

3.10 Hazards and Hazardous Materials

This section describes the affected environment and regulatory setting for hazards and hazardous materials. It also describes the impacts related to hazards and hazardous materials that would result from implementation of the Project and mitigation measures that would reduce these impacts. Cumulative and growth-inducing impacts are discussed at the end of this section.

Issues identified in response to the Notice of Preparation (NOP) (Appendix 1) were considered in preparing this analysis. Applicable issues that were identified pertain to hazardous waste cleanup at the former distillery.

Existing Conditions

Regulatory Setting

Hazardous materials and hazardous wastes are regulated under federal, state, and local laws. In California, federal environmental laws generally establish minimum applicable standards; more stringent state and local standards may apply as well. For example, California regulates a broader array of wastes defined as *hazardous waste* than those regulated under federal law. Hazardous materials handling and hazardous waste management are subject to laws and regulations at all levels of government, as summarized below. Land uses at the Project site and in the surrounding area are required to comply with these laws and regulations, in part by implementing a series of in-house policies and procedures or by correcting adverse environmental conditions that pose a risk to the public and/or the environment. The following describes the major federal, state, and local procedures and programs relevant to each category.

Federal and State

Hazardous Materials Management and Emergency Planning. 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. The federal Emergency Planning and Community Right to Know Act (EPCRA [42 U.S. Code Section 11001, et seq.]) requires facilities that store, use, or produce certain amounts of hazardous chemicals to provide State and local authorities with material safety data sheets, or, alternatively, a list of chemicals. EPCRA also requires reporting of permitted and accidental releases of hazardous substances and requires certain facilities to complete and submit the U.S. Environmental Protection Agency's (EPA's) Toxic Chemical Release Inventory form annually.

California's Hazardous Materials Release Response Plans and Inventory Act, sometimes called the Business Plan Act (California Health and Safety Code Section 25500 et seq.), requires businesses using hazardous materials to prepare a plan that describes their facilities, chemical inventories, emergency response plans, and training programs. Businesses that use, store, or handle 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure require hazardous materials business plans. Plans must be prepared prior to facility operation and are reviewed and, if necessary, updated biennially (or within 30 days of a change). In addition, the Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code Section 25249.5 et seq.) requires that any person with 10 or more employees operating within the state or selling products

in California (1) be prohibited from knowingly discharging listed chemicals into sources of drinking water; and (2) be required to provide a “clear and reasonable” warning before knowingly and intentionally exposing anyone to a listed chemical. This warning can be given by a variety of means, such as by labeling a consumer product, by posting signs at the workplace, or by publishing notices in a newspaper.

The California Fire Code regulates storage and use of hazardous materials at commercial and industrial facilities. The California Building Code regulates how protective measures within a structure will be built and implemented. Certified Unified Program Agencies (CUPAs) are responsible for local regulation and enforcement of hazardous materials laws and regulations. The San Mateo County Environmental Health Division (SMCEHD) serves as the San Mateo County’s CUPA. The CUPA has been certified by the California Environmental Protection Agency (Cal-EPA) to implement six state environmental programs within the City of Menlo Park’s (City’s) jurisdiction: the hazardous materials business plan/emergency response plans and inventories program; the hazardous waste program; the California accidental release prevention program; the Underground Storage Tank (UST) program; the Aboveground Storage Tank (AST) program; and the uniform hazardous materials management plan program.

Hazardous Waste Management. The federal Resource Conservation and Recovery Act (RCRA) regulates handling and tracking of hazardous waste from generation to disposal. Under RCRA, hazardous waste generators must comply with regulations concerning record keeping and reporting, waste storage, proper treatment and disposal, and the use of a manifest system. In California, the Department of Toxic Substances Control (DTSC) has been authorized by Cal-EPA to administer the RCRA program. California’s Hazardous Waste Control Act (HWCA [California Health and Safety Code Section 25100 et seq.]) is similar to, but more stringent than, the federal RCRA program. The HWCA provides authority for DTSC to regulate the transportation and disposal of hazardous wastes, and establishes standards for hazardous waste facilities. The SMCEHD, as the CUPA, implements the hazardous waste generator program for the Project area. RCRA and the HWCA also require facilities engaging in treatment, long-term storage, or disposal of hazardous waste to obtain a permit from DTSC.

Soil and Groundwater Contamination. The Porter-Cologne Act (California Water Code Section 13163) authorizes the State Water Resources Control Board (SWRCB) and the local Regional Water Resources Control Board (RWQCB) to coordinate water quality-related investigations of state agencies. SWRCB and the local RWQCB also have jurisdiction to oversee site cleanups (California Health and Safety Code Section 25355). The Project area is within the jurisdiction of RWQCB Region 2, the San Francisco Bay RWQCB.

Hazardous Building Components. Structural building components sometimes contain hazardous materials such as asbestos, polychlorinated biphenyls (PCBs), lead, and mercury. During demolition or renovation of any existing building or structure, these hazardous material building components may be disturbed and thus expose workers, the public, and the environment to these hazards. The testing, removal, and disposal of these materials are subject to various regulations, as described below.

Asbestos. Asbestos is regulated both as a hazardous air pollutant and as a potential worker safety hazard. Bay Area Air Quality Management District (BAAQMD) and California Division of Occupational Safety and Health (Cal/OSHA) regulations restrict asbestos emissions from demolition and renovation activities and specify safe work practices to minimize the potential for release of asbestos fibers. These regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to

minimize the potential for release of asbestos fibers; and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. California requires licensing of contractors who conduct asbestos abatement activities.

