NOAA Hazardous Waste Site Report

MGM Brakes (IX-28)
Cloverdale, California
April 13, 1984

Location and Nature of Site:

The MGM Brakes facilities are located on the south edge of Cloverdale, California, on both sides of Highway 101. An assembly plant, a storage area, and offices occupy three acres on the east side of the highway. An aluminum casting plant and vacant field occupy five acres on the west side of the highway (Figure 1). The western portion has become contaminated with PCB's through the use of PCB-laden hydraulic fluid in the casting machines.

The casting plant has operated since 1965 and has employed sumps under the casting machines which were drained first into the field south of the plant, and later into collector drains which connected to a central sump south of the plant. The separated oils in the sump were occasionally pumped off by a used oil collection service and the remaining middle portion of the liquid wastes was pumped from the sump and onto the field south of the plant.

Throughout the plant's early operation until 1973, the hydraulic fluid used in four of the five casting machines contained PCB's. Since that time only non-PCB oils have been used. Subsequent studies have demonstrated that there is no PCB contamination of groundwater at the site and that the PCB's in the subsurface soil at the MGM Brakes site are immobilized by their adsorption onto the soil particles. The PCB's will remain immobile provided there is no large and continuous infusion of solvents into the contaminated area, the surface of the contaminated area is covered, and surface drainage is engineered to prevent transport of contaminated surface soils.

A plan has been recommended which will provide for 1) the contaminated soil surface to be covered, 2) a surface drainage system to be constructed, 3) operational procedures to be instituted to minimize the potential for spills, and 4) deed restriction to be voluntarily imposed by MGM Brakes.

Proximity of Chemical Hazard to Marine Resources:

MGM Brakes is located adjacent to Icaria Creek which flows for approximately 1,000 feet to the Russian River. The Russian River in turn flows approximately forty miles to the California coast. Until the remedial actions are completed, there is potential for rain and flood erosion of the soils on the MGM property which could introduce PCB's to the Russian River via the Icaria Creek runoff.

