

5.4 HAZARDOUS MATERIALS AND HAZARDOUS WASTES

5.4.1 Environmental Setting

5.4.1.1 Definitions

Hazardous Materials. The term “hazardous materials” is defined in different ways by different regulatory programs. This Program EIR uses the definition of the California Health and Safety Code Section 25501(o), which defines hazardous material as:

...any material that, because of its quantity, concentration, or physical, chemical, or biological characteristics, poses a potential hazard to human health or safety, or to 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 would 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 certain radioactive materials and biohazardous materials, are also hazardous. This Program EIR considers hazardous materials to include the applicable hazardous chemicals, radioactive materials, and biohazardous materials.

Hazardous Waste. A “hazardous waste,” for the purposes of this Program EIR, is any hazardous material that is to be abandoned, discarded, or recycled, consistent with California Health and Safety Code Section 25124.

5.4.1.2 Regulatory Framework

Hazardous materials and hazardous waste management are subject to numerous laws and regulations at all levels of government. For Fullerton College, these laws apply to demolition and construction of buildings, future classroom activities, research-related activities, maintenance work, and other activities on campus that could affect the physical environment. These regulations are summarized below.

Federal and State Hazardous Waste Management Plans

State and federal laws require detailed plans 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.

The hazardous materials transported and used on the campus include mostly those used for routine maintenance and cleaning in a college setting, although there are also some hazardous substances used by the science laboratories. Fullerton College, like other colleges in the NOCCCD, is no longer permitted to dispose of any hazardous substances into the public drainage system without fully neutralizing and treating them. Instead, any hazardous substances used by the science labs must be temporarily stored in approved storage containers for transportation offsite and disposed by private hazardous waste disposal companies in accordance with state and federal requirements. Moreover, in response to these requirements, the newer labs have shifted to microquantities in their use of chemicals and biological materials.

Some of the campus buildings would be demolished and replaced by new ones, and the older buildings might have asbestos-containing materials (ACMs) and lead paint.

SCAQMD Rule 1403

According to Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) of the South Coast Air Quality Management District (SCAQMD), any building to be demolished or renovated that has asbestos-containing materials is subject to provisions related to the following tasks:

- Asbestos surveying (inspection, identification, and quantification), to be conducted by a qualified environmental laboratory;
- Notification of SCAQMD, including project description;
- Removal procedures and time schedules;
- Material handling and clean-up; and
- Material storage and disposal.

There is an underground oil pipeline on the eastern portion of the college site, north of Berkeley. Based on *Pipelines and Public Safety* published by the Transportation Research Board of the National Research Council, "...petroleum fuels such as gasoline and jet fuel, which are transported in their natural liquid state, pose a fire and pollution hazard..."¹ This pipeline poses little risk of exposure to the public. However, the contents of the pipeline, if released in a pipeline accident, can be hazardous to people living and working near the line. The leading cause of pipeline failure is outside force damage. A majority of these incidents are caused by damage from excavation; to a far lesser extent, outside force damage as the result of natural causes, such as land subsidence. The second leading cause of pipeline failure is corrosion.

The proposed project is not expected to impact this pipeline in any way, and so no increase in hazard to the college would occur.

5.4.2 Thresholds of Significance

According to the NOCCCD, a project component may be deemed to have significant adverse impacts or risk of upset on human health if any impact qualifies under any of the standards of significance described in the Appendix G (Environmental Checklist Form) of the *CEQA Guidelines*. These standards of significance were evaluated in the *Initial Study* prepared for this project (March 2003). Only those standards of significance for which the project impacts are potentially significant are investigated in this Program EIR; the standards of significance that were found to result in "No Impact" or "Less than Significant Impact" are not addressed in this EIR. Therefore, there are four applicable thresholds of significance for project impacts related to hazardous materials and wastes, as follows:

- Location 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, creation of a significant hazard to the public or the environment
- The site of current or former hazardous waste disposal site or solid waste disposal site and, if so, whether the wastes have been removed
- A hazardous substance release site identified by the State Department of Health Services in a current list adopted pursuant to Section 15356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code; or

¹ Transportation Research Board of the National Research Council Special Report #219, *Pipelines and Public Safety*, 1981.

- A site that contains one or more pipelines, situated underground or aboveground, carrying hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school (college) neighborhood

5.4.3 Environmental Impacts

Some campus buildings slated to be remodeled, removed, or demolished as part of this project are 30 years old or more, and so are likely to have asbestos-containing materials (ACMs) and lead-based paint. Because demolition activities could accidentally release asbestos and lead into the environment, materials containing them must be identified and disposed of in accordance with established regulatory standards. Because the project would comply with the ACM notification requirements and removal processes mandated by SCAQMD Rule 1403 and with other regulatory agency requirements, any project impacts from lead and asbestos would be less than significant.