The California Air Resources Board (ARB) Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations is intended to protect public health and the environment by requiring the use of best available dust control measures. These measures prevent offsite migration of naturally occurring asbestos-containing dust from road construction and maintenance activities, construction and grading operations, and quarrying and surface mining operations in areas of ultramafic rock, serpentine, or asbestos. The ATCM applies to grading or excavation activities, which would involve the excavation of bedrock or fill materials potentially containing naturally occurring asbestos.

For construction activities disturbing less than 1 acre of area underlain by these types of bedrock that potentially contain naturally occurring asbestos, specific dust control measures must be implemented in accordance with the ATCM before construction begins. In addition, each measure must be maintained throughout the portion of the construction project during which these types of bedrock are being disturbed. For construction activities disturbing greater than 1 acre of area underlain by these types of bedrock, construction contractors are required to prepare an Asbestos Dust Mitigation Plan (ADMP) specifying measures that will be taken in an attempt to ensure that no visible dust crosses the property boundary during construction. The ADMP must be submitted to and approved by the BAAQMD prior to the beginning of construction, and the site operator must ensure the implementation of all specified dust control measures throughout the construction project. In addition, the BAAQMD may require air monitoring for offsite migration of asbestos dust during construction activities and may change the plan on the basis of the air monitoring results.

PCBs. DTSC has classified PCBs as a hazardous waste when concentrations exceed five parts per million (ppm) in liquids or 50 ppm in non-liquids. Fluorescent light ballasts may contain PCBs, and if so, they are regulated as hazardous waste and must be transported and disposed of as hazardous waste. Ballasts manufactured after January 1, 1978 should not contain PCBs and are required to have a label clearly stating that PCBs are not present. The federal Toxic Substances Control Act (TSCA) establishes procedures and standards for cleanup of PCB releases.

Lead-Based Paint (LBP). Cal/OSHA standards establish a maximum safe exposure level for types of construction work that could result in lead exposure, including demolition of structures where LBPs are present; removal or encapsulation of materials containing lead; and new construction, alteration, repair, or renovation of structures with materials containing lead. Inspection, testing, and removing lead-containing building materials must be performed by state-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Typically, building materials with LBP attached are not considered hazardous waste unless the paint is chemically or physically removed from the building debris. The U.S. Department of Housing and Urban Development has developed guidelines for the evaluation and control of LBP hazards. In 1978, the Consumer Products Safety Commission limited lead content in residential paint and paint used in areas where consumers have direct access to painted surfaces.

Mercury. Spent fluorescent light tubes, thermostats, and other electrical equipment contain heavy metals that, if disposed of in landfills, can leach into soil or groundwater. Fluorescent light tubes typically contain concentrations of mercury that may exceed regulatory thresholds for hazardous waste and, therefore, must be managed in accordance with hazardous waste regulations. Elemental mercury can be found in many electrical switches, and when disposed of, such mercury is considered hazardous waste.

Worker Safety. Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many businesses to prepare injury and illness prevention plans and chemical hygiene plans. The Cal/OSHA Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, material safety data sheets are to be available in the workplace, and employers are to properly train workers.

Hazardous Materials Transportation. The U.S. Department of Transportation (DOT) has developed regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. The U.S. Postal Service (USPS) has developed additional regulations for the transport of hazardous materials by mail. DOT regulations specify packaging requirements for different types of materials. EPA has also promulgated regulations for the transport of hazardous wastes. These more stringent requirements include tracking shipments with manifests to ensure that wastes are delivered to their intended destinations. In California, the California Highway Patrol, the California Department of Transportation (Caltrans), and DTSC play a role in enforcing hazardous materials transportation requirements.

Local

City of Menlo Park General Plan. The following goal, policies, and implementation program within the Safety Element of the General Plan are relevant to the Project.

Goal S1: Assure a Safe Community. Minimize risk to life and damage to the environment and property from natural and human-caused hazards, and assure community emergency preparedness and a high level of public safety services and facilities.

Policy S1.7: Hazard Reduction. Continue to require new development to reduce the seismic vulnerability of buildings and susceptibility to other hazards through enforcement of the California Building Standards Code and other programs.

Policy S1.10: Safety review of development Projects. Continue to require hazard mitigation, crime prevention, fire prevention and adequate access for emergency vehicles in new development.

Policy S1.18: Potential Hazardous Materials Conditions Investigation. Continue to require developers to conduct an investigation of soils, groundwater and buildings affected by hazardous-material potentially release from prior land uses in areas historically used or commercial or industrial uses, and to identify and implement mitigation measures to avoid adversely affecting the environment for the health and safety of residents or new uses.

Implementing Program S1.D: Require Early Investigation of potential hazard Conditions. Require that potential geologic, seismic, soils, and/or hydrologic problems confronting public or private development be thoroughly investigated at the earliest stages of the design process, and that these topics be comprehensively evaluated in the environmental review process by persons of competent technical expertise.

Hazardous Materials Permitting. The City has a use permit process for the use of hazardous materials. The Planning Division relies on the Menlo Park Fire Protection District (MPFD) to determine whether a use permit is required for a project. MPFD has established threshold levels based on the California Fire Code to define the maximum amount of hazardous materials that would be allowed before a use permit is required.

