

# EPA: Superfund Sites in Oregon

## **UNITED CHROME PRODUCTS, INC.**

### **Corvallis, Oregon**

**Federal Register Notice:** [September 21, 1984](#)

**Conditions at listing (September 1983):** From 1960 through 1977, United Chrome Products, Inc., discharged an unknown quantity of chrome plating waste water into a dry well on a 2.5-acre site in Corvallis, Oregon. The facility continues plating operations on the site. Soil on the site, as well as sediments and water in adjacent surface drainages, including Booneville Slough, are contaminated with chromium, according to analyses conducted by the State and EPA. The level in Booneville Slough exceeds Oregon water quality standards and EPA recommended water quality criteria. An aquifer is beneath the site at 30 feet. The City of Corvallis supplies drinking water from this aquifer to the Airport Industrial Park. The effects of United Chrome's waste disposal practices on the aquifer are unknown at this time.

In early 1983, the State conducted a field investigation, which included sampling of soil and runoff at the facility, surface water and sediment in local drainages leading to the Willamette River, and four nearby wells. In June 1983, EPA drilled five additional deep wells into the aquifer to determine ground water flow.

**Status (June 1984):** Analyses of ground water samples taken in the summer of 1983 and in January 1984 show significant levels of chromium in the shallow zone around the dry well and lower levels in two of the five deep wells. Local city and private drinking water wells were also sampled in January 1984 and showed levels of chromium and lead well below maximum contaminant levels. Additional studies are planned to further define the extent of contamination.

## **NORTHWEST PIPE & CASING CO.**

### **Clackamas, Oregon**

**Federal Register Notice:** [October 14, 1992](#)

**Conditions at Proposal (February 7, 1992):** The Northwest Pipe & Casing Co. site covers 53 acres in northwest Oregon in Clackamas, Clackamas County. The site is located in an industrial park and is bordered on the west by railroad tracks, on the north by a large grassy field, on the east by another industrial park, and on the south by the Camp Withycombe Oregon National Guard facility.

From 1956 to 1985, operations included coating pipes, which involved sandblasting the pipes with steel shot, spraying the pipes with primer, and coating the pipes. Coatings used in the operation included coal tar, coal tar epoxy, cement mortar, and asphalt. Wastes from these operations were apparently spilled, burned, or buried on-site. A large waste pile of unknown origin is in the northwestern part of the site.

EPA's limited sampling at the site, conducted in July 1988, indicated widespread contamination of surficial soil. Polycyclic aromatic hydrocarbons (PAHs), which are common constituents of coal tar, PCBs, and some volatile organic compounds (VOCs) were the primary contaminants detected. A more extensive investigation conducted by EPA between December 1989 and February 1990 detected elevated levels of VOCs, PAHs, and PCBs in on-site soil, sediment, surface water, and ground water. Among specific compounds detected are trichloroethene, vinyl chloride, phenanthrene, naphthalene, and anthracene. Contaminants were also detected in off-site ground water and surface water sediments. A comprehensive geophysical survey identified six areas where buried wastes may be contributing to the contamination.

Approximately 6,100 people obtain drinking water from private and municipal wells within 4 miles of the site; the nearest well is 0.75 mile from the site. Surface water drainage from the site eventually flows into the Willamette River, which contains wetlands and endangered species and is used for fishing.

Under an order issued by the Oregon Department of Environmental Quality, the current site owner has fenced the site; however, it is subject to vandalism and trespassing, thus exposing nearby residents to contaminated soil. Approximately 5,200 people live within 1 mile of the site.

**Status (October 1992):** EPA is considering various alternatives for the site.

## **FREMONT NATIONAL FOREST/WHITE KING AND LUCKY LASS URANIUM MINES (USDA) Lake County, Oregon**

**Federal Register Notice:** [April 25, 1995](#)

**Conditions at Proposal (January 18, 1994):** The Fremont National Forest/White King and Lucky Lass Uranium Mines site is located approximately 18 miles northwest of Lakeview, Oregon. The White King Mine is located on U.S. Forest Service and private land and the Lucky Lass Mine is located entirely on Forest Service land.

