

## EXECUTIVE SUMMARY

This Draft Feasibility Study/Remedial Action Plan (FS/RAP) was prepared by Geosyntec Consultants on behalf of Universal Paragon Corporation, Inc. (UPC) to address soil, soil vapor, and groundwater contamination at the former Southern Pacific – Brisbane North Area site at Geneva Avenue and Bayshore Boulevard in Brisbane, California (Site). The Site is part of a larger group of properties under environmental investigation/remediation that have been designated as operable units (OUs) under agreements with the California Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board. The Site is known as UPC OU-SM as it is located in San Mateo County.

The Site is approximately 35 acres in size and occupies the northern portion of the former Southern Pacific Transportation Company Brisbane Railyard, which was used as a railroad switching yard from 1911 to 1982 [Lipps, 2013]. After 1982 the Site was unused. In 1989, Tuntex, USA (now known as UPC) purchased the property. The Site is currently vacant with various foundations and building slabs remaining. It is included as a portion of a larger mixed-use development project known as the Brisbane Baylands Development, which will include housing, commercial businesses, civic uses, and public open space. UPC has been designated as the master developer.

Numerous environmental investigations have been conducted at the Site since 1984 to characterize the distribution of contaminants resulting from historical railroad operations and a contaminant plume from the adjacent Schlage Lock site (Schlage OU). Investigations have identified the presence of metals (primarily arsenic, lead, and mercury), polynuclear aromatic hydrocarbons (PAHs), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), chlorinated volatile organic compounds (CVOCs), and petroleum hydrocarbons, including gasoline-range hydrocarbons (TPH-g) and diesel-range hydrocarbons (TPH-d).

Site remediation completed to date includes the safe removal of hydrocarbon-impacted soil from the northwest portion of the Site. In addition, a groundwater extraction and treatment system operated in the northern portion of the Site from 1995 to 2008 to address CVOC contaminants that had migrated from the Schlage OU. Currently, the contaminated groundwater is being addressed as documented in the Schlage OU FS/RAP [MACTEC, 2009]. Remedial action at the Schlage OU was certified by DTSC in 2014 and operation and maintenance is ongoing [DTSC, 2014]. Because the CVOC groundwater plume at the Site is sourced from, and is the responsibility of the Schlage OU, any additional remediation or mitigation of CVOCs in groundwater implemented at the UPC OU-SM Site will be conducted under the Schlage OU FS/RAP. Impacts to soil vapor on the UPC OU-SM Site that result from the residual CVOCs in groundwater from the Schlage OU will be addressed in the remedial design phase and mitigated at the time occupied buildings are constructed, if necessary.

A Baseline Health Risk Assessment (HRA) for the Site was prepared under the assumption that no remediation or mitigation would be implemented. Using this assumption, the HRA evaluated potential risks to current and future populations that could be exposed to chemicals at the Site so that measures could be implemented to address risks appropriately. The results of the HRA found that present Site conditions are protective for current populations (i.e., site visitors, commercial/industrial workers at neighboring facilities, and residents of adjacent neighborhoods) but future action to remediate or mitigate potential exposure to chemicals of concern (COCs) in

soil and soil vapor are warranted to protect future commercial/industrial workers, construction workers, and residents at the Site under a high intensity, mixed-use redevelopment scenario.

For the Site, five remedial alternatives were subjected to a detailed alternatives analysis pursuant to the nine criteria of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the six criteria of Section 25356.1 of the California Health and Safety Code (HSC). A comparative analysis was also completed that identified the advantages and disadvantages of each alternative when compared to other alternatives. Redevelopment activities that would serve to eliminate pathways to exposure for future Site receptors (e.g., the placement of up to 30 feet of fill over existing soils that minimizes direct exposure to impacted media) were integrated into the remedial technology screening and development of remedial alternatives.

Based on the evaluation and comparison of the five alternatives, Alternative 3: Land Use Restrictions, Excavation with Partial Off-Site Disposal and Partial On-Site Relocation, and Capping for Soils, is the preferred remedial alternative identified for implementation at the Site. This alternative includes:

- Capping of soil that contains COCs at concentrations exceeding cleanup levels in areas where significant fill (i.e., greater than 5 feet of fill) or other capping (e.g., foundations, roads) will be placed over existing soil;
- Excavation, partial off-haul and disposal, and partial relocation and capping of impacted soil that contains COCs at concentrations exceeding cleanup levels in areas that will not be filled (capped);
- Soil vapor mitigation systems as part of future building construction, if required based on subsequent soil vapor testing and Site-specific risk assessment after remediation is completed;
- Land use restrictions including administrative actions and engineered actions; and
- Ongoing operation and maintenance of caps and any engineered systems such as soil vapor mitigation systems.

After approval of the FS/RAP by DTSC, UPC will submit for DTSC review and approval one or more Remedial Design and Implementation Plans. Following completion of remediation activities, UPC will submit to DTSC a Remedial Action Completion Report documenting the implementation of remediation activities and noting any deviations from the approved plan. The completion report will include a post-remediation risk assessment that will evaluate the overall effectiveness of the remediation and will provide the technical basis for any mitigation measures (such as soil vapor mitigation systems) plus an operation and maintenance plan and a soil management plan to ensure the long-term protection of human health and the environment.