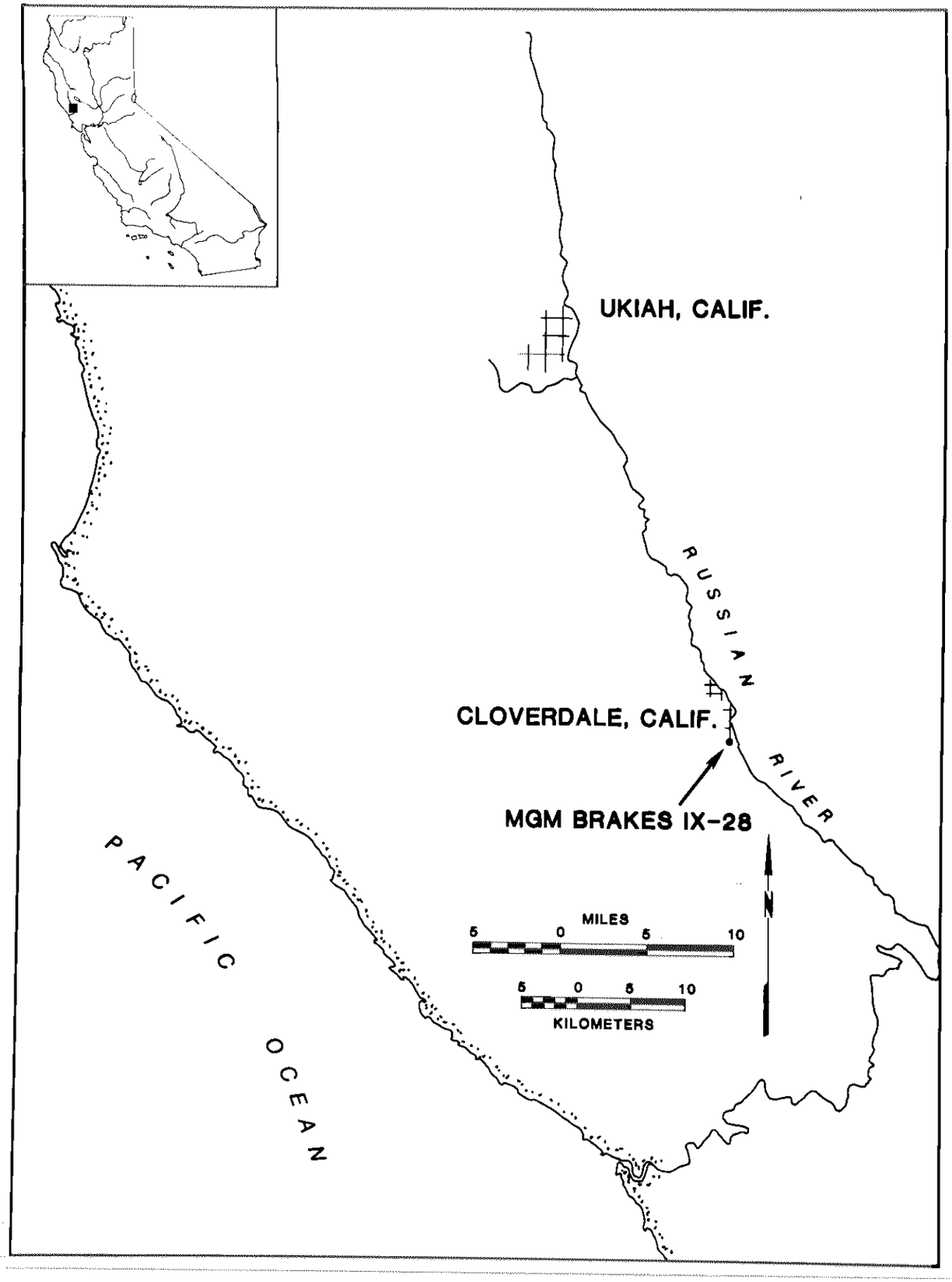

FIGURE 1. Site location.

Groundwater contamination potential is also high with PCB's found as deep as 20 feet in the soil. Any introduction or accidental spill of solvents would allow for the migration of PCB's through the soil. Drinking water wells which support approximately 2,000 people are located three miles downstream of MGM Brakes.

Marine Resources at Risk:

The lower Russian River is spawning and nursery habitat for anadromous fish (1,2,3) (Table 1). It is unknown to what extent these fish utilize the upper Russian River area.

Table 1. Fishery resources of the lower Russian River.

Finfish Species	Adult Habitat	Spawning Area	Nursery Area	Comm. Fish.	Rec. Fish.	Migr. Route
Anadromous						
Coho salmon		X	X		X	X
Steelhead trout		X	X		X	X
American shad	X				X	
White sturgeon	X				X	
Striped bass	X				X	
Shellfish						
Freshwater shrimp	X					

The Russian River is a wintering and migratory area for bald eagles, waterfowl, and shorebirds, and has resident osprey and golden eagle populations (4). The nearshore marine waters support California sea lion, harbor seal, and elephant seal.

Summary of Site-Related Actions::

In August 1981, the California Regional Water Quality Control Board and the California State Department of Fish and Game discovered the PCB discharge and contamination of the field. IT Corporation was employed to recover the oil-stained surface soil and dispose of it at Casmalia, the EPA-approved PCB disposal facility near Santa Maria, California.

Harding Lawson Associates was contracted by MGM Brakes in October 1981 and subsequently employed Kennedy/Jinks Engineers. They conducted an investigation of the extent of PCB contamination in the plant and the soils of the field which had received the plant's effluent. The casting plant was closed down and cleaned by IT Corporation, and a remedial action plan was developed in April 1982 to deal with the soil contamination problem. Final actions and plan implementation are pending.

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References:

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3. National Marine Fishery Service, 1977. Anglers Guide to the United States Pacific Coast.

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