The mines were operated from 1958 through 1961 and intermittently through 1964. The Atomic Energy Commission oversaw ore production from the mines. A total of 140 acres were disturbed by mining: 120 acres at White King Mine and 20 acres at Lucky Lass Mine. Contaminant areas include stockpiled ore, overburden mixed with ore, and acid drainage waste water that has filled the pits created by the mining activities.

The primary hazards posed by the mine waste include gamma radiation exposure from radioactive constituents, emanation of radon gas, and environmental contamination by heavy metals and the radioactive constituents in surface and ground water. Surface water and sediments in Auger Creek and nearby wetlands have been contaminated by mining activities. The creek and surface water bodies downstream of the site are used as a source of recreational fishing.

**Status (April 1995):** In October of 1994, the U.S. Forest Service signed a Memorandum of Agreement (MOA) with EPA and the State of Oregon to: (1) implement a removal action at the Lucky Lass Site during fiscal year 1995; and (2) complete an RI/FS workplan for

characterization of the site. An Engineering Evaluation/Cost Analysis (EE/CA) has been completed for the removal action and public comments are being addressed. The RI/FS workplan is nearing completion. The agencies are currently negotiating with a PRP to implement the RI/FS workplan with RI sampling scheduled to begin in the summer of 1995.

## **TELEDYNE WAH CHANG (ALBANY)**

### **Albany, Oregon**

**Federal Register Notice:** [September 8, 1983](#)

**Conditions at listing (December 1982):** The Teledyne Wah Chang Site covers 100 acres in Albany, Linn County, Oregon. The company is the largest producer in the Western world of zirconium and other rare earth metals and alloys. Production began in 1957. Wastes have generally been disposed of on-site. Process wastes contain a large volume of solids that contribute radiation, heavy metals (barium, cadmium, chromium, and lead), and chlorinated solvents to ground water, surface water, and air. Radiation off-site is generally below established limits. Until 1980, sludges were taken to unlined storage ponds on company property adjacent to the Willamette River. In 1979, the plant added a process to reduce radiation in sludges and waste water. Sludges now have lower levels of radiation than previously and are taken to lined dewatering ponds about 1 mile from the plant.

**Status (July 1983):** Wah Chang had requested permission from the State to cover the old storage ponds to minimize percolation that could contribute to possible leachate into the Willamette. In January 1983, the State drafted a permit indicating its preference for moving the sludges to another location on company property farther from the river. This action has been appealed.

EPA recently completed a Remedial Action Master Plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

## **UMATILLA ARMY DEPOT (LAGOONS)**

### **Hermiston, Oregon**

**Federal Register Notice:** [July 22, 1987](#)

**Conditions at proposal (October 15, 1984):** Since 1941, Umatilla Army Depot Activity has occupied about 20,000 acres in northeastern Oregon 6 miles south of the Columbia River in Hermiston, Umatilla County. This NPL site consists of lagoons covering about 0.5 acre. They are contaminated with wastes from explosives as a result of past demilitarization and disposal operations. The major contaminants identified on the base include explosive-derived wastes (RDX, TNT, and nitrate), pesticides (DDT and lindane), organic solvents (tetrachloroethylene and trichloroethylene), and caustic brine. RDX and nitrates are present in ground water beneath the lagoons. This ground water contamination might affect public water supplies serving about 24 people.

The Umatilla Army Depot is participating in the Installation Restoration Program, established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up

contamination from hazardous materials. The Army has completed Phase I (records search) and Phase II (preliminary survey).

**Status (July 22, 1987):** The Department of the Army has developed a draft generic Environmental Impact Statement (EIS) and public notice under the National Environmental Policy Act (NEPA). The EIS evaluates alternatives for destroying obsolete chemical agents by 1994 as mandated by the Department of Defense Authorization Act of 1986. One of the alternatives involves constructing and operating eight incinerator complexes within the continental U.S., including one at the Umatilla Army Depot. Consequently, in late 1986, Umatilla Army Depot submitted a Part B application for a chemical agent incinerator complex under Subtitle C of the Resource Conservation and Recovery Act (RCRA). When issued, the permit would address any releases of hazardous waste or hazardous constituents from solid waste management units on the facility.

