4.6 HAZARDS AND HAZARDOUS MATERIALS

4.6.1 INTRODUCTION

This section describes the existing conditions with respect to hazards and hazardous materials at the Hayward campus and potential impacts related to hazards and hazardous materials that may occur as a result of campus growth under the proposed Master Plan. Regulations and policies affecting hazardous conditions and materials are also described in this section. Information presented in this section was obtained from the CSUEB Department of Environmental Health & Safety (EH&S) and a government records search performed by Environmental Data Resources.

Public and agency comments related to hazards and hazardous materials received in response to the Notice of Preparation (NOP) issued for this EIR are summarized below.

- Hazardous materials use and storage on the campus must comply with Certified Unified Program Agency (CUPA) requirements.
- A Unified Program Consolidated Permit must be obtained from the Hayward Fire Department's Hazardous Materials Office and maintained for storage and use of hazardous materials.
- Hazardous materials use and storage must comply with the City of Hayward's Uniform Fire Code and Hazardous Material Storage Ordinance.
- The Campus must maintain a Hazardous Materials Business Plan.
- Soil or groundwater contamination on site should be identified and remediated to applicable standards.
- Development of asbestos-containing materials should be evaluated by the appropriate agencies.
- Environmental concerns from the demolition of old structures should be investigated and mitigated in accordance with the Department of Toxic Substances Control's (DTSC) 2006
- The Campus is invited to participate in DTSC's School Property Evaluation and Cleanup Program.

Those comments that are relevant to the environmental impacts of the proposed project were considered in the analysis of impacts in this section.

4.6.2 ENVIRONMENTAL SETTING

The Hayward campus 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 Hayward campus.

A number of properties may cause a substance to be considered hazardous, including toxicity, ignitability, corrosivity, or reactivity. According to the State of California (California Code of Regulations Section 66084), hazardous material is defined as

By convention, hazardous materials are generally chemicals, but radioactive materials and biohazardous materials are also hazardous. This Draft EIR considers hazardous materials to include hazardous chemicals, radioactive materials, and biohazardous materials.

Hazardous materials use on the campus generates hazardous byproducts that must eventually be handled and disposed of as hazardous waste. 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.

4.6.2.1 Study Area

To evaluate the impacts of campus development under the proposed Master Plan related to hazards and hazardous materials, the study area is defined as the Hayward campus. The term “campus” encompasses the 180-acre developed area as well as approximately 184 acres of undeveloped land in the eastern portion and southern portions of the campus.

4.6.2.2 Existing Hazardous Materials Use and Waste Generation

Hazardous materials are used at the Hayward campus 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 campus 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.

Currently, hazardous materials are primarily used in two major science buildings. Some hazardous materials are also used in arts buildings and maintenance buildings, and biohazardous materials are used in the existing Student Health Services building.

Hazardous chemical wastes are generated whenever hazardous chemicals are used. General types of hazardous chemical wastes on the 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.

On- and Off-Campus Contamination

Historical government databases were reviewed in order to identify potential sources of contamination or hazardous materials. Potential sources located in a 0.5-mile radius of the Hayward campus that were identified in the course of these investigations are summarized below.

- Five historical underground storage tanks (USTs) and one active aboveground storage tank (AST) were reported on the campus. One of the USTs was discovered to be leaking due to structural failure in 1988. The 750-gallon leak of diesel fuel was confirmed in 1996. Information on the abatement action is not included in the agency databases.

- A drycleaners located east-southeast of the campus at 26775 Hayward Boulevard was identified in the RCRA Small Quantity Generator (SQG) database as a site that generates between 100 kg and 1,000 kg of hazardous waste per month.

In addition to the above, due to the age of some of the campus buildings, some buildings on the campus that may be renovated or demolished under the proposed Master Plan could contain asbestos containing materials (ACMs), lead-based paints (LBPs), and PCBs usually found in the ballast of fluorescent light bulbs). The presence of ACMs is documented for each building in the CSUEB Hayward Asbestos Notification 2008. If not previously documented, LBPs would be documented by a lead survey that CSUEB routinely 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.

4.6.3 REGULATORY SETTING

Hazardous materials handling and hazardous waste management are governed by federal, state, and local laws and regulations. These laws apply to the classroom activities, research-related activities, maintenance work, and all other applicable activities on the campus. Laws and regulations related to health and safety are summarized below.