Airport Land Use Plan. The Airport Land Use Plan (ALUP) for the Palo Alto Airport identifies the categories of land uses and height restrictions that may be permitted within the surrounding airspace. However, the Project site is not within the jurisdiction of the Palo Alto ALUP and not within the Height Restriction Area, the Airport Safety Zone, or Airport Influence Area.

Emergency Operation Plan. The City is a participant in the Association of Bay Area Governments (ABAG) multi-jurisdictional planning process for emergencies. The City has adopted an Emergency Operation Plan that assesses the potential losses associated with inadvertent or intentional releases of hazardous materials that could affect the public and identifies responsibilities for city departments and coordination with San Mateo County and regional emergency response providers.

Environmental Setting

Soil and Groundwater Contamination

An unidentified source of volatile organic compounds (VOCs)¹ was identified in groundwater beneath the Commonwealth Site in the 1990s. A 1998 RWQCB no-further-action letter noted that the source was likely offsite. There was no VOC use at the site, and no trace of VOCs in soil samples. Although this is the case, a VOC-contaminated groundwater plume remains onsite and has not been properly characterized. No other significant offsite sources of environmental concern were identified during preparation of the Phase I Environmental Site Assessments (ESAs) for the Commonwealth Site and Jefferson Site.²

Commonwealth Site. According to the Phase I ESA, the Commonwealth Site was undeveloped until the 1950s. In the 1950s, the main building, distillery, and portions of the existing tank farm were constructed. In the 1970s, the main building and the tank farm were expanded, and a third building was constructed. There have been no significant changes to the property since that time. Diageo North America, Heublein, Inc., and United Distillers and Vinters operated the facility from the time the facility was opened in the 1950s until it was closed in 2011. The site has been unused since then.

The Commonwealth Site is currently unoccupied. Equipment that was left in place include a subsurface spill containment tank, a condensate tank, water conditioner tank, water heater, 500,000-gallon fire suppression water tank and associated diesel tank, drain lines, gas lines, and sewer system lines. Prior uses of hazardous materials have resulted in soil contamination, discussed below. The SMCEHD issued a “no further action” determination for the site on Diageo’s submittal of the Post-Closure Report but noted that changes in the proposed use of the site may require further site characterization and study.³ According to the Phase I ESA, (approximately) 150 cubic yards of contaminated soil remain onsite.

Jefferson Site. According to the Phase I ESA, the Jefferson Site was undeveloped until the current building was constructed in 1975. That building has been used as a multi-tenant commercial building since then. There have been no significant changes to the property since the original construction.

¹ A volatile organic compound (VOC) is an organic chemical that readily evaporates at temperatures normally found at the ground surface and at shallow depths. Examples of VOCs include acetone, benzene, 1,1-dichloroethene (1,1-DCE), methylene chloride, tetrachloroethylene (PCE), toluene, and xylene.

² PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: Former Diageo North America Facility, 151 Commonwealth Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Companies [sic], Cupertino, CA.

³ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: Former Diageo North America Facility, 151 Commonwealth Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Companies [sic], Cupertino, CA.

The Jefferson Site is currently occupied. Current use of hazardous materials is limited in scope, consisting of only paint, cleaners, adhesives, welding gases, stains, and other maintenance products. During site inspection performed for the Phase I ESA, no concerns were noted with either use or storage of hazardous materials at the site. Although prior uses of hazardous materials at this site have been recorded in environmental databases, no violations were listed, and no onsite contamination has been identified.⁴

Soils and Hydrogeology

The depth and extent of chemical contaminants in the subsurface are a function of underlying geologic materials and how groundwater moves horizontally and laterally. The following summarizes hydrogeologic conditions at the Project site. Refer to Section 3.8, *Geology and Soils*, and Section 3.9, *Hydrology and Water Quality*, for additional information.

The Project site is underlain by fine-grained alluvium consisting of clays interbedded with silts, sands, and fine-gavels. Groundwater has been encountered 8 to 11 feet below ground surface (bgs). At the Commonwealth Site, groundwater generally flows to the southwest, away from San Francisco Bay. Other sites north of the Project site have identified a groundwater flow to the north, toward San Francisco Bay. A Caltrans groundwater pumping station located southwest of the Project site along US 101 that was used for dewatering beneath a railroad right-of-way could have locally affected groundwater flow. It is unknown whether the pumping station is still operating.^{5,6} Changes in groundwater levels occur as a result of seasonal fluctuations due to the weather, underground drainage patterns, and general regional fluctuations.⁷

Hazardous Materials Use

Commonwealth Site. Hazardous materials stored onsite included water-testing chemicals and cleaners, sodium hydroxide, hydrochloric acid, phosphoric acid, and biocides. Environmental documentation for the property records the disposal of the following hazardous materials at the Project site: waste oil, flammable liquids, phosphoric acid, surfactant, solids (lead chromium), citric acid, caustic soda, diesel, polyvinyl glue, absorbent, and ethanol (2006–2007); zinc (2001); and asbestos-containing materials (1990, 1998).

The following list details historical hazardous material releases.⁸

- A 10,000-gallon diesel UST was removed from the facility in 1988. Over 204,000 gallons of contaminated groundwater was extracted from the site, treated, and disposed. Approximately 730 cubic yards (cy) of soil was removed from the site and disposed. An estimated 150 cy of soil containing petroleum hydrocarbon concentrations above the cleanup goal were left in place due to the presence of structures that made removal difficult.
- SMCEHD inspection record in 1999 noted that a hazardous waste oil storage area should be cleaned up.

⁴ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: 164 Jefferson Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Organization, Cupertino, CA.

