Section 3.7

Hazards and Hazardous Materials

Summary

Table 3.7-1 below provides a summary of the potential environmental impacts of the Proposed Project. As shown in Table 3.7-1, the Proposed Project would have some significant adverse impacts related to hazards and hazardous materials within the project area. With the implementation of the mitigation measures described within this section, all of the impacts listed, except one would be reduced to less-than-significant levels. One impact, related to potential accidents at a neighboring industrial facility, is considered significant and unavoidable.

Table 3.7-1. Summary of Significant Hazards and Hazardous Materials Impacts

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact HAZ-1: Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment at the Project site	Potentially Significant	Mitigation Measure HAZ-1a: Follow the Union City Fire Department and Other Guidelines for Storage and Handling of Hazardous Materials Mitigation Measure HAZ-1b: Immediately Contain Spills, Excavate Spill-Contaminated Soil, and Disposal at an Approved Facility Mitigation Measure HAZ-1c: Develop and Implement Plans to Reduce Exposure of People and the Environment to Hazardous Conditions During Construction Activities	Less than Significant

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact HAZ-2: Fire and Explosion Risk Due to Proximity to the Air Liquide Facility	Potentially Significant	Mitigation Measure HAZ-2a: Develop and Implement a Site-Specific Emergency Response Plan for the Project Mitigation Measure HAZ-2b: Require Safety Glass for Portions of the Project at Risk of Overpressure Greater than 1 psi	Significant and Unavoidable
Impact HAZ-3: Hazardous Emissions or Hazardous Materials, Substances, or Waste Handling Within One-Quarter Mile of a School	No Impact	Mitigation not required.	
Impact HAZ-4: Location of the Project on a Known Hazardous Material Site	Less than Significant	Mitigation not required	
Impact HAZ-5: Routine Transport, Use, or Disposal of Hazardous Materials	Less than Significant	Mitigation not required	Less than Significant
Impact HAZ-6: Interference with an Adopted Emergency Response Plan or Emergency Evacuation Plan	Potentially Significant	Mitigation Measure HAZ-6: Provide an Evacuation Route through the Project Site	Less than Significant

Introduction

This section presents the existing setting and potential impacts related to hazards and hazardous materials associated with the proposed project. The *Setting* section below includes a definition of hazardous materials and waste, an overview of the most relevant hazardous materials regulations that are applicable to the project area, a description of general environmental conditions in the project area with respect to the presence of hazardous materials and wastes, and a general description of hazardous building materials likely to be present within the project area. Based on this information, impacts of the Proposed Project associated with hazardous materials are identified.

Sources of Information

The key sources of data and information used in the preparation of this section are listed and briefly described below.

- Department of Toxic Substances Control final determination letter to Pacific Gas and Electric Company (PG&E) dated June 30, 2003.

- Final Remedial Action Completion Report for PG&E Decoto Pipeyard at 1100 Decoto Road, dated June 25, 2003.
- USEPA 1998. Risk Management Program Guidance for Offsite Consequences Analysis. United States Office of Solid Waste EPA 550-B-99-009. Environmental Protection and Emergency Response April 1999. Agency (5104) www.epa.gov/ceppo/
- USEPA. RMP*Comp. Version 1.07. Offsite consequences analysis software. No date.
- Air Liquide America LP, Risk Management Plan. 2007. Prepared August 13. On file at Union City Fire Department.
- United Kingdom Communities and Local Government Department. 2007. Published February 1, 2007. Safety of Acetylene Containing Cylinders During and After Involvement in a Fire. Fire Research Technical Report.

Environmental Setting

Hazardous wastes are defined in the California Code of Regulations Title 22, Sections 66260 through 66261.10. As defined in Title 22, hazardous wastes are grouped into four general categories:

- toxic (causes human health effects);
- ignitable (has the ability to burn);
- corrosive (causes severe burns or damages materials); or
- reactive (causes explosions or generates toxic gasses).

Hazardous materials as defined in the California Health and Safety Code §25501(o) are: “any material that, because of its 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. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

In general, discarded, abandoned, or inherently waste-like hazardous materials are referred to as hazardous wastes. A hazardous material or waste can be present in liquid, semi-solid, solid, or gaseous form.