Table 5.4-1 (Asbestos Abatement...) reports the current status of the campus asbestos abatement program. Generally, although the buildings still contain some asbestos, the amount is small and it is in locations that are not commonly accessible or easily disturbed by the public (e.g., in the ceiling of Buildings 300 and 600, and below the floor in Building 600).

Table 5.4-1
Asbestos Abatement Status of Buildings To Be Remodeled or Demolished

<i>Building and Planned Activity</i>	<i>Asbestos Abatement</i>
Remodel Building 100 (Administration) by expanding offices, repairing ceiling and roof, abating asbestos, and adding themed façade.	80% complete
Demolish Building 200 (Library) for campus service functions, student activities, and student government.	90% complete
Remodel Building 300 (Business) by adding an elevator.	70% complete
Remodel Building 400 (South Science)	90% complete
Remodel Building 500 (Applied Arts) by constructing a second exit.	95% complete
Remodel Building 600 (North Science)	70% complete
Remodel Building 700 (Technical Education) and relocate Cosmetology from Building 700 to District Education Center (DEC).	80% complete (asbestos tiles on the 2nd floor)
Demolish Building 800 (Student Center) and construct new Library/ Learning Resources Center.	50% complete; abatement planned during demolition
Remodel Building 900 (Trade Technical)	100% complete
Remodel Building 910 (Automotive Mechanics).	95% complete
Remodel Building 1000 (Fine Arts) by constructing two new classrooms, relocating the sculpture yard, remodeling Rooms 1016 and 1018 into large lecture rooms.	95% complete
Remodel Building 1100 (Music)	95% complete
Demolish Building 1200 (Physical Education) by adding an aquatic facility (50-meter swimming pool), instructional space, 32 faculty offices, and a Health Services Center).	80% complete; abatement planned during demolition
Remodel Building 1300 (Theater Arts) by creating entrance for theatre, adding 3 classrooms, constructing box office, and reworking patio and roof treatment.	80% complete (sprayed-on asbestos insulation)
Remodel Building 2000 (Student Services).	Minimal abatement needed

Building Status Summary is as of September 9, 2003, Fullerton College Educational Support and Planning.

No information was available regarding asbestos status for the following buildings planned for remodeling or demolition: District Education (DEC) and District Data Processing (DDP), 1400 Buildings (Temporary Classrooms), Child Care Center (Building 1800), and Infant Care Center (Building 1810).

In addition, compliance with regulations and programs established by the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the Orange County Fire Authority, as well as meeting the City of Fullerton's standard conditions of approval regarding any other hazardous materials prior to issuance of building permits would further ensure that any project impacts from hazardous materials or wastes would be less than significant.

5.4.4 Cumulative Impacts

5.4.4.1 Database Searches

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The EDR report (see **Appendix D** of this document) meets the government records search requirements of the Standard Practice for Environmental Site Assessments, E 1527-00, of the American Society for Testing and Materials (ASTM). The search was conducted to detect various areas of concern in the vicinity of Fullerton College, including sites containing hazardous waste, incidents, or spills; contaminated water wells; leaking storage tanks; and other potential cumulative impacts. The EDR report contains the results of searching the following databases.

RCRIS: The Resource Conservation and Recovery Information System (RCRIS) database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). The RCRIS Small Quantity Generator (SQG) list (EDR, July 11, 2003) identifies Fullerton College itself as the only RCRIS-SQG site within approximately 0.25 miles of the campus, but does not report the reason it is on the list. (Fullerton College is also included on the LUST, Cortese, and CA FID UST lists.)

CHMIRS: The California Hazardous Material Incident Report System (CHMIRS) (maintained by the California Office of Emergency Services) reports hazardous material incidents (i.e., accidental releases or spills). The CHMIRS provided by EDR is dated December 31, 2002.

The list has one site within 0.5 mile:

- 1244 North Lemon: The incident occurred on August 24, 1988, while the property was being used for manufacturing by the Inmon Corporation, but neither the particular chemical released nor its extent is reported.

The list also reports ten sites between 0.5 mile and 1 mile of the campus:

- 1314 North Lemon Street: The incident occurred November 27, 1989.
- 1307 Shadow Lane: Raw sewage spills occurred on February 3, 1997, and March 14, 1997. (This counts as two sites because there were two incidents).
- 146 North Raymond Avenue: On October 21, 2002, waste oil spill was spilled when a tanker truck overflowed.
- 1725 Skyline Drive: On May 14, 1999, a rust hole leak in a street transformer released mineral oil with 16 parts per million (ppm) of polychlorinated biphenyls (PCBs).
- 1400 North Harbor Boulevard: On September 26, 1997, an unknown odor was detected throughout the whole building, emanating from the air conditioning vents, drains, and other locations. This had been affecting occupants since November 1996, with people experiencing nausea, headaches, coughing, watery eyes, etc.
- 326 South Lemon Street. The incident occurred January 7, 1988.

