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Hazards and Hazardous Materials

This section describes existing campus conditions and evaluates the potential impacts related to hazards and hazardous materials as the SF State campus grows pursuant to the proposed Campus Master Plan. Primary sources of information used in this section include numerous Phase I Environmental Site Assessments performed for the SF State campus and information obtained from the SF State office of Environmental Health and Occupational Safety (EH&OS).

In response to the Notice of Preparation, a commenter indicated that the EIR should evaluate how the campus will remove or otherwise handle waste and hazardous materials generated during construction and operation of the project. To the extent that these issues involve significant effects on the environment under CEQA criteria, they are addressed in this section.

4.6.1 Environmental Setting

4.6.1.1 Study Area

The study area for the proposed Campus Master Plan is the campus of SF State in the City and County of San Francisco, California. The term “campus” refers to the campus planning area for the proposed Campus Master Plan that includes the 134-acre main campus and an additional 10 acres of adjacent property owned primarily by the SF State Foundation (see [Figure 3-1](#), *Campus Master Plan Boundary*). See Chapter 3, *Project Description*, for further description of the 144-acre project area. The 144-acre planning area is generally bounded by Lake Merced Boulevard on the west; 19th Avenue on the east; the Stonestown Galleria shopping center, Lowell High School, and Lakeshore Alternative Elementary School to the north; and the Parkmerced residential development to the south.

4.6.1.2 Definitions

SF State uses many materials, some of which are considered hazardous, during the course of daily operations. Such hazardous materials on campus include chemical reagents, solvents, fuels, paints, cleaners, pesticides, and biohazardous substances that are used in activities such as laboratory research, building and grounds maintenance, vehicle maintenance, and fine arts. Generally these types of materials are used in small quantities on the SF State campus. The term **hazardous material** is defined in different ways for different regulatory programs. This EIR uses of the definition given in the California Code of Regulations (CCR), which defines hazardous material as:

...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 wastes, and any material which a handler or the administering agency has a reasonable

basis for believing that it will be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

By convention, most hazardous materials are thought to be hazardous chemicals, but radioactive materials and biohazardous materials are also hazardous. This EIR considers hazardous materials to include hazardous chemicals, radioactive materials, and biohazardous materials.

Hazardous materials use on-campus generates hazardous byproducts that must eventually be handled and disposed of as hazardous wastes. A **hazardous waste**, by definition, is any hazardous material that is to be abandoned, discarded, or recycled. Hazardous waste is a subset of hazardous materials; therefore, the same criteria that render a material hazardous make a waste hazardous, such as toxicity, ignitability, corrosivity, and reactivity (California Health & Safety Code, §25117).

4.6.1.3 Regulatory Background

Hazardous materials handling and hazardous waste management are subject to numerous laws and regulations at all levels of government. These laws apply to the classroom activities, research-related activities, maintenance work, and other activities on campus just as they do to other hazardous materials users. Laws and regulations related to health and safety are summarized below.

Hazardous Materials Management. State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

Worker Safety. The California Occupational Safety and Health Administration (Cal/OSHA) and the federal Occupational Safety and Health Administration (Fed/OSHA) are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. In California, Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices.

Lead and Asbestos Standards. The removal and handling of asbestos-containing materials is governed primarily by EPA regulations under Title 40 Code of Federal Regulations. Fed/OSHA also has a survey requirement under Title 29 Code of Federal Regulations, which is implemented by Cal/OSHA under Title 8 Code of California Regulations. These regulations require facilities to take all necessary precautions to protect employees and the public from exposure to asbestos.

The Cal/OSHA lead standard for construction activities is implemented under Title 8 Code of California Regulations. The standard applies to any construction activity that may release lead dust or fumes, including, but not limited to, manual scraping, manual sanding, heat gun applications, power tool cleaning, rivet busting, abrasive blasting, welding, cutting, or torch burning of lead-based coatings.

Due to the age of many of the buildings on campus, SF State is likely to have many facilities containing lead and asbestos.

Hazardous Waste Handling. The California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the Resource Conservation and Recovery Act (RCRA)

and the California Hazardous Waste Control Law. Both laws impose "cradle to grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment.