This section describes general environmental conditions in terms of potential sources of hazardous materials or wastes in soil or groundwater in the project area. The discussion of environmental conditions is based primarily on information from a Final Remedial Action Completion Report (FRAC) completed by SECOR International on behalf of PG&E in 2003. The environmental conditions documented in these reports provide a historical

background and overview of the project area to assess general types of potential impacts and the likelihood of their occurrence.

Site History

The Station District site is an approximately 30-acre property that was a steel gas pipe storage and handling yard for PG&E since the early 1950's. The site appears to have been vacant and/or in agricultural use prior to the 1950's. PG&E's site activities included storage and preparing steel gas pipe for future use. Pipe preparation included blasting rust off the pipe (using steel shot), coating the pipe exterior with tar, and wrapping the pipe with plastic prior to installation at other locations. Pipe welding also occurred at the site. Pipe blasting, coating, and wrapping activities were discontinued in the early 1990's. Since then, the site was used for storage and distribution of unused natural gas pipe and various other utility related equipment and materials.

PG&E also stored transformers and capacitors, and received and transferred PCB-containing equipment from other PG&E facilities pursuant to a hazardous waste facility permit issued on March 9, 1983 by the Department of Health Services (DSH), which was DTSC's predecessor agency. In 1984, PG&E terminated operations associated with materials containing or likely to contain PCBs and initiated facility closure procedures. Several locations within a maintenance building were found to contain PCB contamination as well as a bermed area for cleaning materials and equipment, and a covered work area south of the maintenance building. After cleaning, only the bermed area was still determined to be contaminated. The area was sealed with an epoxy sealant and monitored for several years. On March 7, 1988, DHS stated in a letter that the facility was officially closed contingent upon PG&E's continued monitoring and if necessary, resealing of monitoring areas in accordance with the California Occupational Safety and Health Administration (Cal-OSHA) program. Consequently, on January 5, 1990, DHS officially clean closed the facility and the permit was no longer in effect.

The Feasibility Study/Remedial Action Plan prepared for the Site and approved on September 2, 2002 required that soil and concrete containing excess levels of contamination for certain contaminants be excavated and disposed of at an approved off-site facility.

Remedial actions were initiated in September 2002 and completed in May 2003. In total, approximately 60,000 cubic yards of soil were excavated and removed from the site for off-site disposal. Confirmation samples have shown that all remediation goals were met and that the site is appropriate for unrestricted land use.

Surrounding Areas

The approximately 6-acre Proposed Project site is surrounded by residential subdivisions, Union City BART, Charles F. Kennedy Park, an Air Liquide

facility, a PG&E Substation, Niles and Oakland UPRR track Subdivisions, and commercial and industrial land uses.

The housing subdivisions are south and southwest of the site. The Union City BART station is southwest of the site and Charles F. Kennedy Park is west. Adjacent to the Union City BART station, across Union Square, is a mall that includes a Rite Aid, Safeway, Dollar Tree, and other miscellaneous commercial businesses. The Niles Subdivision is northeast and the Oakland Subdivision to the southwest of the project site. The Air Liquide facility and the PG&E Substation are located north of the Niles Subdivision and north of the project site along Decoto Road.

Air Liquide Facility

The Air Liquide facility owned by Air Liquide America is compressed gas and cryogenic liquid (refrigerated, liquefied gas with a low boiling point) gas transfilling facility and acetylene gas manufacturing and filling facility. The hazardous materials stored on site include gases: argon (gas and liquid), liquid carbon dioxide, carbon monoxide, helium (gas and liquid), hydrogen (gas and liquid), methane, nitrogen (gas and liquid), liquid nitrous oxide, oxygen (gas and liquid), liquid propane, propylene, sulfur hexafluoride; liquids – acetone and ethylene glycol, and solids: calcium carbide, calcium chloride and calcium hydroxide. The manufacturing and handling of acetylene and the handling of hydrogen involve the potential of fire and explosion due to accident conditions. The facility has prepared a Risk Management Plan (RMP) per compliance with Union City Municipal Code (see description below) (Air Liquide America LP, 2007). The latest version of the RMP, on file with the City, describes the industrial processes of the facility and associated fire and explosion for worst-case and less than worst-case scenarios.