4.6.3.1 Federal Regulations

The US Environmental Protection Agency (US EPA) is the main federal agency responsible for enforcing regulations relating to hazardous materials and wastes, including evaluation and remediation of contamination and hazardous wastes. The US EPA works collaboratively with other agencies to enforce materials handling and storage regulations and site cleanup requirements. The Occupational Safety and Health Administration (OSHA) and the Department of Transportation (DOT) are authorized to regulate safe transport of hazardous materials.

Federal regulations which regulate the handling (including transportation), storage, workplace safety, and disposal of hazardous materials and wastes are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR), specifically the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Responsibility, Compensation, and Liability Act of 1980 (CERCLA).

RCRA created a major new federal hazardous waste “cradle-to-grave” regulatory program administered by EPA. Under RCRA, EPA regulates the generation, treatment, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. RCRA includes procedures and requirements for

include the State Water Code, Underground Storage Tank Code, Cortese Act (listing of hazardous waste and substances sites), and Proposition 65 (safe drinking water and toxics enforcement).

Cal/OSHA regulates work practices at asbestos levels less than 1 percent. Samples containing less than 1 percent asbestos are regulated as outlined in 8 CCR Section 1529.

4.6.3.3 Local Regulations

The Bay Area Air Quality Management District (BAAQMD) is the local NESHAP authority for the Bay Area. The local NESHAP authority requires 10 business days' notification prior to the commencement of demolition activities or work that affects regulated ACMs.

The Hayward Fire Department Hazardous Materials Office is responsible for administering federal, state, and local policies, including:

- consulting with businesses for the safe storage and use of hazardous materials;
- responding to hazardous materials emergencies;
- training emergency response personnel in hazardous materials incident response;
- conducting inspections of facilities where hazardous materials and wastes are used and/or stored;
- reviewing construction plans for facilities using hazardous materials;
- investigating exposures to, or releases of, hazardous materials; and
- implementing the Certified Unified Program Agency (CUPA) program for the City of Hayward.

4.6.4 IMPACTS AND MITIGATION MEASURES

4.6.4.1 Standards of Significance

In accordance with Appendix G of the and the CSU CEQA Handbook, the impact of the proposed Master Plan project related to hazards and hazardous materials would be considered significant if it would:

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

- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 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;

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

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

- impair implementation of or physically interfere with (m)2(pa)a6

implementation of the proposed Master Plan are expected to be similar to those that are currently used on the 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 would

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 would 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 already 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 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 Master Plan will continue to comply with all standards related to hazardous waste generation for the Hayward campus. The Campus EH&S has prepared guidelines for proper disposal of hazardous wastes based on regulations established by the EPA and the DTSC. To facilitate safe management, hazardous wastes are controlled from generation to pickup by Campus EH&S hazardous waste disposal guidelines. These guidelines specify that as soon as 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 waste

hazardous materials and waste to and from the campus will also increase. CSUEB policy requires that packaging of chemicals to be transported on public roads comply with all legal requirements, including those of Caltrans, 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 the Campus EH&S 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 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

The Campus EH&S currently maintains spill response guidelines that account for the existence of hazardous materials on the campus. Each individual building and unit is required to have an emergency plan that accounts for the materials present in the building. A current paper copy of the plan must be submitted to the Campus EH&S. All campus departments prepare and maintain department Illness and Injury Prevention Plans and emergency response plans. Since 1992, no spills have occurred on campus that exceeded the response capabilities of CSUEB EH&S (EDR 2008). The types and quantities of hazardous materials used by new facilities developed under the proposed 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 that have occurred in recent years (i.e., very small spills in confined areas). EH&S does not foresee any difficulty in responding to incidents that may occur with new development under the proposed 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 proposed Master Plan project would not result in significant hazards to the public or the environment through increased potential for upset or accident conditions.

Environmental health and safety laws and regulations are dynamic and have been revised and expanded in recent years. CSUEB has a record of maintaining a safe environment for the campus and local community through its implementation of the increasingly complex and stringent laws and regulations regarding the use, storage, and transport of hazardous materials. Throughout the planning horizon of the proposed Master Plan, CSUEB would continue to comply with all federal and state laws and regulations

and would continue to implement all safety programs and procedures currently in place as established by the Campus EH&S. These procedures would continue to avoid or substantially limit exposure of students, faculty, staff, and the community at large to hazardous materials. All projects implemented under the proposed

MP Impact HAZ-3: Construction and demolition activities under the proposed Master Plan in one area of the campus could expose construction workers, campus occupants, or the public to contaminated soil or groundwater.

