

Hazards and Hazardous Materials

This chapter describes the regulatory background and existing conditions related to hazards and hazardous materials. It discusses the hazards and hazardous materials associated with the proposed Project, the potential impacts on public health and safety through exposure to hazards and hazardous materials. Mitigation to reduce impacts are presented as applicable.

9.1 Existing Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 CCR Section 66260.10:

...A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

As described in Section 2.3, the Project site is located at the Event Center between Saratoga Drive, 28th Avenue, and S. Delaware Street in the City of San Mateo. The main components of UFES would be located on the southeast corner of the parcel currently occupied by the Event Center. The diversion sewer lines would be located in roadways that surround the parcel, including Saratoga Drive and S. Delaware Street. The southeast corner of the parcel, where construction would occur, is currently a gravel parking/storage yard with stored trailers, trucks, and large metal storage containers. The site is relatively flat with an elevation of approximately 11 feet above mean sea level. Geologic conditions are described as historic artificial fill that consists of loose to very well consolidated gravel, sand, and silt/clay. Groundwater depth and flow in the site vary from approximately 4 to 7 feet bgs (ENGE0, 2018).

In accordance with **Mitigation Measure 9-3** of the 2016 Final PEIR, a Phase I Environmental Site Assessment (ESA) was conducted for the site by ENGE0 (see **Appendix E**). The purpose of the ESA was to identify recognized environmental conditions (RECs) associated with the site. Additionally, the Phase I ESA complies with standards of ASTM International (ASTM) for property transfers.

Site reconnaissance and review of environmental records conducted for the Phase I ESA did not indicate or identify the presence of RECs, controlled RECs, or historic RECs² associated with the site (ENGE0, 2017).

Environmental databases that were queried for the Phase I ESA identified a former leaking underground storage tank (LUST) case associated with the Event Center property, approximately 850 feet northwest of the Project site. The LUST was removed in 1997. The San Mateo County Groundwater Protection

² “As defined in the ASTM Standard Practice E 1527-13, an REC is the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

“A controlled REC is an REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.”

“A historic REC is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.”

Program issued a Closure memorandum on January 28, 2002. The Phase I ESA concluded that the LUST is a low risk for the Project site (ENGE0, 2017).

9.2 Regulatory Framework

Hazardous materials use, transportation, and disposal are governed by laws and regulations at all levels of government.

9.2.1 Federal Regulations

The EPA is the lead federal agency that regulates hazardous waste handling, transport, generation, and disposal. The EPA delegates permitting and compliance assurance to the state. **Table 9-1** lists federal regulatory agencies that oversee hazardous materials handling and hazardous waste management, and the statutes and regulations they administer.

Table 9-1. Summary of Federal Regulations for Hazardous Waste
Underground Flow Equalization System Project, Environmental Impact Report

| Regulatory Agency | Authority | Summary |
|-----------------------------------|--|--|
| EPA | Clean Water Act | Requires a National Pollutant Discharge Elimination System permit to discharge water. |
| | Clean Air Act (42 USC 7401 et seq., as amended) | Regulates accidental releases of hazardous materials through hazard assessments and response programs. |
| | Resource Conservation and Recovery Act | Regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. DTSC is authorized to implement the state's hazardous waste management program for the EPA. |
| | Toxic Substances Control Act 1976 (15 USC 2605) | Requires reporting, record keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. |
| | Comprehensive Environmental Response, Compensation and Liability Act | Provides funding to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. |
| U.S. Department of Transportation | Hazardous Materials Transport Act – CFR 49 | Regulates the transportation of hazardous materials, types of hazardous materials, and vehicle marking during transport. |
| OSHA | Occupational Safety and Health Act (29 CFR 1910) | Protects workers by setting standards related to safety and health. |

Notes:

CFR = Code of Federal Regulations

DTSC = Department of Toxic Substances Control

OSHA = Occupational Safety and Health Administration

USC = United States Code

9.2.2 State Regulations

The California Environmental Protection Agency (CalEPA) and the State Water Resources Control Board (SWRCB) (2015) establish rules governing the use of hazardous materials and management of hazardous waste. Applicable state laws are summarized in **Table 9-2**.