Within the boundaries of this Federal facility, there are areas subject to the Subtitle C corrective action authorities of RCRA. However, no such areas were included in scoring this specific site. Therefore, this Federal facility site is being placed on the Federal section of the NPL under the NPL/RCRA policy announced on September 8, 1983 (48 FR 40662).

## **ALLIED PLATING, INC.**

### **Portland, Oregon**

**Federal Register Notice:** [February 21, 1990](#)

**Conditions at proposal (January 22, 1987):** Allied Plating, Inc., started operating a chrome-plating facility in Portland, Multnomah County, Oregon, in 1957. The area is light industrial and residential. The operation generated electroplating wastes that contain heavy metals (including chromium, barium, cadmium, lead, and mercury) and arsenic, according to tests conducted by EPA, the State, and the company.

For over 25 years, the company discharged the wastes without pretreatment into an unlined pond in an on-site 0.5-acre swamp that had been filled in. In mid-1985, during an EPA inspection, the banks of the pond were eroding, and the natural drainage channels were filled in with refuse. Shortly thereafter, the owner pumped the contents of the pond into the Portland sewer system.

In 1978, the company detected chromium and barium in an on-site well and in industrial and municipal wells within 2 miles of the site. EPA and the State confirmed the results in 1981, 1984, and 1985. About 1,500 people draw drinking water from public and private wells within 3 miles of the site. A well used for food processing is 1,700 feet from the site. Ground water is also used for irrigation within 3 miles of the site.

The site drains into Columbia Slough, which is 600 feet to the north-northeast. The slough is a part of the Columbia River.

The company received Interim Status under the Resource Conservation and Recovery Act (RCRA) when it filed Part A of a permit application for a surface impoundment. In 1982, the

company filed for bankruptcy under Chapter 11 of the Federal bankruptcy code, and in 1984 consented to liquidation under Chapter 7 bankruptcy.

Because the owner or operator has demonstrated inability to finance appropriate remedial action by invoking bankruptcy laws, the site satisfies a component of EPA's NPL/RCRA policy. In addition, the company lost Interim Status (and hence authority to operate) when it did not certify by November 8, 1985, that it was complying with certain RCRA Subtitle C regulations.

**Status (February 21, 1990):** EPA is considering various alternatives for the site.

## **GOULD, INC.**

### **Portland, Oregon**

**Federal Register Notice:** [September 8, 1983](#)

**Conditions at listing (December 1982):** The Gould, Inc., site covers about 10 acres in Portland, Oregon. The site was a battery recycling and disposal facility which Gould acquired in 1979. It also handled large quantities of lead wastes. The battery facility is no longer active, but a pile of more than 10,000 tons of battery casings remains on the site. Air, surface water, and ground water are contaminated with lead.

**Status (July 1983):** The State has cited Gould for water quality violations. The company and the State are negotiating to develop a plan for cleaning up the site.

## **HARBOR OIL**

### **Portland, Oregon**

**Federal Register Notice:** [September 29, 2003](#)

**Conditions at Proposal (September 5, 2002):** Harbor Oil is a waste oil reprocessing facility located on approximately 4.2 acres in an industrial area of Portland, Oregon. Site operations began in 1961. The site formerly also operated as a tank truck cleaning facility. In March 1974, there was a major spill or release of waste oil from on site storage tanks, which resulted in a fish kill in Force Lake. Following the spill, the work area at the Harbor Oil site was described by Oregon Department of Environmental Quality (ODEQ) staff as a mass of oil-soaked mud. ODEQ staff found Force Lake to be covered by a thin film of oil, and a thicker accumulation of oil, both fresh and decomposed, which had accumulated along the shorelines. In addition, in October 1979, a severe fire destroyed the facility and melted/ruptured five 20,000-gallon aboveground used oil tanks. The incident caused large volumes of used oils and smaller volumes of waste paints to flow west and south across the site, into the wetlands that border the site and Force Lake.