PG&E Substation

This electrical power substation provides electrical power for the cities of Fremont and Union City. Hazardous materials on-site include batteries for backup power, non-flammable compressed gases and insulating oil containing low-levels of PCBs containing insulating oil in the transformers (PG & E 2009). The site does not generate hazardous waste or contain aboveground or underground storage tanks according to PG&E (PG&E 2009).

Regulatory Setting

Federal

The principal federal regulatory agency that regulates exposure to hazardous materials and hazardous wastes is the Environmental Protection Agency (EPA). The two key federal regulations pertaining to hazardous materials and wastes are described below.

Resource Conservation and Recovery Act (RCRA)

The RCRA enables the EPA to administer a regulatory program that extends from the manufacturing of hazardous materials to their disposal, regulating the generation, transportation, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation. This responsibility has been delegated to the State of California Department of Toxic Substances Control (DTSC), who in turn has delegated administration to Certified Unified Program Agencies (CUPAs).The City was certified to be a CUPA in 1997.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The CERCLA, also known as Superfund, was passed to facilitate the cleanup of the nation's toxic-waste sites. In 1986, the CERCLA was amended by the Superfund Amendment and Reauthorization Act (SARA) Title III (community right-to-know laws), which states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the cleanup, even if the material was dumped illegally when the property was under different ownership.

Other applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the CFR.

State

In California, state regulations are equal to or more stringent than federal regulations. The state has been granted primary oversight responsibility by the EPA to administer and enforce hazardous waste management programs. State regulations have detailed planning and management requirements to ensure that hazardous materials and wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key laws pertaining to hazardous materials and wastes are discussed below.

Hazardous Materials Release Response Plans and Inventory Act

This act, also known as the Hazardous Materials Business Plan Act, requires businesses using hazardous materials over threshold amounts to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step and not considered hazardous wastes. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous wastes.

Hazardous Waste Control Act (HWCA)

The Hazardous Waste Control Act (HWCA) created the State Hazardous Waste Management Program, which is similar to, but more stringent than, the federal RCRA program. The HWCA is implemented by regulations contained in Title 26 of the CCR, which describes requirements for the proper management of hazardous wastes, including criteria for:

- identification and classification;
- generation and transportation;
- design and permitting of recycling, treatment, storage, and disposal facilities;
- treatment standards;
- operation of facilities and staff training; and
- closure of facilities and liability requirements.

These regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, and disposing of such wastes. Under the HWCA and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with the California Department of Toxic Substances Control.

California Codes (i.e., Fire, Building, etc.)

The California Fire Code (CFC) regulates the site's storage and use of hazardous materials at commercial and industrial facilities by requiring permits for use and installation of equipment utilizing hazardous materials. The CFC states the quantity of materials that can be stored and when additional protective measures are required to mitigate a hazard. The California Building Code (CBC) regulates how protective measures within a structure will be built and/or implemented.

Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Quick response to incidents involving hazardous materials or hazardous waste is a key part of the plan, which is administered by the California Emergency Management Agency (Cal EMA). Cal EMA coordinates the responses of other agencies, including the EPA, the California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices. All releases or potential releases of hazardous materials must be reported to the California State Warning Center at (800) 852-7550.

California Occupational Safety and Health Administration Standards

Worker exposure to contaminated soils, vapors that could be inhaled, or groundwater containing hazardous constituents would be subject to monitoring and personal safety equipment requirements established in Title 8 of Cal-OSHA regulations. The primary intent of the Title 8 requirements is to protect workers, but compliance with some of these regulations would also reduce potential hazards to non-construction workers and project area occupants because required controls related to site monitoring, reporting, and other activities would be in place.

Other Laws and Regulations

Other laws pertaining to hazardous materials include the Safe Drinking Water and Toxic Enforcement Act (Proposition 65) and the California Government Code, Section 2.65962.5, which require the Office of Permit Assistance to compile a list of potentially contaminated sites throughout the state.