Radioactive Materials. The Radiologic Health Branch of the California Department of Health Services administers the federal Atomic Energy Act, the California Radiation Control Law, and related regulations, which govern the receipt, storage, use transportation, and disposal of sources of ionizing radiation (radioactive material) and provide for protecting the users of these materials and the general public from radiation hazards.

Biohazardous Materials and Animals. The United States Department of Health and Human Services Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health prescribe containment and handling principles for use in microbiological, biomedical and animal laboratories. Although following these guidelines is not legally required for most activities, all SF State laboratories operate with the intent to follow these good hygienic practices. Based on the potential for transmitting biological agents and the rate of transmission of these agents, and based on the quality and concentrations of biological agents produced at a lab, Biosafety Levels may be instituted as prescribed by these principles.

Federal and state laws such as the Animal Welfare Act specify standards for registration, record keeping, handling, care, treatment, and transportation of animals. Such laws are enforced by the US Department of Agriculture and the California Department of Fish and Game.

Medical Waste Handling. Medical (biohazardous) waste is generally regulated in the same manner as hazardous waste, except that special provisions apply to storage, disinfection, containment, and transportation. The California Department of Health Services Medical Waste Management Program enforces the Medical Waste Management Act and related regulations.

Hazardous Materials Transportation. The US Department of Transportation regulates hazardous materials transportation between states. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads.

Emergency Response to Hazardous Materials Incidents. California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is administered by the state Office of Emergency Services, which coordinates the responses of other agencies including the Cal-EPA, the California Highway Patrol, the Department of Fish and Game, the San Francisco Bay Regional Water Quality Control Board (RWQCB), and the Radiologic Health Branch of the Department of Health Services.

4.6.1.4 Existing Conditions

Hazardous Materials Use and Waste Generation

Hazardous materials are used at SF State for a variety of purposes. Research and teaching laboratories are the primary users of hazardous materials. Types of hazardous materials found in laboratories include the following, typically in small quantities:

- Solvents used for cleaning, extraction, or other laboratory activities;
- Reagents (chemical starting materials);
- Reaction products (products of chemical reactions), which may have unknown composition;
- Radioactive materials used in nuclear science laboratories;
- Biological agents, including rats and frogs used in biological studies; and
- Test samples (e.g., specimens such as blood, tissue, soil, or water), prior to use in a testing procedure.

Physical campus maintenance activities also require hazardous materials. Examples of hazardous materials used during vehicle, grounds, and building maintenance activities include:

- Fuels (gasoline and diesel)
- Oils and lubricants;
- Antifreeze;
- Cleaners, which may include solvents and corrosives in addition to soaps and detergents;
- Paints and paint thinners (both oil based and latex);
- Freons (refrigerants); and
- Pesticides and herbicides.

Hazardous chemical wastes are generated whenever hazardous chemicals are used. General types of hazardous chemical wastes on campus include spent solvents from laboratories, maintenance buildings, and creative arts buildings, discarded laboratory reagents and reaction products, unused paints and oils, and contaminated materials such as gloves and containers. Based upon annual hazardous waste disposal, SF State is listed as a Resource Conservation and Recovery Act (RCRA) Large Quantity Generator (LQG) (Ho, 2006a). The campus complies with the provisions required by this designation.

On- and Off-Campus Contamination

URS Corporation has performed numerous Initial Studies and Phase I Environmental Site Assessments (ESAs) at SF State since 2002. As part of these projects, historical government databases were reviewed in order to identify potential sources of contamination or hazardous materials. A small number of potential sources were identified in the course of these investigations. These potential sources are summarized below.

- One active underground storage tank (UST) and one leaking underground storage tank (LUST) have been reported at Fire Station No. 19 located at 390 Buckingham Way on the north edge of Campus.

The LUST case is reported as closed, indicating that contamination due to historical leaks is no longer a concern (URS 2005).