Level of Significance: Potentially significant

As discussed above, the governmental databases search indicated that a leaking underground storage tank (LUST) released approximately 750 gallons of diesel fuel before removal in 1988. Records do not indicate if the contaminated site was remediated. Excavation and other ground disturbing activities in conjunction with the construction of a new facility on the campus in the area of the previous LUST could encounter contaminated soils or groundwater, and potentially expose construction workers, campus occupants or the public to these materials. This is considered a potentially significant impact. The following mitigation measure will be implemented by the Campus, which would reduce the impact to a less than significant level.

MP MM HAZ-3: As and when a project is proposed in the vicinity of the LUST site, the Campus shall conduct a Phase I Environmental Site Assessment (ESA) and if necessary a Phase 2 ESA of the contaminated site. Based on the results of the investigation, the Campus in conjunction with the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) and DTSC shall determine if remediation is required. Remediation will be implemented before the site is excavated or otherwise disturbed for construction.

Significance after Mitigation: Less than significant

MP Impact HAZ-4: Demolition or renovation of buildings under the proposed master plan could expose construction workers, campus occupants or the public to contaminated building materials.

Level of Significance: Potentially significant

Hazardous materials could be encountered in campus buildings when they are demolished or remodeled under the proposed 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.

As noted earlier, due to their age, some of the older buildings on the Hayward campus are expected to contain ACMs or LBPs. The presence of ACMs is documented for each building in the CSUEB Hayward

Asbestos Notification 2008. If not already documented, LBPs will be documented by a lead survey that the Campus requires for all remodeling and demolition projects. State law also requires that contractors and workers be notified of the presence of LBPs and ACMs 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 also 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 would be consulted prior to commencing demolition of a building containing ACMs.

The existing library will be renovated and Pioneer Heights Phase I student housing will be demolished in the course of the proposed Master Plan Other existing buildings on the Hayward campus may be demolished if renovation is determined to be infeasible. While no significant spills or contamination have been reported in the library or the student housing, if proper procedures are not followed for demolition or renovation of buildings containing laboratory space, exposure to contaminated materials could occur during construction, resulting in a potentially significant impact. MP Mitigation Measure HAZ-4 requires that the Campus develop procedures to ensure that laboratory building materials are decontaminated and safe for handling by construction workers and for removal from the campus. Continued compliance with federal and state regulations, campus policies, and current EH&S procedures, and the development of specific procedures for the demolition of laboratory space under MP Mitigation Measure HAZ-4, will minimize the potential for exposure of workers to contamination inside laboratory structures and will ensure proper removal of such materials from the campus. Therefore, with mitigation this impact will be less than significant.

MP MM HAZ-4: The Campus shall develop a procedure for the demolition of laboratory space. These provisions shall 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 shall 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.

Significance after Mitigation: Less than significant

MP Impact HAZ-5: Campus development under the proposed Master Plan would not interfere physically with the Campus' Emergency Operations Plan.

Level of Significance: Less than significant

The current campus

campus. Therefore based on current practices and procedures, the impact related to interference with the campus EOP would be less than significant.

To ensure that these procedures and notification requirements will continue under the proposed Master Plan, MP Mitigation Measures HAZ-5a and HAZ-5b are included. Implementation of these mitigation measures will further reduce the impact 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.

MP MM HAZ-5a: The Campus shall require new construction under the Master Plan to adhere to the following standards already established by Facilities Planning & Operations:

- Construction work shall be conducted so as to ensure the least possible obstruction to traffic.
- Contractors shall notify the Campus Representative at least two weeks before any road closure.
- When paths, lanes, or roadways are blocket tw-1(n)-3(o)[(d)-3(e)7(e)-7(c)-0.2(t)-38149.2603-3(o)-2(u1

comply with all applicable hazardous materials and waste laws. Similarly, other projects in this portion of Hayward that will use, store, transport, and dispose hazardous materials will also be required to comply mpyly