In 1980, following the fire, the facility was rebuilt and a new tank farm was constructed. Currently, the petroleum recovery process tanks consist of a 4,000-gallon diesel fuel storage tank; six 20,000-gallon heated storage tanks; six 20,000-gallon cold storage tanks; and 205,000-gallon and 320,000-gallon cold storage tanks. These tanks hold used petroleum products in varying stages of recovery.

Waste oils received at the facility are first transferred into heat tanks for dehydration, distillation, and blending. Following heat processing, the blended oils flow through an oil/water separator. The separated oils are transferred into settling tanks equipped with filters. The separated water is piped into a surge tank. Processed oils are transferred into storage tanks. Three on-site sumps collect surface water from general runoff and divert it to an on-site/oil/water separator. Treated stormwater from the oil/water separator is discharged into the wetlands west and south of the site via a permitted outfall located in the southwest corner of the site. An earthen dike installed in 1980 also surrounds the south and west sides of the site to direct surface water runoff to the collection sumps.

In July and August 2000, consultants for the EPA conducted a Preliminary Assessment/Site Inspection at the facility. Historical documentation, sampling, and analytical results document the presence of several hazardous substances on-site including volatile organic compounds, semi-volatile organic compounds, metals, pesticides, and polychlorinated biphenyls. Contaminated soil was documented as a source of contamination.

The 15-mile target distance limit (TDL) for this site begins at a permitted outfall which is located in the wetlands west of the site and continues south for approximately 300 feet through the wetlands to Force Lake, and ends at the southern shore of this lake, a distance of approximately 0.2 miles. During most of the year, the lake is filled by springs and seeps. Drainage from Force Lake passes through numerous culverts and ultimately enters the Columbia Slough.

Force Lake supports recreational fishing activities. A large palustrine emergent seasonally flooded wetland having a perimeter of approximately 1.3 miles is located immediately west and south of the site.

**Status (September 2003):** EPA is considering various alternatives for this site.

## **MCCORMICK & BAXTER CREOSOTING CO. (PORTLAND PLANT) Portland, Oregon**

**Federal Register Notice:** [May 31, 1994](#)

The McCormick & Baxter Creosoting Company site covers approximately 58 acres and is located at 6900 Edgewater Street, approximately 7 miles south of the city of Portland, Oregon. McCormick & Baxter is situated on the west bank of the Willamette River in an area zoned for heavy industrial use. The site is bordered by railroad tracks on the northeast and northwest, a barge maintenance and dredging facility on the southeast, and an empty lot where a shipyard and cooperage was once located on the northwest. A residential area is located on the northwest side of the site on top of a bluff approximately 120 feet high.

McCormick & Baxter was founded in 1944 to produce treated wood products during World War II. Wood treating products used at the site include creosote/diesel oil mixtures, pentachlorophenol/diesel oil mixtures, and a variety of water- and ammonia-based solutions containing arsenic, chromium, copper, and zinc. Between 1945 and 1969, waste water and non-contact cooling water were directed into onsite catch basins that discharged directly into the Willamette River via storm water outfalls. Prior to 1971, boiler water, storm water, and oily

wastes were disposed of in the former waste disposal area located in the southern portion of the site. McCormick & Baxter operated an aboveground tank farm at the facility consisting of six tanks ranging in size from 70,000 gallons to 173,000 gallons. These tanks held mixtures consisting of creosote, pentachlorophenol, oil, and oily-waste water. In addition to the tank farm, McCormick & Baxter used a 750,000-gallon creosote tank. McCormick & Baxter filed for Chapter 11 bankruptcy in 1988. In 1989, with certain remedial measures only partially completed, responsibility for the site was transferred to the Oregon Department of Environmental Quality (ORDEQ). McCormick & Baxter's lending institution took control of their accounts in 1991 and the facility ceased operations.

During an investigation conducted by ORDEQ in 1990, heavy metals, polycyclic aromatic hydrocarbons, and pentachlorophenol were detected at elevated levels in soils, sediments, and water at the facility. Soils beneath the site are contaminated from the ground surface to as deep as 80 feet in some areas. The soil contamination has migrated to sediments in the Willamette River. Sediments near the site are contaminated to depths of up to 35 feet below the sediment surface.