- 1133 East Commonwealth (Unocal Service Station): Gasoline spilled through a loose fitting on piping that led into the underground tank.
- 130 West Santa Fe: Two incidents occurred, both with ammonia being released due to equipment malfunction. (This counts as two sites because there were the two incidents.)

“Cortese” List: This database belongs to the California Environmental Protection Agency’s Office of Emergency Information. The database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known contaminant migration. A review of the Cortese List (provided by EDR) revealed 21 sites within approximately 1 mile of the campus, as follows.

The only site within 0.125 mile of the campus is Fullerton College itself, which had a waste oil spill due to rupture (affecting soil only) on January 13, 1993.

Two sites are between 0.125 and 0.25 mile from the campus:

- Fullerton Car Wash, 800 North Harbor Boulevard: Gasoline leak.
- Frisbie Management Services, 117 Chapman: Leaking underground storage tank: LUST.
- FMS/ Edington Fruit Packing, 332 Commonwealth: LUST.

Eighteen sites are between 0.5 and 1 mile from the campus:

- Fullerton Manufacturing: Soil contamination from diesel fuel from a LUST.
- Carl Karcher Enterprises, 1301 North Lemon: Waste oil and gasoline from a LUST.
- Quaker State Facility, 336 Santa Fe Avenue: LUST.
- ARCO #1579, 1124 Chapman Avenue: Release of premium, unleaded gasoline (that may have affected an aquifer) from a LUST.
- Sam Cal Corporation, 515 Walnut: Diesel fuel on September 9, 1996, from a LUST.
- M.G. Disposal, 201 Balcom: LUST.
- Unocal #4351, 1133 Commonwealth Avenue: Gasoline on August 4, 1997, and waste oil on October 12, 1993, from LUSTs (two sites).
- Fullerton Police Station, 237 West Commonwealth Avenue: Gasoline from a LUST in 1990.
- Classic Marble, 371 Raymond Avenue: Gasoline on January 9, 1997, from a LUST.
- Fullerton City Hall, 303 West Commonwealth Avenue: Diesel fuel on September 3, 1998, from a LUST.
- Southern California Gas/Fullerton MGP, southeast corner of Malden.
- Home Gas Company, 144 West Walnut.
- Superior Wholesale/Anders, 1141 Ash: LUST.
- Alice Pitcher, 116 Elm Avenue: LUST.
- All-Roads Moving and Storage, 1400 Walnut: Gasoline from LUST.

- Allergan, Inc., 1410 Walnut: LUST.
- Unitdesigned, Inc. 1234 Ash Avenue: Other organic solids, and hydrocarbon solvents (benzene, hexane, and Stoddard) from LUST.

LUST: The Leaking Underground Storage Tank (LUST) Incident Reports inventory reported LUST incidents. The data come from the California Water Resources Control Board Leaking Underground Storage Tank Information System. This database (EDR, April 2, 2003) lists 5 LUST sites within approximately 0.5 miles of the campus, including Fullerton College itself.

Four sites between 0.125 and 0.25 mile from the campus:

- Estate of Trilby H. Easton, 1234 Luanne Avenue, confirmed leak of gasoline, July 2, 1997.
- Fullerton Car Wash, 800 North Harbor Boulevard, same incident as described in the Cortese List, occurred October 12, 1999.
- FMC/Edington Fruit Packing, 332 Commonwealth Avenue, same incident as described in the Cortese List, due to release of xylene that may have affected an aquifer.
- Shell Oil, 242 Commonwealth Avenue East, gasoline and a lead underground storage tank.

CA FID: The Facility Inventory Database (FID) contains active and inactive underground storage tank locations. The source is the California Water Resources Control Board. A review of the CA FID UST list (provided by EDR) revealed one CA FID UST site within approximately 0.25 miles of the target property. This site is Fullerton College itself due to waste oil from a 1,000 gallon tank that was removed December 22, 1994.

One site is between 0.25 and 0.5 mile from the campus:

- Fullerton Car Wash, active underground storage tank location.

Three sites are between 0.5 and 1 mile from the campus:

- Carl Karcher Enterprises, Inc. active underground storage tank location.
- Fullerton Police Station, active underground storage tank location.
- Fullerton City Hall, active underground storage tank location.