Table 9-2. Summary of California Regulations for Hazardous Waste
Underground Flow Equalization System Project, Environmental Impact Report

| Regulatory Agency | Authority | Summary |
|--|--|--|
| CalEPA through the San Mateo County Public Health Department | Certified United Program Agency under the California Health and Safety Code | The San Mateo County Public Health Department has been certified by CalEPA to implement the following five state environmental programs within the local agency's jurisdiction: <ol style="list-style-type: none"> 1. Hazardous Material Business Plan 2. Hazardous Waste Generators and Onsite Treatment Program 3. Underground Storage Tanks 4. California Accidental Release Program 5. Aboveground Petroleum Storage Tank Program |
| California Highway Patrol | California Vehicle Code | Designates routes to be used for the transportation of inhalation hazards. |
| Department of Industrial Relations | California Occupational Safety and Health Act | Requires employee training, safety equipment, prevention, and hazardous substance exposure warnings. Requires employer to monitor exposure to listed hazardous substances and notify employees of exposure. |
| State Office of Emergency Services | Hazardous Materials Release Response Plans and Inventory Law (also known as the Business Plan Act) | Requires the preparation of hazardous materials business plans that include an inventory of hazardous materials that are handled, their storage locations, an emergency response plan, employee safety training, and emergency response procedures. |
| California Office of Environmental Health Hazard Assessment | Safe Drinking Water and Toxic Enforcement Act | Protects drinking water from chemical contamination. |
| | Aboveground Petroleum Storage Act | An inspection program for aboveground storage tanks. Requires owners or operators of aboveground petroleum storage tanks to file a storage statement and implement measures to prevent spills. |

9.2.3 Local Regulations, Policies, and Programs

Local regulations, policies, and programs for hazardous materials management are determined by the County of San Mateo and the City of San Mateo.

9.2.3.1 San Mateo County Hazardous Materials Business Plan Program

The San Mateo County Hazardous Materials Business Plan Program (County of San Mateo, 2016) requires that businesses create a hazardous materials business plan for safe storage and use of chemicals. The plans are used by “firefighters, health officials, planners, public safety officers, health care providers and others” during emergencies to “prevent or lessen damage to the health and safety of people and the environment when a hazardous material is released.”

9.2.3.2 Fire Code

The *San Mateo City Code and Municipal Code* (City of San Mateo, 2015), includes a building and construction fire code for all development and construction activities within the City. The fire code requires compliance with the California Fire Code and Uniform Fire Code.

9.2.3.3 General Plan

The *City of San Mateo General Plan – Vision 2030* (General Plan) (City of San Mateo, 2010) includes the following policies related to the use, storage, and disposal of hazardous wastes:

S 5.1: County Cooperation. *Cooperate with the County of San Mateo in the regulation of hazardous materials and transportation of such material in San Mateo.*

S 5.2: County Hazardous Waste Management Plan. *Adopt by reference all goals, policies, implementation measures, and supporting data contained in the San Mateo County Hazardous Waste Management Plan.*

S 5.3: On-site Waste Treatment. *Promote on-site treatment of hazardous wastes by waste generators to minimize the use of hazardous materials and the transfer of waste for off-site treatment.*

S 5.4: Transportation Routes. *Restrict the transportation of hazardous materials and waste to truck routes designated in Circulation Policy C-1.3 and limit such transportation to non-commute hours.*

S 5.10: Contaminated Sites. *Require the clean-up of contaminated sites indicated on the Hazardous Waste and Substances Sites List published by the Department of Toxic Substance Control and/or the Health Department in conjunction with substantial site development or redevelopment, where feasible.*

S 5.11: Cost Recovery. *Require San Mateo County businesses which generate hazardous waste or applicants for hazardous waste management facilities to pay necessary costs for implementation of the HWMP programs and for application costs, and to pay for costs associated with emergency response services in the event of a hazardous material release, to the extent permitted by law.*

9.3 Assessment Methods and Thresholds of Significance

The analysis of impacts was derived from the results of the Phase I ESA, including government database searches such as those maintained by EPA and Department of Toxic Substances Control (DTSC), as well as information about existing hazardous materials protocol/practices at the Project site.