The Willamette River is used for recreational activities downstream of the McCormick & Baxter site. ORDEQ and the Oregon Department of Fish and Wildlife have posted warning signs to alert people of the potential hazards associated with the site. The site is also fenced and 24-hour security restricts public access. EPA and ORDEQ will investigate various cleanup alternatives appropriate for the site.

## **PORTLAND HARBOR**

### **Portland, Oregon**

**Federal Register Notice:** [December 1, 2000](#)

**Conditions at Proposal (July 27, 2000):** The Willamette River originates within Oregon in the Cascade Mountain Range and flows approximately 187 miles north to its confluence with the Columbia River. The Lower Reach of the Willamette River from River Mile (RM) 0 to approximately RM 26.5 is a wide, shallow, slow moving segment that is tidally influenced with tidal reversals occurring during low flow periods as far upstream as RM 15. The river segment between RM 3 and RM 10 is the primary depositional area of the Willamette River system. The Lower Reach has been extensively dredged to maintain a 40-foot deep navigation channel from RM 0 to RM 14. This segment of the Lower Reach contains a highly industrialized area known as Portland Harbor, which contains a multitude of facilities and both private and municipal waste water outfalls. Up to 17 industrial operations have been identified as potential sources of contamination to Portland Harbor between RM 3.5 and RM 9.5; however, because not all sources of contamination to this river segment have been thoroughly investigated, the site is being evaluated as contaminated sediments with no identified source.

In July 1997, the United States Army Corps of Engineers (USACE) collected surface sediment samples between RM 3.8 and RM 8.9 from Portland Harbor as part of a pre-dredging sediment quality study. Analytical results document the presence of contaminated sediments in this river segment having elevated concentrations of arsenic, mercury, several pesticides, and several semivolatile organic compounds (SVOCs).

In September and October 1997, consultants for the U.S. Environmental Protection Agency (EPA) conducted field work for a Site Inspection (SI) in the Lower Reach of the Willamette River within Portland Harbor. This sampling effort included the collection of bottom sediment and porewater samples from near shore areas between RM 3.5 and RM 9.2. Analytical results document the presence of contaminated sediments in this river segment having elevated concentrations of several inorganics (i.e., metals), several SVOCs, dichloro-diphenyl-trichloroethene (DDT), and tributyltin (TBT).

Recreational fishing is extremely popular throughout the Lower Willamette River basin. Species most desired are spring chinook, steelhead, coho, shad, and white sturgeon. Spring chinook contribute substantially to the mainstem Columbia River sport fishery and consistently support the largest recreational fishery in the Lower Willamette River. The chinook fishery in the Willamette River occurs between Oregon City and the confluence of the Willamette and Columbia Rivers, which includes the area of sediment contamination. The Willamette River is also an important fish stream with spawning populations of chinook and coho salmon, steelhead, American shad, Pacific lamprey, and white sturgeon. The Lower Reach of the Willamette River to Willamette Falls provides a migratory corridor for both juvenile and adult anadromous fish and juvenile rearing habitat for several anadromous fish species. Three runs of chinook, two runs of steelhead, and individual runs of coho and sockeye salmon occur in this area. Several of these runs are either listed or proposed for listing under the Endangered Species Act.

**Status (December 2000):** EPA is considering various alternatives for this site.

## **REYNOLDS METALS**

### **Troutdale, Oregon**

**Federal Register Notice:** [December 16, 1994](#)

**Conditions at Proposal (August 23, 1994):** The Reynolds facility is a primary aluminum reduction plant where alumina from bauxite is reduced to aluminum. The facility is approximately 1.25 miles north of the City of Troutdale, Oregon. The Columbia River forms its northern border and the Sandy River forms its eastern border. A dike surrounds the plant on the northern and eastern sides, and protects the plant from floods. Site areas north and east of the dike are within the 100-year flood plain.

