

Teledyne Wah Chang (X-14)
Albany, Oregon
30 June 1985

Location and Nature of Site

Teledyne Wah Chang is the site of a rare earth metals plant operated by the U.S. Bureau of Mines until purchased by Wah Chang in 1958. Teledyne, Inc. purchased the facility in 1967. The site is located on 110 acres of land in the central Willamette Valley in western Oregon. Murder Creek abuts the property on the north and Truax Creek and the Willamette River form the western boundary.

The extraction and refining of zirconium and hafnium metals from zircon sands have been the primary activity at the site. The production of these rare earth metals generates liquid and solid wastes which have been disposed of in ponds and diked storage areas on site. The company also holds a NPDS permit for waste water discharges.

EPA has completed a Remedial Action Master Plan (RAMP) for the site, but it has not yet been released to the public. The company has expressed a willingness to conduct additional sampling in support of Superfund actions. Further EPA action is on hold pending the availability of Federal funds and the outcome of a lawsuit in the Oregon Supreme Court.

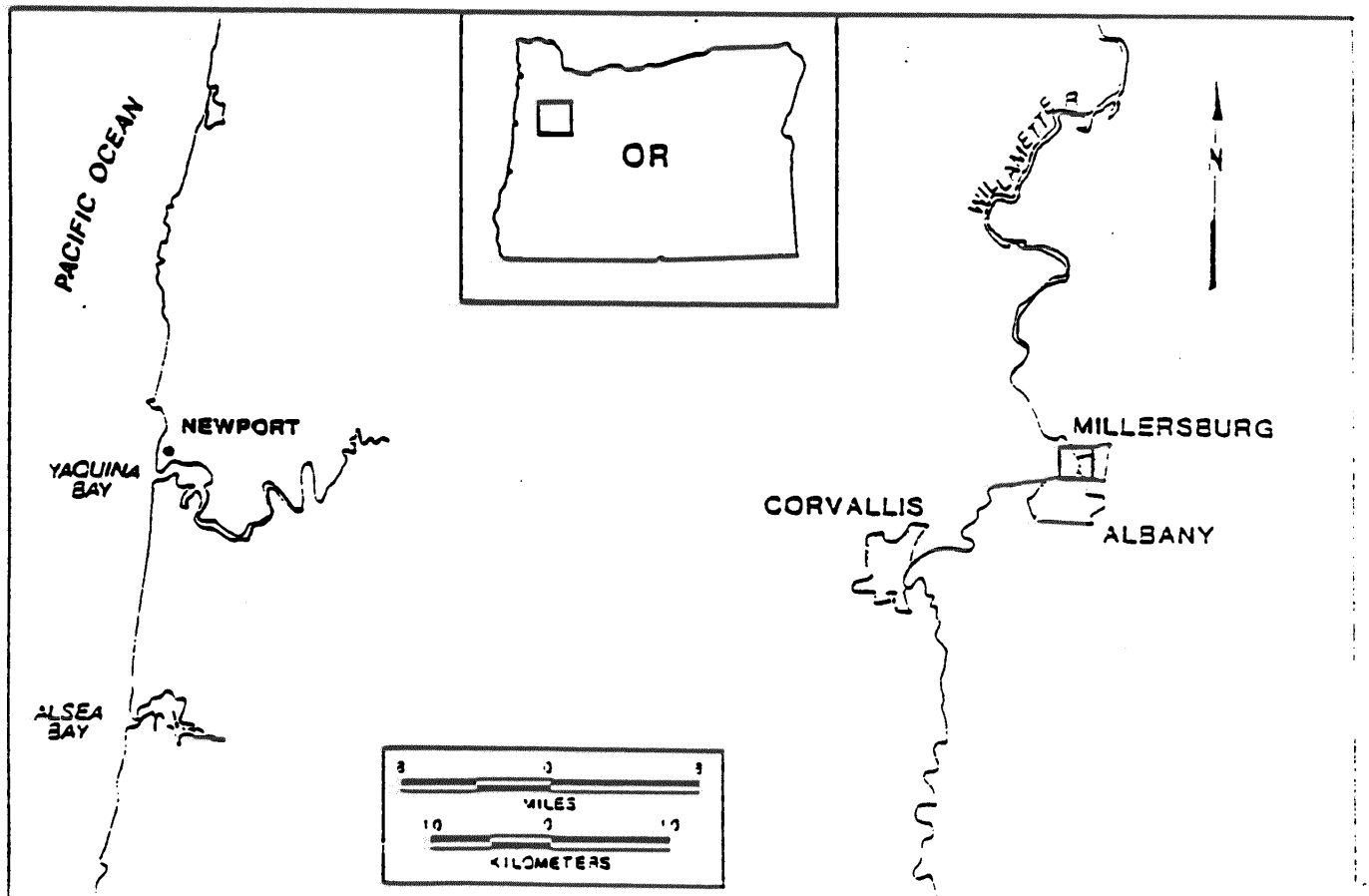
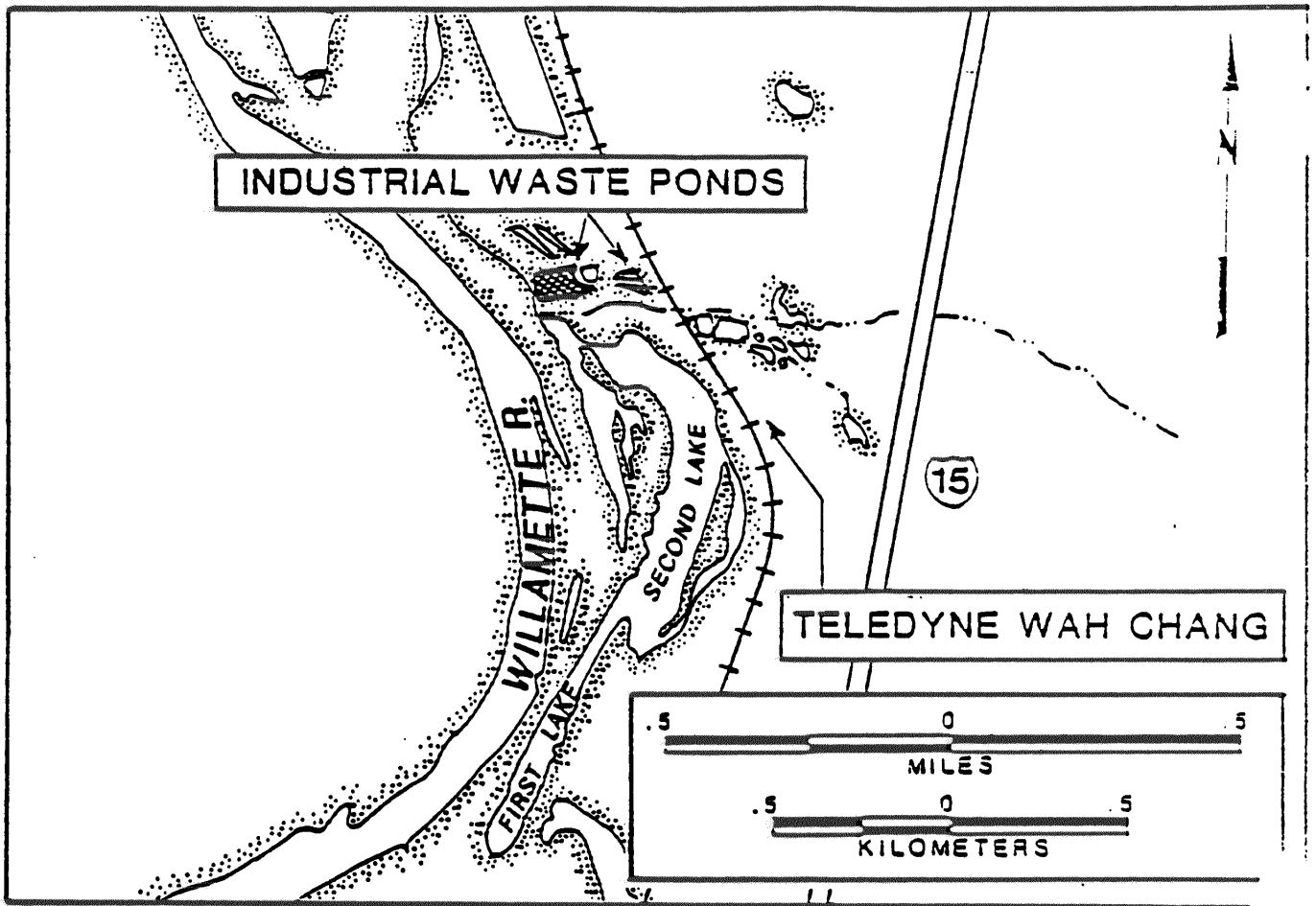
Teledyne Wah Chang has been identified as a responsible party.