⁵ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: Former Diageo North America Facility, 151 Commonwealth Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Companies [sic], Cupertino, CA.

⁶ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: 164 Jefferson Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Organization, Cupertino, CA.

⁷ Cornerstone Earth Group. 2012. Preliminary Geotechnical Investigation, Commonwealth Office Complex, 151 Commonwealth Drive, Menlo Park, CA. Sunnyvale, CA. March 14. Prepared for The Sobrato Organization, Cupertino, CA.

⁸ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: Former Diageo North America Facility, 151 Commonwealth Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Companies [sic], Cupertino, CA.

- Internal records indicate a diesel spill in the parking lot in 2001, cleaned by onsite personnel.
- South Bayside System Authority issued notices of violation of the facility wastewater discharge permit in 2001 for high zinc levels due to a deteriorating water tower, in 2006 for discharge of more than 100 gallons of ethanol, and in 2008 for low pH.
- A report prepared for Diageo North America details two accidental releases of ethanol to a storm drain in 2007, one small release and one release of 2,000 gallons. Diageo staff and a contractor contained the spill by plugging the storm drains and pumping the ethanol from the storm drains. RWQCB issued a Notice of Non-Compliance for these releases.
- An anonymous letter in MPFPD files reported that corrosives, acids, caustics, alcohol, and other materials were released to corroded drains. The West Bay Sanitation District (WBSD) inspected the drains in 2011 and found that the flow entered containment tanks and that three manhole covers on the containment tanks needed repair due to corrosion.

VOC-contaminated groundwater with concentrations above regulatory limits was identified beneath the site in the 1990s. The source of the contamination was not identified but was assumed to be offsite. No VOCs have been in use at the Project site, and no VOCs have been detected in soil samples. Current concentrations in the groundwater are unknown.⁹

Jefferson Site. Trugreen Chemlawn (Chemlawn) was a tenant at the property from the late 1980s to the mid-1990s. Chemlawn used the property for storage, staging, and paint mixing. During their tenancy, there was one overspill from an interior mixing tank onto a concrete slab. Before vacating the site, Chemlawn removed the slab, sampled the soil under the slab, and repoured the slab. The property owner reports that no contaminants were identified in the soil sample. SMCEHD files include a review of these sample results. A Hazardous Material Business Plan prepared for Chemlawn and on file with the MPFPD indicated use and storage of sulfur coat urea, urea fertilizer, horticultural oil, Turflon, Roundup, Diazinon, and other herbicides and fungicides. Hazardous wastes included waste oil and solvent from a parts cleaner.

Olovo was a tenant at the property from 2003 to 2007. Olovo used the property for electronic activities. They generated small amounts of waste solder dross. Regulatory agency files contain no records of violations. VOC-contaminated groundwater with concentrations above regulatory limits was identified beneath the site in the 1990s. The source of the contamination was not identified but was assumed to be offsite. No VOCs have been in use at the Project site, and no VOCs have been detected in soil samples. Current concentrations in the groundwater are unknown.¹⁰

Cortese List Status

Government Code section 65962.5 requires compilation of a list of Hazardous Waste and Substances Sites to be used as a planning document by state and local agencies and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release sites. This list is commonly known as the "Cortese List." Neither the Commonwealth Site nor the Jefferson Site is on the Cortese List.¹¹

⁹ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: Former Diageo North America Facility, 151 Commonwealth Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Companies [sic], Cupertino, CA.

¹⁰ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: 164 Jefferson Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Organization, Cupertino, CA.

¹¹ California Department of Toxic Substances Control. 2013. EnviroStor. Hazardous Waste and Substances Site List (Cortese List). Available: <http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST>. Accessed: June 2013.

Naturally Occurring Asbestos

As discussed in Section 3.8, *Geology and Soils*, soils at both the Commonwealth Site and the Jefferson Site have been mapped as Urban Land. These soils are associated with reclaimed tidal flats and marshes, and include fills of unknown origin.¹² Bedrock underlying much of the surrounding area belongs to the Franciscan Complex, which includes serpentinite,¹³ a naturally occurring mineral that is known to contain asbestos. Because the source of the fill at the Project site is unknown, it is possible that its origin is in materials from the Franciscan Complex. Therefore, there is the potential for naturally occurring asbestos (NOA) to be present in fill material at the Project site.

Asbestos, Lead-Based Paint (LPB), PCBs

Commonwealth Site. The Phase I ESA conducted for the Commonwealth Site did not assess asbestos-containing materials (ACMs). However, the site closure plan approved by the SMCEHP noted that asbestos-containing floor tiles are present throughout the buildings in the facility. In addition, asbestos-containing insulation is present in the boilers. Based on the buildings' construction dates (pre-1978), LBP may be present.¹⁴

Electrical transformers and fluorescent lights can be sources of PCBs. During site inspection performed for the Phase I ESA, one Pacific Gas & Electric (PG&E)-owned pad-mounted electrical transformer was observed on the site. It did not display a label indicating its PCB content. Fluorescent lights were observed throughout the facility. PCB-containing ballasts may be present.

Jefferson Site. The Phase I ESA conducted for the Jefferson Site did not assess ACMs. Based on the building's construction date of 1975, ACMs may be present. Based on the building's construction date (pre-1978), LBP may be present. During site inspection performed for the Phase I ESA, one PG&E-owned pad-mounted electrical transformer was observed. It was labeled as PCB-free. Fluorescent lights were observed throughout the facility. PCB-containing ballasts may be present.¹⁵

Schools within 0.25 Mile of the Project Site

Beechwood School is located at 50 Terminal Avenue, Menlo Park,¹⁶ approximately 0.12 mile from the Commonwealth Site. No other schools are located within 0.25 mile of the Project site.