Local

CUPAs

Certified Unified Program Agencies (CUPAs), such as Union City, are authorized to carry out the various hazardous materials regulatory programs administered by the State of California and/or Federal government. This designation allows the City to have local control over hazardous materials programs and streamlines hazardous materials programs – providing a single point of contact for permitting, billing, and inspections. The Environmental Programs Division (UCEPD) of the City's Economic and Community Development Department is responsible for the safe management of hazardous materials and hazardous wastes within the City. Programs that are administered by the City include: Hazardous Materials Business Plan. Hazardous Waste Generator Program, Underground Storage Tank Program, Aboveground Storage Tank Program, Risk Management Plan/California Accidental Release Program, and the Clean Water Program.[1].

Union City General Plan

The Union City General Plan provides the following goals and objectives related to hazards and hazardous materials, which apply to the Proposed Project:

Goal HS-G.1: To protect the public health and safety by reducing the use, storage, and disposal of toxic hazardous substances.

[1] http://www.union-city.ca.us/commdev/environmental%20programs.html

Policy HS-G.1.1 The City shall strictly control the use, storage and transport of toxic, explosive or other hazardous materials and wastes at facilities within Union City.

Policy HS-G.1.2 The City shall limit locations of hazardous materials storage and use to those areas where potential accidents will not cause undue risk to people and property, and where effective emergency response can be provided. Actions, as found appropriate, shall include the prohibition of certain hazardous materials, combinations of materials or quantities of materials in particular land use areas and/or facilities. This shall be accomplished during the facility review, permitting and site development review processes.

Policy HS-G.1.3 Where potential for contamination exists or for critical facilities and/or uses, the City shall require an Applicant for new development to prepare a Phase I and II Environmental Site Assessment.

The property owner shall:

a. Provide appropriate notification to the City, and any additional responsible agencies concerning the source(s) of any contaminate(s) found and their extent.

b. Remediate all environmental hazards and contamination to the most stringent requirements of Federal, State and local law, code or practice.

Policy HS-G.1.4 The City shall monitor the transportation of hazardous materials within the city limits.

Policy HS-G.1.5 The City shall encourage the appropriate county and state agencies to monitor and respond promptly to questions and/or complaints regarding possible public health threats related to environmental hazards.

Union City Municipal Code

Chapter 15.20.180, Section 2701.5.2 of the Union City Municipal Codes provides that if the Fire Chief, or his authorized representative, determines that a facility poses a significant likelihood of risk to public health and safety or the environment, whether or not the facility handles acutely hazardous materials, the Fire Chief can require at the expense of the owner or operator that the facility manager prepare a Risk Management and Prevention Plan in accordance with the California Prevention Program. This requirement is relevant to the adjacent Air Liquide facility.

Project Impacts and Mitigation Measures

This section describes the impact analysis relating to hazards and hazardous materials for the proposed project. It describes the methods used to determine the impacts of the project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce,

eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

For this analysis, an impact pertaining to hazardous substances and materials was considered significant under CEQA if it would result in any of the following environmental effects, which are based on professional practice and State CEQA Guidelines Appendix G (14 CCR 15000 et seq.).

- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous substances into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school;
- be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous substances; or
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impacts and Mitigation Measures

Impact HAZ-1: Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment at the Project site (Less than Significant with Mitigation)

Although construction of the Proposed Project would require excavation and movement of large quantities of soils, the Final Remedial Action Completion Report and subsequent letter regarding the project site (2003) indicated that hazardous materials conditions on the site from the prior use of the site have been satisfactorily cleared. Subsequent testing of soil samples from the parcel indicated that there are no excessive levels of contamination on the site that would create a hazard to the public or the environment (Department of Toxic Substances Control 2003).

Construction of the Proposed Project could expose construction workers, the public or the environment to hazardous materials through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used and disposed of at the project site and transported to and from the site during construction. Accidental releases of small quantities of these substances

could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard.

In addition, if there are utility lines located underground on the project site, this could present a potential hazard to construction workers during excavation and construction.

This impact is potentially *significant*. Implementation of the Mitigation Measures HAZ-1 through HAZ-3, described below, would reduce the impact to a *less-than-significant* level. Mitigation measures included in Section 3.2, *Air Quality*, which require construction emission control measures, and in Section 3.12, *Public Services Utilities, and Recreation*, which outline procedures to avoid unintentional utility service disruptions during construction, would also contribute to the reduction of Impact HAZ-1.

