

## Redevelopment of Treasure Island: Overcoming Long-lasting Remedial Challenges

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**Background/Objectives.** In 1936, Treasure Island was raised from the waters of the San Francisco Bay using 29 million cubic yards of sand and gravel dredged from the Bay. The island was constructed to house the Golden Gate International Exposition (GGE) in 1939 and envisioned to subsequently become the location of San Francisco's airport. Following the GGE and with the onset of World War II, Treasure Island was instead leased to the US Navy in 1941 and became Naval Station Treasure Island. The island was used as a Navy base for over five decades for numerous military purposes including housing, maintenance, industrial operations and radiological decontamination training.

Following the closure of the naval station in 1997, the Navy agreed to transfer Treasure Island to the City of San Francisco (City) for redevelopment, pending environmental remediation efforts, which began in 1988. The City has embarked on a massive project to redevelop the island into a new residential neighborhood and a model for sustainability and affordable housing. The redevelopment project includes 8,000 new residential units, 450,000 square feet of commercial space, a ferry and transit hub, a hotel, regional sports fields, and 300 acres of open space, natural habitat, and wetlands.

**Approach/Activities.** As the environmental consultant to the City for Treasure Island, Langan reviews the Navy's environmental remediation efforts and provides environmental support associated with the redevelopment project. As part of the Navy's cleanup program, as land transfers from the Navy to City, the City is responsible for complying with environmental land use controls required by property deeds and regulatory covenants. These controls and covenants are associated with transferred lands which were deemed environmentally suitable for transfer and redevelopment, but may contain certain limitations on use or required procedures to manage potential health risk during earthwork activities. For example, Langan provided support to identify potential environmental restrictions associated with construction of the proposed Treasure Island Wastewater Treatment Plant expansion project. In addition, Langan prepared a Land Use Control Management Plan (LUC Management Plan) for the City; this plan summarizes and tracks the land use controls and environmental restrictions associated with the transferred parcels. Examples of controls/restrictions include activity restriction compliance inspections, preparation of and adherence to protocols provided in site management and operation and maintenance plans and compliance reporting.

A Soil and Groundwater Management Plan (SGMP) was prepared by the City's developers. The SGMP identifies procedures and protocols to be implemented at transferred, City-owned parcels during soil disturbing or groundwater producing activities during redevelopment. Per on-going land use restrictions and covenants, the City adopted the SGMP for large earthwork activities proposed in environmentally-impacted areas requiring a site management plan.

**Results/Lessons Learned.** This presentation will discuss:

1. Phasing the redevelopment with environmental remediation and property transfer timelines;
2. Overcoming challenges with communicating continuously-evolving environmental conditions to City agencies (e.g., San Francisco Public Utilities Commission and the San Francisco Fire Department);
3. Providing assistance on redevelopment plans that will involve earthwork activities in areas with residual environmental impacts (e.g., residual petroleum hydrocarbons in the proposed wastewater treatment plant expansion study area); and
4. Gaining regulatory approval on managing on-going environmental issues associated with redevelopment of Treasure Island. On-going environmental issues include approval of the City's adoption of the SGMP, the City's SMP for an off-shore site (Clipper Cove) and analytical results for imported fill material.