- Five historical USTs and four active aboveground storage tanks (ASTs) were reported at the site of the former Stonestown Apartments, now called University Park North, on the northern part of campus. None of these tanks have been identified as leaking (URS 2005).
- One underground storage tank was removed from the campus in 2000. The City and County of San Francisco Department of Public Health provided closure approval for this tank (San Francisco DPH, 2000).
- One active UST and two reports of LUSTs have been noted at the Chevron Station at 3451 19th Avenue, adjacent to the northeast corner of campus. The LUST cases are believed to be down gradient of the campus (URS 2005). It is unlikely that LUST cases down gradient of campus represent a concern for activities at the campus.
- Three LUSTs were reported for the SF State School of Science facility at 1600 Holloway in the southern portion of the campus. At least four active USTs appear to be installed at this facility. This site is also listed by the EPA as a RCRA Small Quantity Generator. Wastes reported from this site include metals-containing wastes and asbestos-containing materials. The LUST cases are reported as closed, indicating that contamination due to historical leaks is no longer a concern (URS 2003).
- A report that laboratory wastes are generated and disposed of by the campus (URS 2003).
- Numerous campus buildings are likely to contain Asbestos containing materials, lead-based paint, and possible PCB-containing transformers due to the age of the many of the buildings (URS, 2004; URS, 2005).

Moreover, according to the campus office of Environmental Health and Occupational Safety, no known contamination due to the use of hazardous materials exists on campus (Ho, 2006). No spills, except for minor spills isolated to a single area and cleaned up immediately, have occurred on campus since 1994. Based upon the findings above, there are no known sites with existing soil or groundwater contamination on the SF State campus. Additionally, there appears to be limited possibilities that campus soil or groundwater has been impacted by past contamination. However, it is probable that campus buildings contain Asbestos containing materials, lead-based paint, and possible PCB-containing transformers.

4.6.2 Impacts and Mitigation Measures

4.6.2.1 Standards of Significance

The following standards of significance are based on Appendix G of the CEQA Guidelines. For the purposes of this EIR, an impact is considered significant if development of this project will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- 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.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, will the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area.

All of these standards are addressed in the impact assessment below with the exception of the CEQA checklist questions related to wildland fires and public or private airports or airstrips. SF State is not on or adjacent to wildlands, and is not in the vicinity of or within 2 miles of any airport or airstrip, public or private. Therefore, these topics will not be further evaluated.

4.6.2.2 Analytical Method

Many different types of hazardous wastes are generated (usually in small quantities) through the course of research, maintenance, and other activities at SF State. Due to the nature of campus research, the chemicals used at any particular time on campus change rapidly and sporadically, as do the quantities of materials used. Therefore, a detailed inventory of hazardous materials to be used on campus with growth and development under the proposed Campus Master Plan is not provided in this EIR. However, the types of hazardous materials that will be used on campus with implementation of the proposed Campus Master Plan are expected to be similar to those that are currently used on campus, as described in the Environmental Setting.

Hazardous materials could be released to the environment during their delivery to or removal from campus facilities; the potential for such a release is considered in the following section. Once hazardous materials are delivered to campus facilities, accidents or spills in outdoor areas, and air emissions from fume hoods, and engine exhausts will be the only potential release sources for hazardous materials to the immediate outside environment, as most activities related to hazardous materials will occur inside the buildings. The potential for impacts from air emissions is considered in Section 4.2, *Air Quality*. The potential impacts from accidents in outdoor areas are discussed in this section.

4.6.2.3 Campus Master Plan Impacts and Mitigation Measures

Impact HAZ-1: Implementation of the proposed Campus Master Plan will increase routine use of hazardous materials, generation of hazardous wastes, and transport of such materials by SF State laboratories and departments and in maintenance and support operations, which will not create significant hazards to the public or the environment.

Significance: Less than significant

Mitigation HAZ-1: Mitigation not required

Residual Significance: Less than significant

Campus growth under the proposed Campus Master Plan will involve an increase in the number of laboratories and the expansion of other facilities, such as maintenance facilities, which involve the use of hazardous materials, generation of hazardous waste, and the transportation of such materials to and from the campus. Currently, hazardous materials are primarily used in three major science and engineering buildings. These buildings encompass an area of approximately 480,000 square feet (Ho, 2006). Some hazardous materials are also used in arts buildings and maintenance buildings, and biohazardous materials are used in the existing Student Health Services building. SF State plans for a net increase in square footage in science buildings, creative arts buildings, and facilities and maintenance buildings under the proposed Campus Master Plan. This increase in space will result in the increase in use of hazardous materials, generation of hazardous waste, and transport of such materials, as further described below.

