materials releases were observed.

Structures and facilities to be removed from the crusher/Quarry office support area and rock plant⁵ are identified in Sections 2.6.4 and 2.6.6, respectively, of the Project Description and include items that do not contain asbestos (such as conveyor system components, tanks, electrical panels, screens and the like) and buildings that might contain asbestos (including portable office buildings and storage trailers). Potential impacts to historical and cultural resources are analyzed in Section 4.5, *Cultural Resources*. Before demolition and removal of any of the structures that could contain asbestos could occur, the Applicant would have to obtain a County-approved demolition permit. The County's demolition permit application requires compliance with BAAQMD's Regulation 11, Rule 2, Section 303, which governs the demolition and removal of asbestos-containing materials (County of Santa Clara, 2011; BAAQMD, 1998). This rule requires the party seeking a demolition permit to have a Division of Occupational Safety and Health-certified professional "thoroughly survey the affected structure or portion thereof for the presence of asbestos-containing material, including Category I and Category II nonfriable asbestos-containing material." The survey would include "sampling and the results of laboratory analysis of the asbestos content of all suspected asbestos-containing materials." If the structure (or any part of it) contains regulated asbestos-containing material, then it would be treated as asbestos-containing waste material pursuant to BAAQMD's regulations. Compliance with the County's demolition permit requirements, including BAAQMD's survey requirement, would prevent a significant adverse environmental effect related to worker or public exposure to asbestos-containing material, including Category I and Category II nonfriable asbestos-containing material because regulations and requirements are established at a level to protect against related risks.

Revegetation activities associated with site restoration would require weed control to reduce the occurrence of non-native plants that may invade the revegetated areas. Weed control methods may include chemical and mechanical removal techniques depending on the species and number of individuals encountered (WRA, 2011). Any use of herbicides to control invasive species while native plantings become established would be subject to the oversight of the Santa Clara County Division of Agriculture, which regulates the use, storage, and disposal of all pesticides (including herbicides). Regulations outline training requirements for individuals performing pesticide application and require the submittal of monthly pesticide use reports. These regulations are designed to ensure the protection of workers, the public, and the environment from pesticide use.

Because the Applicant and its contractors would be required to comply with all hazardous materials laws and regulations for the transport, use, and disposal of hazardous materials, the impacts associated with the potential to create a significant hazard to the public or the environment would be less than significant.

⁵ As described in Section 2.6.6 of this EIR, some of the facilities located in the rock plant would not be demolished or removed from the Project Area.

b) Would the Project 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?

Impact 4.9-2: The Project 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. (*Less than Significant Impact*)

Under the Project, reclamation activities with a hazardous materials component would be similar to existing operations. Project activities would include the use of earth-moving equipment, such as excavators, trucks, graders, loaders, and water trucks. Fueling of vehicles and equipment would occur at the aboveground fuel dispensing facility located near the quarry offices. Accidents or mechanical failure involving heavy equipment or leaks and spills from storage tanks could result in the accidental release of small quantities of fuel, lubricants, hydraulic fluid, or other hazardous substances. This type of spill could be readily cleaned up according to regulations and would not create a significant hazard to the public or the environment.

In March 2010, URS Corporation submitted a Storm Water Pollution Prevention Plan (SWPPP) on behalf of the Applicant that covers existing operations on the site (URS, 2010). The SWPPP includes provisions to prevent the discharge of pollutants caused by equipment operation, fueling, and maintenance as well as a description of containment controls and site-specific erosion and sediment control criteria. The SWPPP would be revised following Project approval to include the final suite of protective measures that would be implemented in the PCRA and the rest of the Project Area. Final measures are likely to include the following: good housekeeping practices such as clearly labeling hazardous materials containers and storing in an uncluttered area so leaks and spills can be quickly detected and addressed; placing drip pans under leaking equipment; checking construction equipment for leaks regularly; maintaining spill containment and cleanup equipment onsite and training of construction personnel in proper material handling, storage, cleanup, and disposal procedures. The SWPPP requires maintenance of records to document compliance. See Section 4.10, *Hydrology and Water Quality*, further discussion of the SWPPP and protection of surface water resources. Because the applicant and its contractors would be required to comply with the SWPPP and BMPs, the impacts associated with the potential for an upset or accident to create a significant hazard to the public or the environment would be less than significant.

h) Would the Project provide breeding grounds for vectors?

Impact 4.9-3: Sedimentation basins planned for erosion control at the Project site could provide breeding grounds for vectors. (*Less than Significant Impact*)

To control drainage from the site and prevent sedimentation of receiving water bodies, the Applicant would install new temporary sedimentation basins for storm water runoff in the Quarry pit and along the south-facing slope of the WMSA. If not properly managed, these sedimentation basins could provide a source of standing water that could provide breeding grounds for mosquitoes, which can be vectors for disease transmission.

As proposed, the siltation basins would be designed to drain completely after storm events and, therefore, would not contain standing water for sufficient periods of time to provide breeding grounds that would promote mosquito population growth. Similarly, sedimentation basins would not contain vegetation that could be an attractant to mosquitoes. These proposed sedimentation basins would operate until site vegetation is established and then would be reclaimed as described in the Project Description.

There are approximately 21 existing sedimentation basins operating in the Project Area, some of which retain water. To increase the flow and effectiveness of these basins, SWPPP BMPs include periodic inspections and clean out of the catch basins and culverts. The SWPPP Appendix B provides long-term stormwater facility maintenance procedures for upland sedimentation basins. Routine inspection and cleanout of the basins also would remove any vegetation, as needed, and standing water from the basins. According to Mr. Victor Romano, SCCVCD Operations Supervisor, no mosquito issues associated with the existing sedimentation basins have been reported or observed (Romano, 2011). Because the new basins proposed under the Project would be operated and maintained in accordance with the facility's SWPPP, operation of these basins is not anticipated to cause a significant impact related to the breeding of mosquitoes. A less than significant impact would result.

4.9.6 Alternatives

4.9.6.1 Alternative 1: Complete Backfill Alternative

The hazards and hazardous materials impacts of Alternative 1 would be the same as for the Project. Alternative 1 would involve similar types of Project reclamation activities and use of the same types and quantities of hazardous materials for operation of equipment and vehicles. The same robust regulatory framework would continue to apply. Under Alternative 1, the routine transport, storage and disposal of hazardous materials and the potential for accidents to result in a release would be identical. Similarly, the operation of sedimentation basins would have the same less-than-significant effect on the breeding of mosquitoes.

4.9.6.2 Alternative 2: Central Materials Storage Area Alternative

The hazards and hazardous materials impacts of Alternative 2 would be the same as for the Project. Alternative 2 would involve similar types of Project reclamation activities and use of the same types and quantities of hazardous materials for operation of equipment and vehicles. The same robust regulatory framework would continue to apply. Under Alternative 2, the routine transport, storage and disposal of hazardous materials and the potential for accidents to result in a release would be identical. Similarly, the operation of sedimentation basins would have the same less-than-significant effect on the breeding of mosquitoes.

4.9.6.3 No Project Alternative

The hazards and hazardous materials impacts of the No Project Alternative would be the same as for the Project. The No Project Alternative would involve similar types of Project reclamation activities and use of the same types and quantities of hazardous materials for operation of equipment and vehicles. The same robust regulatory framework would continue to apply. Under the No Project, the routine transport, storage and disposal of hazardous materials and the potential for accidents to result in a release would be identical. Similarly, the operation of sedimentation basins would have the same less-than-significant effect on the breeding of mosquitoes.

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