¹² U.S. Natural Resources Conservation Service. 2012. Web Soil Survey. Custom Report. Available: <<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>>. Accessed: May 2013.

¹³ Serpentine is a rock consisting of one or more serpentine minerals. This rock type is commonly associated with ultramafic rock along faults such as the Hayward Fault. Small amounts of chrysotile asbestos, a fibrous form of serpentine minerals, can be common in serpentine. The State has designated serpentine as the "State Rock" of California.

¹⁴ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: Former Diageo North America Facility, 151 Commonwealth Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Companies [sic], Cupertino, CA.

¹⁵ PES Environmental, Inc. 2011. Phase I Environmental Site Assessment: 164 Jefferson Drive, Menlo Park, California. November 29. Novato, CA. Prepared for The Sobrato Organization, Cupertino, CA.

¹⁶ California Family Foundation. 2010. Beechwood School. Available: <<http://www.beechwoodschool.org/>>. Accessed: June 2013.

Airports within 2 Miles of the Project Site

There are no airports within 2 miles of the Project site. However, the Project site is within approximately 2.25 miles of the Palo Alto Airport. The primary hazards associated with airports are crash hazards due to aircraft approach and departure operations.

Environmental Impacts

This section describes the impact analysis relating to hazards and hazardous materials for the Project. It describes the methods used to determine the impacts of the Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- 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 or 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 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 (the "Cortese List," described above) and, as a result, would 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.
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- Impair 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.

Methods for Analysis

To assess the potential for the Project to create a significant hazard to the public or environment from hazardous materials, the following analysis considers the pathways through which exposure to hazards could potentially occur and evaluates the controls that would foreseeably be placed on each of these pathways.

As a result of the health and safety risks associated with the use of hazardous materials, hazardous materials use, storage, and disposal are subject to numerous laws and regulations at various levels of government. These laws and regulations are identified above under *Regulatory Setting*. In most cases, the laws and regulations pertaining to hazardous materials management are sufficient to minimize risks to human health and the environment, except where site-specific conditions warrant additional consideration. The impact analysis identifies areas where impacts related to hazardous materials during Project occupancy may, nonetheless, be potentially significant. In these cases, feasible mitigation measures are identified.

The primary sources of information for establishing baseline conditions are site-specific Phase I ESAs for the Commonwealth Site and the Jefferson Site, prepared by PES Environmental, Inc. in November 2011, and reports available from DTSC's EnviroStor website. Phase I ESAs are used to assess whether potentially hazardous materials are located on a property. Standards for Phase I ESAs have been developed by the American Society for Testing and Materials (ASTM). They are used routinely to determine the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products onto the surface or into the ground or into groundwater or surface water of the property. A Phase I ESA consists of a site reconnaissance, review of regulatory agency databases and/or files, aerial photograph review, interviews, interpretation of the results, and recommendations whether additional investigation is necessary.

Because the Phase I ESAs for the Commonwealth Site and the Jefferson Site included a summary compilation of decades of investigation at the Project site and were prepared in accordance with industry standards, the conclusions presented therein are assumed to represent the best available information for purposes of analyzing potential effects. The ESAs have also been independently reviewed. Thus, there is sufficient information upon which to base the analysis.

The baseline for determining potential effects for the Project is described in Section 3.0, *Environmental Impact Analysis*.

Impacts Not Evaluated In Detail

Wildland Fires. The Project site is surrounded on the east, south, and west by urban development. It is separated from salt evaporation ponds and Bay margin vegetation by roadways, and there are no wildlands near the Project site. As described in Section 3.12, Public Services, the MPFD provides fire protection services to the Project site. There would be no impact related to wildland fire hazards; therefore, this impact is not evaluated further.

Hazards Materials Site. Neither the Commonwealth Site nor the Jefferson Site is on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65062.5. There would be no impact related to siting a project on a hazardous materials site; therefore, this impact is not evaluated further.

Airport Hazards. Neither the Commonwealth Site nor the Jefferson Site is within an ALUP or 2 miles of a public airport. There would be no impact related to siting a project within an ALUP area or within 2 miles of a public airport; therefore, this impact is not evaluated further.

Impacts and Mitigation Measures

Impact HAZ-1: Routine Hazardous Materials Use. The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (LTS)

Project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations such as the RCRA, DOT Hazardous Materials Regulations, and the local CUPA regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed during Project construction, these materials are typically used in construction projects and are not considered acutely hazardous. Because compliance with existing regulations is mandatory, the Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

During Project operation, it is anticipated that the Project would involve use of hazardous materials typical of office uses (solvents, cleaning agents, paints, petroleum fuels, propane, batteries, etc.) that would be used in small, localized amounts. Project operation may also involve use of hazardous materials typical of biotech and other research and development facilities (depending on the eventual building tenants). Use, storage, and disposal of these materials would be regulated according to federal and state regulations and guidelines, including those of DTSC, BAAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials. Because compliance with existing regulations is mandatory, the Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Proper handling and disposal of contaminated building materials would reduce unforeseen risks to the environment and prevent potential future adverse health, safety, or environmental effects. As a result, impacts related to transport, use, and disposal of hazardous materials would be *less than significant*.

