Site Summary
The Aluminum Company of America (ALCOA) Vancouver site is in Vancouver, Clark County, Washington on the north bank of the Columbia River (Figure 1). The areas surrounding the site are characterized by submerged tidal and nearshore habitats and upland lands. From 1940 to 1985, ALCOA Vancouver was operated as an aluminum smelting and fabrication facility. Aluminum metal was produced and then used to fabricate materials such as wire, rod and extruded channel. Wastes generated during production and fabrication activities were disposed of in on-site waste piles or transported to a facility in Longview, Washington.

The wastes included contaminants such as cyanide, fluoride, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), trichloroethylene (TCE), and metals (NOAA, 1989). The on-site waste piles were covered with plastic sheeting and soil to create impermeable caps. However, the caps did not cover the lower portions of the waste-piles allowing for movement of contaminants into the environment (NOAA, 1989). The waste piles were revegetated in the late 1970s (Ecology, 2007).

In 1985, operations ended and ALCOA sold the facility to V ANALCO. ALCOA retained ownership of some parcels on the property. V ANALCO was subsequently purchased by Evergreen Aluminum (Glencore) (Ecology, 2010a). The site was listed on the U.S. Environmental Protection Agency’s National Priority List (NPL) in 1988. It was removed from the NPL in 1996 because it was added to the Washington Department of Ecology’s (Ecology) Hazardous Sites List (EPA, 2010). Since the late 1980s, numerous remediation activities have occurred in the upland and nearshore areas at the site. More recently in 2009, river sediments were remediated under a Consent Decree agreement between Ecology and ALCOA. Because TCE is a remaining concern in groundwater at the site, this particular Consent Decree was amended to require additional sampling to monitor the contamination (Ecology, 2010a). In 2009, the property was transferred to the Port of Vancouver for industrial use. Industrial reuse of the site is possible because most remediation work has been completed.

Contaminants of Concern
Sediment, groundwater, surface water and soil samples have been collected for analysis from the ALCOA Vancouver site and adjacent areas during the course of several site investigations. Contaminants of concern include cyanide, fluoride, metals, petroleum hydrocarbons, polychlorinated biphenyls (PCB), and trichloroethylene (TCE). Cyanide, fluoride, metals, petroleum hydrocarbons, PCBs, and TCE were detected in soil samples collected from the site at levels which exceeded Ecology’s Model Toxics Control Act (MTCA) cleanup levels (Ecology, 2008).

TCE has been detected in drinking water at the site at concentrations exceeding MTCA cleanup levels. PCBs were detected in the sediment and clam tissue samples collected from the Columbia River at levels which exceeded the threshold effects concentrations screening guidelines, protective of biota living in a freshwater environment (EPA, 2009; MacDonald et al. 2000).

Quick Facts
- Site is located in Vancouver, Washington.
- Ecology is the lead agency in this cleanup.
- Ecology Site ID#: 21
- Contaminants at site include Cyanide, Flouride, Metals, TPH, PCBs, and TCE.
- Contamination has migrated into the Columbia River from this site.

Figure 1. Detail of the ALCOA Vancouver site, Vancouver, WA.
Species and Habitats of Interest
The Columbia River is a major migratory corridor for several salmonid species migrating inland from the Pacific Ocean. Chinook (spring, summer, and fall runs), coho, chum, and sockeye salmon and steelhead trout (summer and winter runs) all migrate through this section of the Columbia River, as do American shad, Pacific lamprey, and smelt. For several years, smelt runs have been inconsistent and often reduced in number. During years with reduced runs, smelt spawn in the lower mainstem of the Columbia River. White sturgeon are also found in the Columbia River, which they use as both a migratory corridor and for juvenile habitat. The Columbia River also provides rearing, foraging, spawning and adult habitat for numerous resident fish, shellfish, plants, and wildlife species unique to the Pacific Northwest.

Yakama Nation Authority
The Yakama Nation is a federally recognized Tribe pursuant to the Treaty of 1855 (12 Stat. 951) with authority to manage, protect and restore treaty resources throughout the Pacific Northwest. The Columbia River, life blood of the Yakama Nation, has become a polluted and life threatening environment for salmon and other aquatic resources because of industrial development. The Yakama Nation has the additional authority, as a natural resource trustee under Superfund law, to initiate and oversee response and restoration actions that affect our Treaty reserved rights and interests. Furthermore, the Yakama Nation’s involvement in the remediation of contaminated sites and implementation of restoration activities ensures that these efforts are protective of our Treaty resources. The Yakama Nation is steadfast in restoring a clean and productive Columbia River that sustains our cultural practices and improves life for our neighbors and future generations.

COLUMBIA RIVER: HONOR. PROTECT. RESTORE.

Since time immemorial...
The sacred relationship with the Yakama People, the Salmon, and the Columbia River was established in ancient time. When the first people established themselves in this region, the Creator came and revealed that He was going to make human beings. He advised the first people to take care of these new beings. After lengthy discussions, it was so agreed that the first people would give of themselves to sustain the human beings and that the human beings would honor and take care of the first people. Then the Creator asked who would be the first to volunteer and the salmon came forward.

The relationship between the People, the Salmon, and the Columbia River is the foundation of the time-honored laws of the Yakama people: the laws that protect life and the cycles of nature and provide for human well being; the laws that govern our long house traditions; the laws that support our practices, which have sustained the Yakama people since time immemorial. The scared relationship of the Yakama people, the Salmon, and the mighty Columbia River is based on an understanding that all life is intertwined and interdependent. Today the Salmon has become the epitome of a time honored agreement; fighting to survive, fighting to maintain their natural life cycle, fighting to honor their agreement with the Creator and the Yakamas.

References