Proximity of Chemical Hazard to Marine Resources

Surface and groundwater from the site flow toward the Willamette River. The discharge from Murder and Truax Creeks enters the Willamette River at Conser Slough towards the north end of the facility.

The Lower River Solids Pond is both the largest disposal area on the site and the closest to the Willamette. The 130-137 meter high diked pond was constructed in 1966 and is approximately 130 meters from the river. Sludges contained in the pond are contaminated with heavy metals and radioactive materials.

Sampling of wells on site has shown metal and radioactive contamination of ground water, including:



Barium	up to 5.8 ppm
Cadmium	up to 2.3 ppm
Lead	2.8 ppm
Manganese	130.0 ppm
Uranium	26.3 pCi/l
Thorium	1.1 pCi/l
Radium	5.0 pCi/l

No data are presently available on offsite contamination

Marine Resources at Risk

The Willamette River is an important migratory route for anadromous fish. In addition to a large resident population, the middle and upper river basins contain spawning and reproduction areas. There is no commercial fishery in the river at present, but there has been a historical salmon fishery. Anadromous fishery resources of the Willamette River near Albany include the lamprey, white sturgeon, chinook salmon, coho salmon, steelhead trout, cutthroat trout, and American shad. Numerous non-anadromous species also inhabit the river.

Site Chronology

- Pre-1958 Operation of rare earth metal processing facility by U.S. Bureau of Mines.
- 1958 Purchase by Wah Chang Corporation.
- 1966 Lower River Solids Pond constructed.
- 1967 Purchase by Teledyne Corporation.
- 1983 Completion of EPA RAMP for site.

NOAA Reviewer: Robert Pavia, NOAA Hazardous Materials Response Branch
EPA Contact: Neil Thompson, Project Manager

References

- CH2M Hill, 1982. Groundwater Quality Study: Lower River Sludge Pond. Teledyne Wah Chang, Albany, Oregon.
- Oregon Department of Environmental Quality, 1980. Results of the 1980 Truax Creek Survey. Albany, Oregon. 8pp.
- Oregon Game Commission, 1963. The Fish and Wildlife of the Middle Willamette Basin. Oregon and Their Water Use Requirements. A Report to the State Water Resources Board. 25pp.

- Oregon Game Commission, 1964. Basin Investigations. Lower Willamette Basin. Albany, Oregon.
- Oregon Game Commission, 1966. Basin Investigations. Upper Willamette Basin. Albany, Oregon.
- SAI, 1981. Public Health Hazards Associated with the Storage of Certain Types of Low Level Radioactive Waste in Oregon. Final Report to the State of Oregon. 318pp.
- U.S. Environmental Protection Agency, 1983. Remedial Action Master Plan: Teledyne Wah Chang Albany. Seattle, WA. July 1983.