The plant was completed in 1941 for the United States government war-time operations. Reynolds first leased the plant from the government in June 1946, and purchased it in June 1949. Currently, Reynolds owns the 80.25-acre plant area and approximately 500 surrounding acres. The aluminum reduction plant has been shut down since November 1991 for economic reasons. Currently, there are approximately 100 workers for maintenance, security, administration, and casting ingots from molten aluminum transported to the plant from the Reynolds reduction plant in Longview, Washington.

Large quantities of wastes were produced at the Reynolds plant during the production of aluminum. Twenty-one separate waste streams were identified by Reynolds in response to an EPA information request letter. Major hazardous substances of concern include polyaromatic

hydrocarbons (PAHs), aluminum and other metals associated with bauxite, cyanide, fluoride, and polychlorinated biphenyls (PCBs) from electrical equipment.

In May 1993, an EPA contractor collected samples at the Reynolds site. On-site sampling included surface and subsurface soil, sediment, surface water, ground water and an unknown waste pile. Elevated concentrations of cyanide, PAHs, many metals, and fluoride were detected in various sources on site. Elevated levels of cyanide and fluoride were detected in several on-site drinking water wells. Significant concentrations of aluminum, barium, manganese, cyanide, and fluoride were detected in the surface water samples. Concentrations of copper and cyanide in an on-site drainage ditch which flows to an on-site lake and then the Columbia River exceeded the freshwater quality criteria promulgated under the Clean Water Act. Elevated concentrations of fluoride, metals, and extremely high concentrations of PAHs were detected in sediment samples taken from the ditch and lake. The same contaminants were also detected in on-site wetlands.

The Columbia and Sandy Rivers are used for recreation and fishing, people reach the rivers through the Reynolds property. Anadromous fish are found in both rivers as well as numerous sensitive environments.

The Reynolds Metals Company (RMC) has expressed an interest in investigating and conducting early actions under the EPA Removal Program. RMC has initiated an integrated assessment under EPA oversight. The scheduled seven week assessment is the first phase of investigations and is a cooperative effort between RMC and EPA. On-site ground water contamination and newly discovered dump sites are being characterized and evaluated for expedited response actions.

**Status (December 1994):** RMC completed field work in summer of 1994 which will help determine time-critical actions, non-time-critical actions, and further investigations to be conducted at the site.

## **JOSEPH FOREST PRODUCTS**

### **Joseph, Oregon**

**Federal Register Notice:** [March 31, 1989](#)

**Conditions at proposal (June 24, 1988):** Joseph Forest Products formerly treated wood on an 18.5-acre site approximately 0.8 mile northwest of the Town of Joseph, Wallowa County, Oregon.

The wood treatment process used a water-based mixture of chromated copper arsenate. Wastes were stored in a cement pit and sump prior to removal. A fire in 1974 resulted in a spill of concentrated preservative mixture to the ground. In 1986, EPA detected high levels of arsenic and chromium and lower levels of copper in on-site soils.

The shallow aquifer occurs at 5 to 10 feet below the surface and is overlain by very permeable soils, conditions that facilitate movement of contaminants into ground water.

Ground water within 3 miles of the site provides drinking water to over 2,000 people. The City of Enterprise gets its drinking water from springs 4,000 feet from the site. Ground water is also used for irrigation. The site lies within the City of Enterprise Watershed Protection Area.

The Wallowa River is 400 feet east of the site.

**Status (March 31, 1989):** The Oregon Department of Environmental Quality is sampling several monitoring wells and springs around the site on a quarterly basis.

## **MARTIN-MARIETTA ALUMINUM CO.**

### **The Dalles, Oregon**

**Federal Register Notice:** [June 10, 1986](#)

**Conditions at proposal (October 15, 1984):** Martin-Marietta Aluminum Co. produces aluminum on a site covering less than 350 acres in The Dalles, Wasco County, Oregon. Cyanide is present in both the shallow and deep aquifers underlying the site, according to tests conducted by the State and Martin-Marietta. Cyanide appeared in one production well and several monitoring wells, and also in surface run-off and in leachate from a cathode waste pile. Cyanide is known to be present in spent cathode potliners.

Under State order, the company removed an old waste pile of 75,000 tons of spent cathode potliners to a new approved area on the site. An on-site landfill contains approximately 4,600 tons of spent cathodes.

