

Site Description: Gunpowder Point Burnsite
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The Gunpowder Point Burnsite is located at intersection of Highway 5 and the Sweetwater River channel in the city of National City. It occupies an area of deltaic and tidal flats on a low terrain (+ or - five feet elev.) on the San Diego Coastal Plain. Groundwater occurs at approximately one foot elevation MSL, with a gradient from east to west of -0.08 percent. The site is thought to have been used as a U.S. Navy burn landfill from the late 1930s to the early 1950s during which time material believed to be predominantly municipal waste was burned and mechanically spread over the area. It is not known whether unburned wastes were also buried at the site, but none were observed during the LEA's 01-19-96 site visit. At this time, no evidence of landfill gas emissions were detected. Land uses to the east, north, and south of the site are primarily residential and commercial. The area west of the site is occupied by the Gunpowder Point Nature Interpretive Center.

This site currently appears to cover an area up to about 5 acres, but other adjacent areas have been characterized and removed in the past. The attached site map (Figure 1) shows those areas which have been investigated and removed, as well as those still remaining. Areas "A" and "B" were previously characterized and excavated by the U.S. Army Corps of Engineers (USACoE) and the California Department of Transportation (Caltrans).

Soil sampling conducted between 1973 and 1984 showed an area of lead-contaminated materials in the flood control channel west of the I-5 bridge approximately 300' x 300' (area "A"; see attached map). Most contamination in this area was found to be present in the upper 2 feet of soil. Total lead concentrations were found to range from 0.5 to 24,000 mg/kg (ppm). Based on these results, approximately 2,700 tons of contaminated soil were excavated and transported to Kettleman Hills, CA for disposal in a Class I hazardous waste landfill. As a precaution against effects on estuarine biota, another 2,700 tons of non-hazardous landfill material (area "B") were also excavated and used as highway fill. Because this project was conducted only to evaluate soils proposed for excavation, sediments outside of areas "A" and "B" (e.g. area "C") were not characterized. However, because these areas are contiguous, these results should also be indicative of conditions in the remaining areas.

The remaining unexcavated portion (area "C") still remains in place. This area appears to be approximately 750' in length, and to average about 300' wide (5.2 acres). It is bounded on the west by a rip-rap bank, and occupies a relatively flat plain to the east of this embankment. The western portion of this area is cut by a north-south trending drainage channel. Site drainage is generally from south to north via this channel. The site is directly adjacent to the Sweetwater River channel which feeds into San Diego Bay approximately 1 mile to the west, and the entire site is subject to tidal inundation via this channel. Depth of wastes is unknown, but burn ash and melted glass and metal were observed up to 2.5 feet in exposed channel cuts. Pieces of glass were observed at the surface throughout the entire area, but it was not possible to determine how much of this is from exposure of intact wastes since tidal flow has significantly reworked these sediments.

The LEA recommends a quarterly inspection frequency for this site. Although the remote location of the site precludes the possibility of human contact, relatively high groundwater levels, as well as a lack of adequate cover over most of the site, present potentially significant environmental hazards. The LEA recommends that this site be investigated in greater detail to better evaluate these risks.

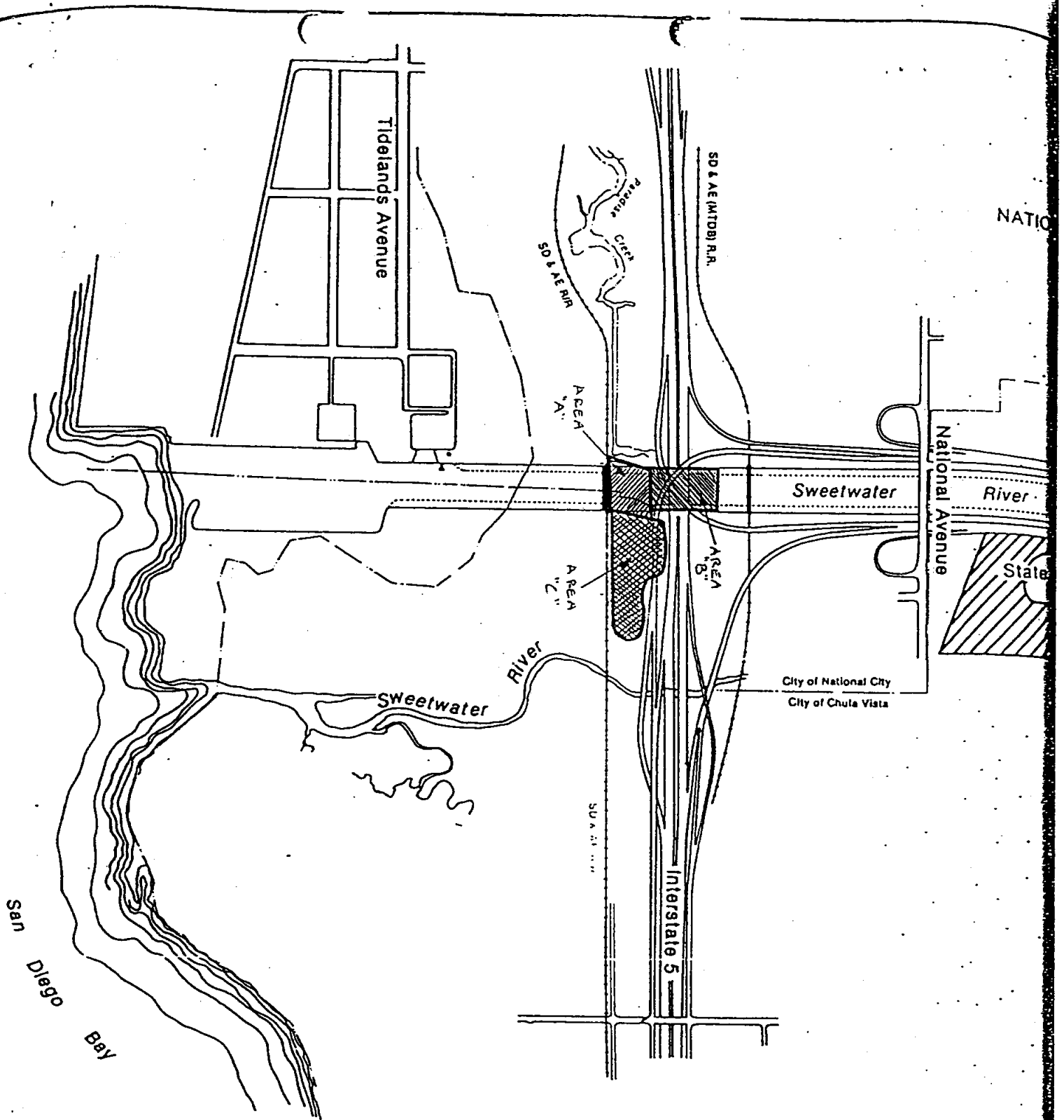


FIGURE 1