Hazardous Materials Use

Laboratories and other facilities constructed under the proposed Campus Master Plan will continue to comply with all hazardous materials standards for SF State related to use and storage of such materials (Ho, 2006). Cal/OSHA has mandated that steps be taken to minimize exposure to chemicals in the air. Researchers and other workers will continue to take these standard procedural precautions, such as working under fume hoods when using chemicals likely to present exposure hazards. To prevent exposure through skin contact, campus policies and procedures established by EH&OS require that protective clothing, such as laboratory coats, gloves, and safety glasses, be worn while handling hazardous materials and wastes. Proper washing after handling chemicals is also required. Exposure to the public from hazardous materials use on campus is limited because such materials are used primarily indoors. The only potential pathway for public exposure will be air emissions. To minimize exposure to chemicals in the air and to comply with Cal/OSHA requirements, researchers and other workers will continue to take standard procedural precautions, such as working under fume hoods when using chemicals likely to present exposure hazards. Special handling protocols and storage requirements are in place for radioactive materials and biohazardous materials in compliance with all applicable regulations. While increased use of hazardous materials will likely occur with the expansion of facilities under the proposed Campus Master Plan, the campus will continue to comply with all hazardous materials standards, and therefore this use will not create significant hazards to the public or the environment.

Hazardous Waste Generation

Laboratories and other facilities constructed under the proposed Campus Master Plan will continue to comply with all standards related to hazardous waste generation for SF State. The campus EH&OS has prepared guidelines for proper disposal of hazardous wastes based on regulations established by the EPA and the DTSC (Ho, 2006). To facilitate safe management, hazardous wastes are controlled from generation to pick-up by EH&OS hazardous waste disposal guidelines. These guidelines specify that as soon as the first drop of waste is generated, the user must complete an online storage tag and attach it to the storage container. Waste must be stored in a hazardous waste accumulation area in a container with a tight lid that is compatible (i.e., nonreactive) with the material being stored, surrounded by secondary containment, and free from contamination. Sharps wastes (e.g., syringes/needles), which are primarily generated in the Student Health Services Building, must be packaged in appropriate, safe containers. Different types of wastes, such as medical wastes and radioactive wastes, must not be mixed and require special storage and handling. Partially filled containers can be stored for up to 60 days. Once a container is ready for disposal, the user must submit a request for disposal to EH&OS. EH&OS manages final removal of wastes from campus in compliance with all applicable regulations. While increased hazardous waste generation will likely occur with the expansion of facilities under the proposed Campus Master Plan, the campus will continue to comply with all hazardous materials standards related to waste generation and disposal, and therefore such wastes will not create significant hazards to the public or the environment.

Hazardous Materials Transport

As discussed above, campus growth under the proposed Campus Master Plan will increase the use of hazardous materials and the generation of hazardous waste on campus. Consequently, the transport of hazardous materials and waste to and from campus will also increase. SF State policy requires that packaging of chemicals to be transported on public roads conform with all legal requirements, including those of the DOT, the California Department of Agriculture, the California Highway Patrol, and the guidelines of the International Civil Aeronautics Organization and the International Air Transport Association. All hazardous waste is picked up from generators by EH&OS or a licensed hazardous waste contractor, and generators must properly package and label all hazardous wastes. In addition to proper packaging and labeling, radioactive waste must be accompanied by a completed Radioactive Waste Tracking Form. The campus contracts with radioactive waste contractors to remove the radioactive waste from campus and the contractors take the waste to approved radioactive waste facilities. While increased hazardous materials transport will likely occur with the expansion of facilities under the proposed Campus Master Plan, the campus will continue to comply with all hazardous materials standards related to transport, and therefore such transport of materials will not create significant hazards to the public or the environment.