Impacts related to hazards and hazardous materials may occur if the proposed Project would result in the following:

- 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
- Release 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 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires

There are no airports within 2 miles of the site. Construction activities within the site would not be within an area addressed by an airport land use plan and would not create a significant safety hazard. Therefore, no hazards associated with airports would occur, and this issue is not discussed further.

The site is located within a highly urbanized area and is not adjacent to wildlands; therefore, no hazards associated with wildland fires would occur, and this issue is not discussed further.

9.4 Environmental Impacts

Impact 9-1. Would construction of the proposed Project expose the public or the environment to hazardous materials through routine use, transport, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials?

Construction of the proposed Project would include the use, transport, storage, and disposal of hazardous materials. The proposed Project would temporarily require the use of vehicles and other construction equipment that would use hazardous materials such as fuels, lubricants, and solvents. Accidental releases of small quantities of these materials could expose people and the environment to hazardous materials. However, the handling and storage of these materials would be in accordance with all DTSC, EPA, Occupational Safety and Health Administration (OSHA), and fire department regulations, and would comply with measure S 5.4 of the General Plan (City of Mateo, 2010).

Compliance with regulatory requirements would reduce potential impacts associated with the use, transport, and disposal of hazardous materials during construction for the Project to less than significant.

Operation of the proposed Project would require the occasional use of small quantities of hazardous materials, such as diesel fuel for the backup generators and lubricants for the temporary holding structure cleaning equipment (tipping buckets). Existing City of San Mateo plans and programs to store and handle hazardous materials, including a hazard communication program, hazardous materials business plan, and spill prevention, control, and countermeasures plan, would be updated as required by regulation and would continue to be implemented for the proposed Project. Potential impacts from use, storage, transport, and disposal of these materials would be less than significant. No mitigation would be required.

Impact 9-2. Would the proposed Project 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?

As previously discussed, the Phase I ESA that was conducted on the Project site concluded that there are no RECs. However, unexpected hazardous materials could be encountered during construction. If unexpected hazardous materials are encountered or suspected, **Mitigation Measure 9-2, Perform a Phase II Assessment as needed and remediate, control, or dispose of contaminated materials as appropriate**, would be implemented as needed to determine the extent and nature of the contamination. Contaminated material would be removed and disposed according to applicable federal, state, and local regulations. Therefore, with implementation of **Mitigation Measure 9-2**, both proposed Project construction and operation impacts related to hazardous materials resulting in hazards to the public or environment would be less than significant.

Impact 9-3. Would construction and operation of the proposed Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within 0.25 mile of an existing school?

The Nueva School Bay Meadows Campus is located within 0.25 mile southwest of the Project site. As discussed for Impacts 9-1 and 9-2, the use, storage, and transport of hazardous materials related to construction and operation of the proposed Project would comply with existing regulations, programs, and plans, including a hazardous materials business plan and spill prevention control and countermeasures plan as applicable. Accidental releases of any fuels, oils, and lubricants would be contained within the work sites and addressed in accordance with all DTSC, EPA, OSHA, and fire department regulations. Additionally, as discussed in Chapter 10, *Hydrology and Water Quality*, a

stormwater pollution prevention plan (SWPPP) will be prepared and implemented to avoid/address potential construction-related impacts. Safety training and emergency response procedures would be employed during construction and operation and would be updated regularly to account for changes in hazardous materials use. Therefore, potential impacts from the use of these materials during construction and operation of the Project would be less than significant.

As discussed for Impact 9-2, no RECs were discovered in the Project area. With implementation of **Mitigation Measure 9-2**, any unexpected contaminated soil and groundwater would be identified and safely removed and disposed. Therefore, impacts as a result of hazardous emissions, handling of acutely hazardous materials, substances, or wastes within 0.25 mile of an existing school would be less than significant.