UST: The Underground Storage Tank (UST) database registers USTs, which are regulated under Subtitle I of RCRA. The data come from the California Water Resources Control Board's Hazardous Substance Storage Container Database. The UST list (provided by EDR and dated April 2, 2003) identifies Fullerton College itself due to HIST UST (The Historical UST Registered Database) records for the site (provided by EDR and dated October 15, 1990) described in a following section.

- 2,000-gallon diesel fuel tank, installed in 1958
- 1,000-gallon waste oil tank, installed in 1961
- 8,500-gallon diesel fuel tank, installed in 1964
- 10,000-gallon diesel fuel tank, installed in 1975
- 10,000-gallon diesel fuel tank, installed in 1975

Carl Karcher Enterprises, Inc. 1301 North Lemon, located between 0.5 and 1 mile from campus, was also listed in this database, for the following records:

- 10,000-gallon diesel fuel tank, installed in 1977
- 10,000-gallon diesel fuel tank, installed in 1977

- 10,000-unleaded gasoline fuel tank, installed 1977
- 250-gallon waste oil tank, installed 1977

Total Listed Sites: Although there are a total of 45 sites on the combined above lists that may have hazardous materials or waste in the vicinity of Fullerton College, 13 of these sites are duplicates (i.e., they appear on more than one list). Therefore, the total number of documented potential hazardous materials or waste sites in the vicinity of Fullerton College is 32.

5.4.4.2 Conclusions

Listed Hazardous Material Sites

Any direct impacts of hazardous materials and waste from the Fullerton College Master Plan Projects are expected to be less than significant because of adherence to related local, state, and federal regulations.

Although there are known contaminated properties within 0.125, 0.25, and 0.5 mile of the campus, there are no plans to acquire property in these areas, so no site inspections were conducted at any of the identified sites. However, Fullerton College itself is on several lists, and the databases do support the possibility that, in the vicinity of the campus, hazardous materials may be present below ground and may also be in the groundwater.

Typically, hazardous materials and waste sites within 0.125 mile of a subject property are evaluated for potential project impacts. (Properties outside of the 0.125-mile radius are not expected to have a potential impact to the near-surface soils that might be disturbed during typical building demolition.) However, for the proposed Master Plan Projects, most buildings are located in the southwest quadrant of the campus, with peripheral parking lots and athletic fields located on the northern and eastern sides of the campus. The Master Plan Projects located closest to the campus boundary that will be new construction (not remodels) are the new East Parking Structure [II] and the new buildings north of Berkeley Avenue for Maintenance and Operations and Academic Computing Technologies. None of these projects would require deep excavation.

Therefore, despite the presence of known contaminated properties in the vicinity of the campus, it is not expected that subsurface contamination from surrounding properties will be encountered during excavation and construction. No extraction of groundwater is planned on campus, so, even if the groundwater is contaminated, students and staff at Fullerton College are not expected to be exposed to such contaminants. No significant impacts will occur to any listed hazardous material sites.

Hazardous or Solid Waste Disposal Sites

No known hazardous or solid waste disposal sites were identified in the project area. No significant impacts are expected to occur to hazardous or solid waste disposal sites.

Sites Identified for Removal or Remediation

Asbestos abatement is planned to occur during the demolition or remodeling of various campus buildings. These buildings have been identified earlier in this section. No significant impacts are expected to occur to sites that have been identified for the removal or remediation of hazardous materials.

Pipelines Carrying Hazardous Substances

The underground oil pipeline on the eastern portion of the college site, north of Berkeley, will not be disturbed during the proposed demolition and remodeling of the campus buildings. No significant impacts are expected to occur to pipelines carrying hazardous substances.

5.4.5 Mitigation Measures

In the unlikely event that any excavation or construction activity should uncover a potentially hazardous material or waste, the following mitigation measures would be implemented to reduce the potential human health risk impacts to a less than significant level:

- **HM/HW-1:** Prepare a Hazardous Material Inventory and Business Plan and submit it to the Orange County Fire Department Health Hazardous Materials Division for review and approval. The plan shall follow the format as prescribed by the County and include all state-mandated information.
- **HM/HW-2:** Prepare and implement a Hazardous Waste Emergency Management Plan to ensure that employees are trained in the safe handling of hazardous waste.
- **HM/HW-3:** Ensure that all material being disposed of is properly manifested and transported by a licensed hazardous waste hauler.
- **HM/HW-4:** Prior to demolition, if contaminated soils, asbestos, lead-based paints, fluorescent lamps and ballasts, or other hazardous materials or liquids are discovered, asbestos abatement and lead paint, carry out abatement before site development, and transport these materials to disposal facilities that are permitted to accept them.

5.4.6 Level of Significance After Mitigation

After the implementation of the above mitigation measures, any significant impacts of hazardous materials through use, storage, disposal, and site development would be mitigated to a less than significant level.