Upset and Accident Conditions

SF State EH&OS currently maintains spill response guidelines that account for the existence of hazardous materials on campus. Each individual building and unit is required to have an emergency plan that accounts for the materials present in the building (Ho, 2006). All campus departments prepare and maintain department Illness and Injury Prevention Plans and emergency response plans (SF State, 2006).

Since 1994, no spills have occurred on campus that exceeded the response capabilities of SF State EH&OS (Ho, 2006). The types and quantities of hazardous materials used by new facilities developed under the proposed Campus Master Plan will be similar to those used in existing facilities. Although the number of hazardous materials incidents could potentially increase, the types of incidents will be similar to those (very small spills in confined areas) that have occurred in recent years. EH&OS does not foresee any difficulty in responding to incidents that may occur with new development under the proposed Campus Master Plan. Furthermore, compliance with all applicable regulations related to the use, storage, and transport of hazardous materials, as described above, will minimize the potential for accidental spills and release of materials to the environment. Therefore, the impact will be less than significant, as the project will not create significant hazards to the public or the environment through upset or accident conditions.

In summary, environmental and health and safety laws and regulations are dynamic and have been revised and expanded in recent years. SF State is committed to providing a safe environment for the campus and local community by implementing the increasingly complex and stringent laws and regulations regarding the use, storage, and transport of hazardous materials. Throughout the planning horizon of the proposed Campus Master Plan, SF State will continue to comply with all federal and state laws and regulations and will continue to implement all safety programs and procedures currently in place as established by EH&OS. These procedures will continue to avoid or substantially limit exposure of students, faculty, staff, and the community at large to hazardous materials. All SF State projects implemented under the proposed Campus Master Plan will comply with these controls. Therefore, the project will not create significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials, or under upset and accident conditions involving the release of hazardous materials into the environment. The impact is therefore considered less than significant.

Impact HAZ-2: Development under the proposed Campus Master Plan will not create significant hazards to the public or the environment, such that existing or proposed adjacent schools may be affected.

Significance: Less than significant

Mitigation HAZ-2: Mitigation not required

Residual Significance: Less than significant

Existing schools and child care centers within ¼ mile of the planning boundary include Lowell High School northwest of the planning boundary on Eucalyptus Street, Lakeshore Alternative Elementary School northwest of the planning boundary on Winston Street, Mercy High School northeast of the planning boundary on 19th Avenue, Lakeside Presbyterian Center of Children northwest of the planning boundary on Eucalyptus Street, Montessori Children’s Center south of the campus on San Juan Bautista Circle, and Lutheran School of our Savior southeast of SF State on Garfield Street. There are two child-care centers on campus – one on the west edge of campus, and one at the northwest corner of campus (Ho, 2006).

Although hazardous materials and waste use within ¼ mile of an existing or proposed school will likely increase as a result of campus growth under the proposed Campus Master Plan, these materials will not exist in quantities sufficient to pose a risk to occupants of the school or campus community. Because

hazardous materials in laboratories are typically handled in small quantities and will continue to be handled in this manner under the proposed Campus Master Plan, the potential consequences of an accidental release will be limited to a single building and in most cases, to the individual laboratory where the spill occurred. Furthermore, as discussed under Impact HAZ-1, SF State will continue to comply with federal and state regulations and will continue to implement existing campus safety programs and procedures. Therefore, the impact to those attending existing or proposed schools and childcare centers will be less than significant.

Impact HAZ-3: Construction and demolition activities under the proposed Campus Master Plan will not expose construction workers and campus occupants to contaminated soil or groundwater.

Significance: Less than significant

Mitigation HAZ-3: Mitigation not required

Residual Significance: Less than significant

The proposed project will not be located on a site that is on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. There are no known sites with soil or groundwater contamination on the main campus as several former UST or LUST sites on campus have been remediated and contamination is no longer a concern. EH&OS is not aware of any existing contaminated sites on campus (Ho, 2006). Also, the past uses of the campus are well known and are not likely to have resulted in soil or groundwater contamination. Due to the low probability of any remaining contaminated locations on campus, this impact is less than significant.