Impact HAZ-2: Accidental Release of Hazardous Materials. The Project could 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. (PS)

Implementation of the Project could expose people and the environment to residual contaminants in soil if measures are not implemented to control unintentional or inadvertent releases. The Commonwealth Site has undergone various remediation efforts and has been part of several environmental studies (as noted in the Phase I ESA) and, as such, soil contamination onsite has been properly characterized. According to the aforementioned environmental studies, the Commonwealth Site is known to contain approximately 150 cubic yards of soil contaminated with petroleum hydrocarbons from a previous diesel release. As a result, construction personnel could be exposed to contaminated soils during earth moving activities such as grading or excavating. Implementation of Mitigation Measure HAZ 2.1 would minimize the impacts related to human exposure to, or release of, contaminated soils into the environment.

Both the Commonwealth Site and the Jefferson Site are sited on fill materials that may contain naturally occurring asbestos. Onsite soil disturbance has the potential to result in impacts due to hazardous materials releases in a variety of ways: soil disturbance during construction could generate dust containing residual soil contaminants, which could pose an inhalation hazard to workers if contaminants adhere to the dust; improperly stockpiled soils could introduce contaminants into stormwater; excavation and removal of contaminated soils, particularly if soils are used elsewhere onsite or

transported for offsite disposal or reuse could spread contaminants. Ground-disturbing construction activities, such as grading, and ground-disturbing activities during Project operation, such as landscaping, if done improperly, could release hazardous materials into the environment.

Groundwater under both the Commonwealth Site and the Jefferson Site was identified as containing levels of VOCs surpassing regulatory levels in the 1990s. Although this is the case, Project construction and operation do not include dewatering activities that could expose the public, construction personnel, or the environment to VOC groundwater contamination. Additionally, excavation and grading activities are expected to occur at shallow depths and are not expected to encounter groundwater (groundwater depth onsite ranges from 8 to 11 feet below ground surface).

Unintended releases of hazardous materials could also occur from construction equipment and processes. Typical hazardous materials that may be used during the construction activities include motor oils, solvents, cleaning fluids, and lubricants. There is a potential for dermal contact and inhalation of contaminants from any of these exposures. Demolition or excavation could disturb hazardous materials in existing building components, underground utilities, and tanks if done improperly. Buildings at the Commonwealth Site are known to contain asbestos, and the building at the Jefferson Site is also likely to contain asbestos. Buildings at both the Commonwealth Site and the Jefferson Site are likely to contain LBP. Fluorescent lights that may contain PCB ballasts may be present on both the Commonwealth Site and the Jefferson Site. Demolition of the buildings could disturb these hazardous building materials and cause adverse health or safety effects on construction workers, the public, and/or the environment if appropriate hazardous materials surveys and safety precautions are not taken.

Asbestos poses health hazards only when inhaled; therefore, friable (easily crumbled) asbestos is potentially hazardous if not encapsulated. Non-friable asbestos or encapsulated asbestos does not pose substantial health risks. Upon building demolition, asbestos fibers (if present) could be disturbed, released into the air, and inhaled by construction workers or the public unless proper precautions are taken. Existing laws and regulations (e.g., 29 CFR 1926.1101—Asbestos and BAAQMD Regulation 11, Rule 2—Asbestos Demolition, Renovation, and Manufacturing) would require the Sobrato Organization (Project Sponsor) to retain a qualified environmental specialist (e.g., a Cal/OSHA-certified asbestos consultant or similarly qualified individual) to inspect existing buildings that may be altered. In addition, existing government regulations, such as the California Health and Safety Code Section 39000 et seq., limit asbestos emissions from asbestos-related demolition or construction activities, and specific precautions and safe work practices that must be followed to minimize the potential release of asbestos fibers. In light of these regulations, public health risks due to asbestos exposure during demolition of the existing buildings are expected to be controlled and proper precautions would be implemented.

In sufficient concentrations, lead and mercury are regulated as hazardous wastes. RCRA and the state RWCA require that generators of PCBs, lead, or mercury waste test the debris for toxicity characteristics. This requires that building components be tested for those materials. If building components containing hazardous materials are found at levels that require special handling (i.e., any building material containing paint that contains more than 5,000 ppm of lead, or any building materials known or suspected to contain PCBs or mercury), these materials would be removed and disposed of offsite as required by law and according to federal and state regulations and guidelines, including those of DTSC, BAAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials.

Further, soil movement during construction of the Project could expose ecological receptors to residual contaminants in soil and/or groundwater if measures are not implemented to control contaminants.

Because residual hydrocarbon contaminants remain in soil, onsite soil movement during construction could provide a new potential pathway through which wildlife species could be exposed to contaminants in soil or fill material. The primary environmental mechanisms for ecological exposure during soil disturbance would be (1) direct species contact with the fill or soil containing contaminants (e.g., birds landing on or rodents burrowing into stockpiled materials); (2) stormwater runoff from exposed soils or fill, or soils spilled onto roads during transport, which could carry contaminants into aquatic environments, where fish and benthic invertebrate species could be affected; or (3) windblown dust, which could be inhaled by terrestrial and avian species, or that could be deposited on surface water, where aquatic organisms could be affected. Consequently, impacts could be **potentially significant**.

MITIGATION MEASURES. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce the impacts on human populations and ecological systems to a **less-than-significant** level.

HAZ-2.1: Engineering Controls and Best Management Practices during Construction. During construction the contractor shall employ use of BMPs to minimize human exposure to potential contaminants. Engineering controls and Construction BMPs shall include the following.