Mitigation Measure HAZ-1a: Follow the Alameda County Fire Department and Other Guidelines for Storage and Handling of Hazardous Materials and City of Union City Environmental Programs
To minimize the potential for an accidental release of hazardous materials, the City shall require that contractors transport, store, and handle hazardous materials required for construction in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the Alameda County Fire Department and Union City Environmental Programs during the duration of project.

Mitigation Measure HAZ-1b: Immediately Contain Spills, Excavate Spill-Contaminated Soil, and Disposal at an Approved Facility
In the event of a release or threatened release of hazardous materials, the contractor shall notify the Alameda County Fire Department, the City of Union City Environmental Programs Division and the State Warning Center if the release is significant and could have off-site impacts. The contractor shall immediately control the source of the leak and contain the spill. If required by the Alameda County Fire Department Union City Environmental Programs Division or other regulatory agencies, contaminated soils will be excavated and disposed of offsite at a facility approved to accept such soils.

Mitigation Measure HAZ-1c: Develop and Implement Plans to Reduce Exposure of People and the Environment to Hazardous Conditions During Construction Activities
Prior to beginning construction, the City will require the Applicant to develop plans to prevent the pollution of surface water and groundwater and to promote the health and safety of workers and other people in the project vicinity prior to the beginning of project. These programs shall include an operation and maintenance plan, a site-specific Health and Safety plan, and a fire prevention plan, in addition to the Storm Water Pollution Prevention Plan (SWPPP) required for storm water impacts. In addition, the City will require the Applicant to develop a Hazardous Materials Business Plan (HMBP) that discloses basic information on the type, quantity, and health risks of hazardous materials stored, used, or disposed of (as defined by Chapter 6.95 of the Health and Safety Code).

The programs are required by law and shall require approval by several responsible agencies. Required approvals are as follows:

- the SWPPP shall be approved by the Union City Department of Public Works;
- the site-specific safety plan and the operations and maintenance plan shall be approved by Union City Environmental Programs Division;
- the fire safety plan shall be approved by the Alameda County Fire Department; and
- the HMBP shall be approved by the Union City Environmental Programs Division.

Finally, the City shall require the Applicant and its designated contractors to comply with appropriate articles of the California Fire Code that regulate the safe storage, dispensing and handling of flammable and combustible liquids, and the storage, use and handling of hazardous materials.

Impact HAZ-2: Fire and Explosion Risk Due to Proximity to the Air Liquide Facility (Significant and Unavoidable with Mitigation)

The property boundary of the Air Liquide facility at its nearest point is approximately 500 feet from the project property boundary north of Block 2. The nearest edge of Block 2 is approximately 1,000 feet from the northern part of the Air Liquide facility where acetylene manufacture and acetylene and hydrogen cylinder filling activities occur. The nearest edge of Block 3 is approximately 1,400 feet from the northern part of the Air Liquide facility.

Due to the handling of acetylene and hydrogen at this nearby facility, there is a risk of fire and explosion that could affect the proposed project.

Using the U.S. Environmental Protection Agency's Risk Management Program Guidance (USEPA 1998), a worst-case explosion scenario (a highly unlikely but possible event) for acetylene and hydrogen would involve a vapor cloud explosion involving the maximum amount of acetylene or hydrogen that could be on the facility at any one time. Such a scenario would result in a blast radius of 0.2 miles (1,100) feet from the location of the material storage. This distance was confirmed by the Union City Fire Department using the USEPA's RMP*Comp software (Perez., pers. comm. 2008). The blast radius is defined as that point at which the overpressure due to the blast is one pound per square inch (PSI). In other words, the areas within the blast radius are subject to "overpressure" due to an explosion which results in pressure greater than atmospheric conditions. An overpressure of 1 psi is the threshold for potentially serious to people from flying glass, falling debris, and other explosion effect (USEPA 1998). The effects of overpressure depend on the amount of peak overpressure which is related to the distance from the source explosion. Structural damage and bodily injury increase with greater amounts of overpressure.