Impact HAZ-4: Demolition or renovation of buildings under the proposed Campus Master Plan could potentially expose construction workers and campus occupants to contaminated building materials.

Significance: Potentially significant

Mitigation HAZ-4: SF State will develop procedures regarding the demolition of laboratory space. These provisions will ensure the removal of hazardous materials; the decontamination of surfaces and equipment; proper characterization, storage and shipment of hazardous materials removed from laboratories; and proper worker training and safety procedures. These procedures should provide for the following:

- Removal of all hazardous materials
 - User inspection for contamination
 - Performance of a site audit to determine likelihood of chemical spills
 - Performance of sampling for potential chemical contamination, if site audit finds that this is warranted
 - Use of survey meters or wipe samples to detect lingering
-

radioactivity, if radioactive materials were present

- Performance of sampling for potential chemical contamination, if site audit finds that this is warranted
- Communication with workers to ensure any remaining risk and health and safety procedures are understood and followed during demolition
- Following proper procedures for characterizing, storing, and shipping hazardous wastes, if necessary

Residual Significance: Less than significant

Hazardous materials could be encountered in campus buildings when they are demolished or remodeled under the proposed Campus Master Plan. These hazardous materials could be related to lead-based paints or asbestos used in the construction of the buildings, or to past spills and other releases of hazardous materials (such as chemicals) in laboratories during research activities.

Due to their age, some of the older SF State buildings are expected to contain asbestos or lead-based paints. These materials may already be documented or will be documented by a lead and asbestos survey that SF State requires for all remodeling and demolition projects. State law also requires that contractors and workers be notified of the presence of lead-based paint and asbestos in buildings constructed before 1979. The California Department of Health Services requires the certification of employees and supervisors performing lead-related construction activities in residential and public buildings. Standard specifications included in all campus construction contracts specify that contractors who disturb or potentially disturb asbestos or lead must comply with all federal, state, and local rules and regulations regarding hazardous materials. Contractors are also required to stop work and inform the campus if they encounter materials believed to be asbestos, lead, PCBs, or other hazardous materials. The demolition renovation or removal of asbestos-containing building materials is subject to the limitations of Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2: Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing. The BAAQMD's Enforcement Division should be consulted prior to commencing demolition of a building containing asbestos building materials.

The Science Building will be demolished in the course of the proposed Campus Master Plan. This building contains laboratories that have been used by the biology and chemistry departments (Ho, 2006). While no significant spills or contamination have been reported in this building since 1994 (Ho, 2006), proper procedures should be followed whenever a laboratory is scheduled for demolition or renovation. Mitigation HAZ-4 will require that SF State develops procedures to ensure that laboratory surfaces and/or equipment are decontaminated and safe for handling by construction workers and for removal from campus.

Continued compliance with federal and state regulations, campus policies, and current EH&OS procedures, and the development of specific procedures for the demolition of laboratory space under Mitigation HAZ-4, will minimize the potential for exposure of workers to contaminated building materials or other contamination inside structures and will ensure proper removal of such materials from campus. Therefore, this impact will be less than significant.

Impact HAZ-5: Campus development under the proposed Campus Master Plan could potentially interfere physically with the campus's Emergency Operations Plan (EOP).

Significance: Less than significant

Mitigation HAZ-5A: The campus shall continue to include the following requirements in its standards established by Capital Planning and implement them under the proposed Campus Master Plan:

- Construction work shall be conducted so as to ensure the least possible obstruction to traffic.
- Contractors shall notify the SF State's Representative at least two weeks before any road closure.
- When paths, lanes, or roadways are blocked, detour signs must be installed to clearly designate an alternate route.
- Fire hydrants shall be kept accessible to fire fighting equipment at all times.
- To ensure adequate access for emergency vehicles when construction projects will result in temporary lane or roadway closures, campus police and dispatchers must be notified of the closures and alternative travel routes.

Mitigation HAZ-5B: New building and/or department-specific EOPs shall be developed for any new development project.

Residual Significance: Less than significant.