- Contractor employees working on site shall be certified in OSHA's 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training.
- Contractor shall monitor area around construction site for fugitive vapor emissions with appropriate field screening instrumentation.
- Contractor shall water/mist soil as its being excavated and loaded onto transportation trucks.
- Contractor shall place any stockpiled soil in areas shielded from prevailing winds.
- Contractor shall cover the bottom of excavated areas with sheeting when work is not being performed.

HAZ-2.2: Develop Construction Activity Dust Control Plan (DCP) and Asbestos Dust Management Plan (ADMP). Prior to commencement of site grading, the Project Sponsor shall retain a qualified professional to prepare a DCP/ADMP. The DCP shall incorporate the applicable BAAQMD pertaining to fugitive dust control. The ADMP shall be submitted to and approved by the BAAQMD prior to the beginning of construction, and the Project Sponsor must ensure the implementation of all specified dust control measures throughout the construction of the Project. The ADMP shall require compliance with specific control measures to the extent deemed necessary by the BAAQMD to meet its standard.

Impact HAZ-3: Exposure to Schools. The Project could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (PS)

The Project would result in the handling of hazardous materials within 0.25 mile of existing schools. The closest school is Beechwood School, located approximately 0.12 mile from the Commonwealth Site. During Project construction, any hazardous materials at the Project site could be disturbed and released, and this could be a **potentially significant** impact. However, implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce the impact a **less-than-significant** level.

Impact HAZ-4: Impairment of Emergency Access or Emergency Plans. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (LTS)

As discussed in Section 3.3, Transportation and Traffic, the Project would increase traffic in the vicinity of the Project site. Currently, both the Commonwealth Site and Jefferson Site are each accessed by one ingress/egress point and the two sites are not interconnected.

The Project would improve the ability for emergency vehicles to circulate throughout the Project site. Emergency access to the Project site would be provided from access points onto Commonwealth Drive and Jefferson Drive. Emergency vehicles could enter the site from either Commonwealth or Jefferson Drives and continue along the northern portion of the Project site, adjacent to the proposed buildings. Fire hydrants and fire department connections would be located along the emergency access route in the vicinity of the proposed buildings. As a result, emergency vehicle access would be improved over existing conditions.

Implementation of the Project would not impede emergency access routes and would continue to maintain the existing City grid system. The Project would not result in permanent road closures that would physically interfere with the City's 2011 Emergency Operation Plan. Therefore, the impact would be *less than significant*.

Cumulative Impacts

The geographic context for the analysis of cumulative impacts associated with hazardous materials varies depending on the threshold. The cumulative projects considered in this Draft EIR consist of two categories, as shown in Table 3.0-1 and Table 3.0-2 in Section 3.0, Environmental *Impact Analysis*. The cumulative context for disposal and transport of hazardous materials includes the area between the area of generation and the area of disposal as well as the route between a distribution facility to the Project area, where risk of upset and accident would occur. The cumulative context for analysis of contaminated soil and risk from hazardous materials in buildings is site-specific and includes only those cumulative projects in the immediate vicinity of the Project site. The cumulative context for airport hazards and emergency access is the airport influence area of the Palo Alto Airport.

Impact C-HAZ-1: Cumulative Hazardous Materials Use. The Project, in combination with other foreseeable development in the surrounding area, would not have a significant cumulative impact resulting from hazardous materials usage. (LTS)

Tier 1 and Tier 2

The Tier 1 projects are a combination of residential, office, commercial, retail, and medical office uses. Both the types and amounts of hazardous materials present at any one time in these uses would be limited to household-type products, with the exception of the medical offices. Medical offices could include laboratories where small amounts of chemicals would be used, along with pharmaceuticals and small amounts of radioactive materials for diagnosis and treatment. Medical offices would also generate biohazardous medical waste. The Tier 2 projects would include a similar range of land uses as Tier 1, with the addition of institutional, research and development (R&D)/industrial, park/trail, hotel, and rail corridor uses. The R&D and industrial uses would likely involve greater amounts of hazardous materials, such as solvents, flammable materials, and compressed gases, along with other chemicals used in manufacturing and processing.

Although existing, proposed, and reasonably foreseeable development could have potentially unique hazardous materials considerations, all such existing and potential users would comply with the range of federal, state, and local statutes and regulations applicable to the use, transport, and disposal of hazardous materials, and would be required to comply with existing and future programs of enforcement by the appropriate regulatory agencies, which are described in the *Regulatory Setting*. Compliance with these federal, state, and local laws and regulations pertaining to hazardous materials management would be sufficient to minimize health and safety risks because these laws and regulations have been designed to protect health and safety and are enforced by state and local agencies. In addition, stringent federal and state regulatory requirements apply to the common carriers that would handle the delivery and transport of hazardous materials to and from locations where hazardous materials are used. While these regulations do not eliminate the potential for accidents and resulting spills, they would reduce the frequency of possible occurrences and would limit the number of people that could be exposed. Therefore, the cumulative impact with regard to routine use, transport, disposal, and handling of hazardous materials would be less than significant.

Operation of the Project would involve limited hazardous materials use because of the types of activities that would occur (offices and related amenities). Moreover, as explained in Impact HAZ-1, the Project would also have to comply with all applicable statutes and regulations. This would ensure that the Project would not result in significant hazards as a result of hazardous materials use, transport, or disposal.