The facility has the following process controls in use to reduce the potential for fire and explosion and reduce the potential effects of a fire or explosion should it occur: vents, relief valves, check valves, manual and automatic shutoffs, interlocks, alarms, emergency and backup power, grounding equipment, rupture disks, quench system, purge system; a water deluge system over the acetylene filling areas, fire walls, and a leak detection system. The facility has an Emergency Response Plan defining response actions and agency notification procedures.

Although the worst-case explosion is a highly unlikely event (by definition), for the purposes of CEQA, it is considered a possible event. In this event, the project site would be subject to blast overpressure that could shatter glass, damage structures, and/or cause bodily injury. Less than worst-case scenarios also entail risks to the project site due to fire and explosion, but the effects will be less than for a worst-case scenario and the intensity and scale of effects would be less.

A fire or explosion would also have the potential for spread of fire from the adjacent facility to the project site and for injury related to exploding acetylene or hydrogen cylinders. When acetylene cylinders are involved in a fire, cylinders can be launched as a projectile due to explosion up to several hundred meters and the heated cylinders can present an explosion hazard up to 18 to 24 hours after the fire is extinguished (U.K. Department for Communities and Local Government 2007).

A further risk would be for pedestrians who may be walking from the project site northward along Decoto Road (including children who may be attending Emanuele Elementary School (100 Decoto Road), which is north of the Air Liquide facility) who may be located at close proximity to the facility during an accident.

Emergency response in this location would likely be dispatched from Fire Station #3, which is located at 33942 7th Street, just north of the Air Liquide facility and south of Emanuele Elementary School.

While the Air Liquide has a range of process controls in use, these controls do not presently eliminate the potential for fire and explosion and for effects on adjacent areas.

Structural damage or bodily injury due to fire or explosion from the adjacent facility would be a *significant* impact. Implementation of Mitigation Measures HAZ-4 and HAZ-5, described below, would reduce the potential for structural damage and bodily injury at the proposed project site, but would not eliminate the potential for personal injury, and thus this impact is considered *significant and unavoidable* as there will remain the potential for personal injury in the event of a fire or explosion at the adjacent industrial facility.

Mitigation Measure HAZ-2a: Develop and Implement a Site-Specific Emergency Response Plan for the Project

The Applicant shall develop an Emergency Response Plan for the project to address the contingency of fire, explosion or other hazardous release at the

adjacent Air Liquide facility. The Plan will be reviewed and shall be approved by the Alameda County Fire Department prior to occupancy of the residential or commercial space.
The plan shall include the following:

- **Risk Characterization**—A description of the potential risks to residents and commercial users associated with worst-case and less than worst-case scenarios at the adjacent facility;
- **Alarm and Notification system**—The project shall have an alarm and public announcement system in the residential and commercial areas in order to inform the residents and workers of potential hazardous events. In the event of a fire, explosion or the release of hazardous material from the Air Liquide facility, the City shall require Air Liquide to notify the City, which will allow the City to inform the residents and commercial tenants. The City has a "reverse 911" system set up to provide calls to residents during emergency events including Intermodal Station residents in the event of a situation at Air Liquide. The Emergency Response Plan shall require public posting of this notification process within the residential and commercial areas of the Proposed Project.
- **Evacuation routes and safe assembly areas**—The Plan shall identify evacuation routes and safe assembly areas for residents/commercial users of the Proposed Project in the event of fire or explosion.
- The Plan shall be provided to all Project residents and commercial tenants.

Mitigation Measure HAZ-2b: Require Safety Glass for Portions of the Project at Risk of Overpressure Greater than 1 psi.

As blast-related overpressure may result in shattering of windows in buildings facing the Air Liquide facility, the City shall require the Applicant to evaluate the specific overpressure possible on the north side of the project and to provide safety glass windows to reduce the potential risk of window shatter wherever windows could be exposed to overpressure of 1 psi or greater. The blast radius shall be calculated based on the most recent inventory of hazardous materials for the Air Liquide facility on file with the City and using current USEPA Risk Management Program guidance. The evaluation of potential overpressure shall be submitted to the Alameda County Fire Department and Union City Environmental Programs Division along with proposed safety glass treatments in the application for a building permit. The City shall require safety glass to be incorporated into the project wherever it determines a potential for glass shatter due to blast-related overpressure may occur on the project site.