The current main campus EOP provides guidance for campus activities in case of an emergency. The EOP details a chain of command to help the campus handle a variety of emergencies. Different campus staff may take control of the situation, depending on the type of emergency. Additionally, each campus department and building is required to maintain individual EOPs for building or department-specific emergencies or in the event that campus-wide communication is unavailable. Emergency evacuation drills are performed annually, according to the SF State Emergency Procedures Handbook.

Campus growth under the proposed Campus Master Plan will not interfere with the campus EOP through construction-related road closures. Under current campus policy, contractors must complete work with the least possible obstruction to traffic, and must keep fire hydrants accessible at all times. The SF State Capital Planning Agency is the lead agency regulating lane closures, and the Department of Public Safety ensures that lanes are passable at all times (Ho, 2006). To ensure that these procedures and notification requirements will continue under the proposed Campus Master Plan, Mitigation HAZ-5A is included so that construction activity will not interfere with the campus EOP.

Additionally, as new buildings are constructed, Mitigation HAZ-5B will require that new EOPs are developed for new buildings, and that departments alter their EOPs to include new buildings within their department, as is currently required. Because new buildings scheduled for construction under the

proposed Campus Master Plan will have similar functions to existing buildings, it is likely that the EOPs developed for these buildings will be similar in nature to existing EOPs.

In summary, SF State currently has a campus-wide EOP and individual EOPs for campus buildings in place. Implementation of Mitigations HAZ-5A and -5B will further reduce the impact related to interference with emergency response plans by ensuring that construction-related road closures do not adversely affect campus activities in the event of an emergency and requiring that site-specific EOPs be developed for the new facilities, in accordance with current campus practices.

4.6.2.4 Cumulative Impacts and Mitigation Measures

Impact HAZ-6: Development under the proposed Campus Master Plan, in conjunction with other area development, will result in increased use, disposal, and transport of hazardous materials, but the increase will not result in a significant cumulative hazard or hazardous materials impact. It is unlikely that there will be a cumulative increase in risk of hazardous materials release, or risk to existing and proposed schools from handling of hazardous materials.

Significance: Less than significant

Mitigation HAZ-6: Mitigation not required

Residual Significance: Less than significant

The cumulative context for hazardous materials use will be the SF State campus and the southwest portion of the City and County of San Francisco. The proposed Campus Master Plan hazardous materials impacts discussed in Section 4.6.2.3, *Impacts and Mitigation Measures* focus on the use, transportation, storage and disposal of hazardous materials and hazardous wastes during construction and occupancy of the proposed facilities. The construction-related hazardous materials impacts will generally be site-specific and will be limited to the duration of the construction activity, and will be highly regulated under federal, state and local regulation, and will therefore not contribute to a cumulative impact. With respect to the use, storage, transportation and disposal of hazardous materials, the operation of the projects constructed under the proposed Campus Master Plan will comply with all applicable hazardous materials and waste laws. Similarly, other projects in this portion of San Francisco that will use, store, transport and dispose hazardous materials will also be required to comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health and safety and the environment. However, it should be noted that the areas surrounding the SF State campus are currently mostly developed and are designated for residential and commercial uses and therefore will not likely be sources of existing or new substantial hazardous materials use.

Impact HAZ-2 above indicates that the impact of the proposed Campus Master Plan on schools within ¼ mile of the campus will be less than significant. Additionally, there is limited potential for a new school to be located within ¼ mile of the proposed Campus Master Plan project area, as the adjacent vicinity is mostly developed and also because the SFUSD is facing declining enrollments and is not foreseeing the construction of new school sites in their district (see Section 4.12, *Utilities and Public Services*). Furthermore, Section 17213 of the Education Code (School Siting Code) requires that, prior to acquiring

property for a new school site, an environmental site investigation must be completed to determine the health and safety risks associated with a site. Thus, it is not expected that a school will be sited in the area if a significant risk were determined to exist. As such, cumulative impacts associated with hazardous emissions or hazardous materials handling near a school will be considered less than significant.

In summary, development under the proposed Campus Master Plan, when combined with other past and reasonably foreseeable development in the southwestern portion of San Francisco, will not result in significant adverse cumulative hazards and hazard materials impacts.

4.6.3 References

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