CTS Printex, Inc. Mountain View, California Region 9 CAD009212838

Site Exposure Potential

The CTS Printex site consists of seven buildings located on 2.3 hectares in a commercial/ industrial area of Mountain View, California (Figure 1). CTS Printex manufactured printed circuit boards on-site from 1966 to 1985. The manufacturing process generated large quantities of chemical wastes, including toluene; methylene chloride; TCE; TCA; acids; and wastes containing iron, nickel, tin, lead, and copper. In one building, wastewater containing copper, lead, TCE, and TCA was discharged over a wet floor area that drained into a subsurface pH neutralization sump. After neutralization with ammonia, these wastes were discharged into the municipal sanitary sewer. Organic chemicals, iron, copper, and lead wastes were often drummed and stored on-site (EPA 1987).

The site is flat, with most of the area covered by buildings or paved with asphalt. The slope of the surrounding area is north-northeast at less than three percent toward San Francisco Bay. The site is bordered to the west by Permanente Creek, which discharges into San Francisco Bay via Mountain View Slough, 4 km from the site. A second drainage system runs along the northwestern corner of the site and drains into the Coast Casey Canal, 1.8 km northwest of the site. Water in the Coast Casey Canal is pumped into San Francisco Bay (ATT 1987).



Figure 1. The CTS Printex site in Mountain View, California.

Surface runoff is a possible pathway for contaminants from the site to NOAA trust resources, but the most likely migratory pathway is groundwater flow. Most of the contaminants of concern are under the pavement near the wet floor facility. Groundwater is two to 30 meters below the site. Regional groundwater flows north, discharging into south San Francisco Bay. The potential for groundwater discharge to Permanente Creek is unclear; there is no evidence of direct contaminant discharge to the creek (ATT 1987). A groundwater flow study currently underway should give a clearer picture of contaminant pathways.

Two other NPL sites, Jasco Chemical Corporation and Spectra-Physics, Inc., are adjacent to Permanente Creek, upstream of the site.

Site-Related Contamination

The contaminants of concern to NOAA are copper and lead (Table 1) (ATT 1987). Maximum lead and copper concentrations greatly exceeding the range in natural soils were found in samples taken from soil borings one meter below the wet concrete floor where the floor was severely deteriorated (EPA 1983; ATT 1987). Analyses of soil borings taken from the excavated sump indicated that trace metal concentrations were not above background levels. Both lead and copper exceeded AWQC in on-site groundwater. Low concentrations of several VOCs were detected in groundwater.

Table 1. Maximum concentrations of selected contaminants at the CTS Printex site (ATT 1987); AWQC for the protection of saltwater aquatic life (EPA 1986); ranges in natural soils (EPA 1983); soil concentrations in mg/kg and water concentrations in μg/l.

AWQC										
Contaminant	Groundwater	Acute	Chronic	Soil	Range in Natural Soils					
copper	1,000	2.9	2.9	22,000	2-100					
lead	50	140	5.6	2,500	2-200					

NOAA Trust Habitats and Species in Site Vicinity

Habitats of concern to NOAA include Mountain View Slough, San Francisco Bay, and Permanente Creek. Permanente Creek is a continuously flowing, low-gradient stream that is an average of six meters wide and 0.3 to 1.5 meters deep (Rugg 1988). The lower 1.5km stretch of the creek is diked and tidally influenced. Steelhead trout is the only anadromous fish species in Permanente Creek. The run is very small, consisting of less than 50 individuals (Rugg 1988).

Mountain View Slough is a tidally influenced waterway that connects Permanente Creek with the southern portion of San Francisco Bay. The area around Mountain View Slough is diked and wetland habitat is extremely limited. From a resource perspective, the Slough acts as a narrow extension of San Francisco Bay. There are important NOAA trust resources in Mountain View Slough and in San Francisco Bay (Table 2) (USFWS 1981).

Spacias	Spawning	Nursery	Adult	Migratory	Commercial	Recreational
Species	Alea	Alea	Alea	Roule	FISHELY	FISHELY
INVERTEBRATE						
bay shrimp	Х	Х	Х		Х	
common littleneck clam	Х	Х	Х			
soft-shell clam	Х	Х	Х			
FISH						
silver salmon				Х		
steelhead trout				Х		
striped bass				Х		
white sturgeon			Х			Х
green sturgeon			Х			Х
MAMMAL						
harbor seal		Х	Х			

Table 2. Selected NOAA trust resource use of Mountain View Slough and southern San Francisco Bay (USFWS 1981).

Response Category: State Fund Lead (Regional Water Quality Control Board) through a cooperative agreement with EPA Region 9.

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

Melanie Field 415-974-8444

NOAA Coastal Resource Coordinator

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EPA. 1983. Hazardous Waste Land Treatment. Washington, D.C.: Office of Water Regulations and Standards, Criteria and Standards Division. SW-874.

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