Development of the Tier 1 and Tier 2 projects and the Project would result in an increase in hazardous materials use and transportation in the area, and such use could also occur within 0.25 mile of schools. This could expose greater numbers of people to increased risks in the event of an inadvertent release or spill. However, hazardous materials incidents are usually site-specific, and the likelihood of multiple incidents occurring concurrently to result in a cumulative impact is anticipated to be very remote. As a result, associated health and safety risks would generally be limited to those individuals using the materials or to persons in the immediate vicinity of the materials.

For the reasons explained above, the Project's cumulative impact would be *less than significant*.

Impact C-HAZ-2: Cumulative Soil and Groundwater Contamination. Development of the Project site and other cumulative development could expose people or the environment to residual contaminants in soil and/or groundwater if measures are not implemented to control unintentional or inadvertent releases. This is a less-than-significant cumulative impact. (LTS)

Tier 1 and Tier 2

One project included in the Tier 1 analysis, Facebook West, is listed pursuant to Government Code Section 65962.5 (Cortese List). This project, which is located at 312-313 Constitution Drive, is an approved new construction for office use and is an active site for voluntary cleanup. The El Camino Real/Downtown Specific Plan (Tier 2 project) is also included on the Cortese List. This area includes two voluntary clean-up sites, two evaluation sites, and one state response site.

For projects in the City that would involve the development or redevelopment of an existing site where soil or groundwater contamination may have occurred, the potential exists for release of hazardous materials during construction and/or remediation of those sites. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through construction-generated dust. Other potential pathways, such as direct contact with contaminated soils or groundwater, would not pose as great a risk to the public because such exposure scenarios would typically be confined to the construction zones.

Assuming that site-specific risk management controls are implemented and compliance with applicable laws and regulations pertaining to site cleanup and hazardous materials management is achieved at all other locations, soil or water contamination in the identified geographic context would not result in significant cumulative impacts. Exposure to soil and groundwater contamination, inadvertent spills, etc. are all localized impacts that are not expected to combine with other incidents to create a cumulative impact for the same population or environment. Moreover, an individual who is near the construction zone of one source would not likely be exposed to maximum levels offsite from another source. Implementation of applicable hazardous materials management laws and regulations adopted at the federal, state, and local levels, which are explained in the *Regulatory Setting*, would reduce cumulative impacts related to development of known or potentially contaminated sites to less than significant.

All of the Project's impacts associated with soil and groundwater contamination would be mitigated to a less-than-significant level. As described above, the hazards associated with investigation and cleanup of contaminated sites elsewhere would not combine in the cumulative sense, nor would the Project Sponsor be responsible for participating in efforts to reduce the impacts at other locations. Therefore, the Project's cumulative impact would be *less than significant*.

Impact C-HAZ-3: Cumulative Hazardous Materials in Building Components. Development of the Project and other cumulative development could expose people to asbestos, lead, PCBs, or other hazardous materials in existing buildings that may be demolished, renovated, or rehabilitated if measures are not implemented to control unintentional or inadvertent releases. (LTS)

Tier 1 and Tier 2

It is reasonable to assume development of some of the Tier 1 and/or Tier 2 projects could involve demolition of existing structures, or renovation and rehabilitation of some buildings. If demolition of existing buildings where asbestos, LBP, PCBs, or other hazardous materials are present, those projects, along with the Project, would be required to comply with applicable federal, state, and local regulations, which are explained in the *Regulatory Setting*. Prior to issuance of a demolition permit, the City would be responsible for ensuring that the necessary investigations and remediation have been completed.

Hazardous materials incidents associated with demolition activities where asbestos, lead, PCBs, or other hazardous materials could be released would be site-specific. As a result, associated health and safety risks would generally be limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Further, the likelihood of multiple incidents occurring concurrently to result in a cumulative impact would be minimal, and there would be no significant cumulative impact. Development of the Project would comply with all local, state, and federal regulations pertaining to the handling and disposal of hazardous materials that could be contained in the buildings to be demolished. Compliance with these regulations would reduce any potential Project impact to less than significant. Therefore, the Project's cumulative impact would also be *less than significant*.

Impact C-HAZ-4: Cumulative Impairment of Emergency Access or Emergency Plan Impacts. Development of the Project and other cumulative development would not impair implementation of or interfere with an adopted emergency response or evacuation plan. (LTS)

Tier 1 and Tier 2

Cumulative development would result in increased traffic throughout the City. Emergency provider response times could be significantly impacted due to congestion at intersections, particularly for those projects that are farther away from fire and police stations. However, the Project is fairly near existing

Fire Station 77 (a driving distance of approximately three-quarters of a mile), and existing traffic preemption devices would ensure that response times are not significantly affected.

Since the site plans of several Tier 1 and Tier 2 projects are unknown, it is possible that emergency access to these sites could be affected. Certain features for the Tier 1 and Tier 2 projects would be required to be designed to ensure that adequate emergency access to and from the sites is maintained. During the design review process of the projects, the City would require appropriate measures to ensure that emergency access is not impeded and that the developments include adequate emergency access to the sites. As explained in Chapter 2, *Project Description*, adequate emergency access would be provided to the Project site.

With existing traffic preemption devices located throughout the City and adequate emergency access to the Project site, implementation of the Project would not impede emergency access routes and would continue to maintain the existing City grid system. The Project would not result in permanent road closures that would physically interfere with the City's 2011 Emergency Operation Plan. Therefore, the impact would be ***less than significant***.