Impact 9-4. Would implementation of the proposed Project interfere with an adopted emergency response plan or emergency evacuation plan?

The City has a multi-hazard functional plan (City of San Mateo, 1995) as required by the California Emergency Services Act, and a local hazard mitigation plan (ABAG, 2010), as required by the Federal Emergency Management Agency (FEMA). These plans include information related to the City's response to hazardous materials releases. First responders frequently conduct drills simulating emergencies, including hazardous materials releases. The City's Emergency Operations Center, which is located at the City of San Mateo Police Department (SMPD) at 200 Franklin Parkway, would serve as the communication headquarters for emergency responses. Emergency supplies and equipment are stored at the Emergency Operations Center. SMPD and the San Mateo Fire Department would act jointly as incident command, unless the release occurred on a state highway under the authority of the California Highway Patrol. The Belmont–San Carlos Fire Department is able to provide assistance through a fully equipped hazardous materials response vehicle.

As discussed in Chapter 14 – *Public Services*, construction of the new diversion sewer pipelines within roadways could interfere with emergency access and evacuation. However, construction of pipeline sections would be temporary, lasting up to approximately 13 months, and detours would be provided during Project construction. In addition, with implementation of Final PEIR **Mitigation Measure 9-4, Coordinate emergency services during construction**, the City would follow its standard measures to coordinate in advance with the SMPD and establish signage and detours so that emergency access is maintained during the temporary construction activities. With implementation of Final PEIR **Mitigation Measure 9-4**, impacts of the proposed Project on emergency services would be less than significant.

9.5 Mitigation Measures

9.5.1 Final PEIR Mitigation Measure

Implementation of the following mitigation measure from the Final PEIR would ensure that potential impacts related to hazards and hazardous materials would be less than significant.

Mitigation Measure 9-4. Coordinate emergency services during construction.

For Project work areas located in or near roadways, or that may otherwise interfere with emergency access, the City shall follow its standard measures to coordinate in advance with the SMPD and establish signage and detours so that emergency access, including police and fire access, is maintained during temporary construction activities. Signage and notifications to the public regarding parking, driving, and pedestrian access disruptions shall be made. Emergency personnel and coordination centers shall be notified of construction locations and schedules prior to start of construction.

9.5.2 Project-Specific Mitigation Measure

Implementation of the following Project-specific mitigation measure would ensure that potential impacts related to hazards and hazardous materials would be less than significant.

Mitigation Measure 9-2. Perform a Phase II ESA as needed prior to construction and remediate, control, or dispose of contaminated materials as appropriate.

Where unexpected contamination is encountered or suspected, sampling shall be performed under a Phase II ESA, as appropriate, and recommendations for reducing or eliminating the mechanisms of contamination shall be provided. Recommendations may include removing the contaminated soil and disposing of it at a licensed facility in accordance with all regulations.

9.6 References

Association of Bay Area Governments (ABAG). 2010. *Taming Natural Disasters – Multi-jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area*.

Jacobs. 2016. *Final Programmatic Environmental Impact Report (Final PEIR), City of San Mateo Clean Water Program*. SCH# 2015032006. Prepared for the City of San Mateo. April.

City of San Mateo. 1995. *City of San Mateo Multi-Hazard Functional Plan*.

_____. 2010. *City of San Mateo General Plan – Vision 2030*. Resolution No. 134-2010. Adopted by the City Council on October 18.

County of San Mateo. 2016. Website on Hazardous Material Business Plan Program. Available at: <http://smchealth.org/HazMat%20Business%20Plan>. Accessed April.

EDAW, Inc. 2004. *San Mateo Corridor Plan and Bay Meadows Specific Plan Amendment EIR*.

ENGEO Incorporated (ENGEO). 2017. *Exposition Center San Mateo Basins 2 and 3 Phase I Environmental Site Assessment*. February 10.

State Water Resource Control Board (SWRCB). 2015. Geotracker. Available at: <http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=san+mateo+CA>. Accessed June 8, 2015.