Impact HAZ-3: Hazardous Emissions or Hazardous Materials, Substances, or Waste Handling Within One-Quarter Mile of a School (No Impact)

Although several schools are located in the project vicinity, none are within a quarter mile of the project site. The closest campuses include Emanuele Elementary, James Logan High, and Searles Elementary, all of which are located more than 0.3 miles from the project site. As such, hazardous materials

emissions, use, and transport associated with the construction and operation of the Proposed Project would not impact nearby schools. No mitigation is necessary.

Impact HAZ-4: Location of the Project on a Known Hazardous Material Site (Less than Significant)

Although historical uses of the site left traces of contamination, the DTSC issued a Certificate of Completion for the site in September of 2003 following the clean-up completed by PG&E. This certification indicates that the remedial action at the site has been satisfactorily completed. Furthermore, DTSC has indicated that the site is cleared for unrestricted land use, which includes the residential and commercial uses associated with the project (Department of Toxic Substances Control 2003). Therefore, the proposed development would not be located on a known hazardous materials site that would pose a hazard to the public or environment.

Several nearby locations have been included on a list of hazardous materials sites, but are not expected to impact the Proposed Project parcels. Therefore, this impact is considered to be *less than significant*. No mitigation is necessary.

Impact HAZ-5: Routine Transport, Use, or Disposal of Hazardous Materials (Less than Significant)

Upon build-out, the Proposed Project would include residential and commercial land uses. These land uses have the potential to create a hazard to the environment through the routine transport, use, or disposal of hazardous materials, in the form of household and commercial hazardous wastes.

Normal landscaping operation techniques for the landscape areas may involve pesticides, fertilizers, and fungicides. However, impacts resulting from landscaping are considered to be less-than-significant.

Impacts regarding stormwater runoff are discussed in Section 3.7, *Hydrology and Water Quality*.

Under the Proposed Project, potentially significant impacts resulting from the routine, transport, use or disposal of hazardous materials could be associated with household and commercial hazardous wastes. However, Alameda County has two household hazardous waste facilities that are available to Union City residents. The Alameda County and Fremont Household Hazardous Waste Facilities are open throughout the week for residents to drop-off hazardous waste. Furthermore, a county website, <www.stopwaste.org>, provides information about the materials that can be recycled at the facilities. The two drop-off facilities and the county website provide disposal sites and information regarding the appropriate handling of household hazardous waste.

Therefore, this impact is considered less than significant. No mitigation is necessary.

Impact HAZ-6: Interference with an Adopted Emergency Response Plan or Emergency Evacuation Plan (Less than Significant with Mitigation)

The project is located in the middle of existing neighborhoods, in an undeveloped area that is not currently used for an evacuation route or for an emergency vehicle route. The proposed project would not alter existing emergency vehicle routes or interfere with evacuation routes in surrounding areas during operation or construction. However, the ability to evacuate the proposed residents on the project site must exist to ensure adequate emergency and fire response. This impact is *less than significant* with implementation of Mitigation Measure HAZ-6.

Mitigation Measure HAZ-6: Provide an Evacuation Route through the Project Site

The Applicant will provide an evacuation route for all residential units on the project site to evacuate in case of a natural disaster or other hazard before any residents move in. The City shall include this requirement in its conditions of approval for the proposed development. The proposed evacuation route will be reviewed and approved by the Alameda County Fire Department prior to final project approvals.

Cumulative Impacts

Based on the cumulative projects in Table 4-1, there aren't any cumulative projects that would substantially increase the potential safety risks for residents of the existing project as there aren't any new industrial sources proposed for construction in the project vicinity. Increased freight and passenger rail operations that would result from the rail projects in Table 4-1 are governed by federal rail safety regulations.

While some of the cumulative projects may handle hazardous materials or generate hazardous waste, operationally the proposed project, as a residential/commercial mixed use project will use limited hazardous material and generate limited hazardous waste. Thus, the project will not contribute considerably to potential cumulative hazardous material or hazardous waste impacts.