Ground water provides drinking water to 14,000 people in The Dalles and Chenoweth. The wells are also used in the immediate vicinity for industrial purposes. The nearest well is approximately 2,000 feet from the waste pile. The company has constructed several monitoring wells around the site to detect and document the contamination.

**Status (June 10, 1986):** Martin-Marietta hired a contractor to conduct a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The company has submitted a workplan for the RI/FS to EPA for review and comment. On September 12, 1985, EPA and the company signed a Consent Order covering the RI/FS.

## **UNION PACIFIC RAILROAD CO. TIE-TREATING PLANT**

### **The Dalles, Oregon**

**Federal Register Notice:** [August 30, 1990](#)

**Conditions at proposal (October 26, 1989):** The Union Pacific Railroad Co. Tie-Treating Plant covers 83 acres in a mixed commercial and residential area just south of the Columbia River in the City of The Dalles, Wasco County, Oregon. Union Pacific owned the wood treatment facility from 1926 to late 1987, when equipment and structures were purchased by Kerr-McGee Chemical Corp.; however, Union Pacific retained ownership of the land and responsibility for all pre-1987 contamination of facility soil and ground water. The plant primarily treated railroad ties

for Union Pacific, but also treated wood for other commercial users across the United States. From 1959 to November 1987, J. H. Baxter Co. operated the plant for Union Pacific.

The facility treated wood with ammoniacal copper arsenate, creosote, a creosote/fuel oil mixture, and pentachlorophenol. Spills of treatment solutions on-site and waste water ponds no longer in use are thought to be the main source of contamination of soil and ground water. Improvements in the waste water treatment system allow the site to operate as a zero discharge facility.

In 1984, Union Pacific began a comprehensive investigation of soil and ground water at the site. Creosote components, pentachlorophenol, fuel oil, ammonia, volatile organic compounds (VOCs), and arsenic are the major contaminants found in soil and ground water at the site. Contamination by arsenic and VOCs is greatest in the shallow and intermediate aquifers beneath the site. Organic contaminants, including phenanthrene and naphthalene, have been detected in the two deep confined aquifers beneath the site. Ground water is used by over 11,000 people within 3 miles of the site. The Dalles has increased its monitoring of the municipal supply wells.

In May 1989, Union Pacific signed a Consent Order with the Oregon Department of Environmental Quality (DEQ) and agreed to undertake a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The RI/FS is scheduled to be completed by mid-1991.

**Status (August 30, 1990):** DEQ approved Union Pacific's workplan for the RI/FS in January 1990. The investigation is now underway.

## **TAYLOR LUMBER AND TREATING**

### **Sheridan, Oregon**

**Federal Register Notice:** [June 14, 2001](#)

**Conditions at Proposal (December 1, 2000):** In order to address the long-term threat to surface water, sediments, residential soils, and air, the EPA is placing this site on the NPL. The Taylor Lumber and Treating site is an active wood processing and treating business located approximately 1 mile west of Sheridan, Oregon. The wood treating facility began operating in autumn 1966. The wood treating facility's primary functions are to condition and pressure-treat wood products with preservatives in order to prolong the useful life of the products. Wood products treated at the facility include lumber, poles, pilings, posts, railroad ties, and plywood. Wood preserving chemicals, which historically have been used at this facility and are still in use, include petroleum-based creosote and pentachlorophenol (PCP) solutions. The wood treating chemicals are stored in aboveground storage tanks (ASTs) located in two separate tank farms.

Numerous RCRA and NPDES violations have occurred at this site over the past decade. In June and August 1999, EPA conducted an Integrated Assessment (IA) of the Taylor Lumber and Treating facility. The IA was conducted in two phases. Phase I of the IA field sampling event was conducted from May 16 through June 11, 1999, and included surface and subsurface soil sampling, ground water sampling, surface water, and sediment sampling. Phase II of the IA consisted of an air-sampling event which was conducted from August 18 through August 30, 1999. Results of the IA documented the presence of several on-site sources of Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances including volatile organic compounds (VOCs), SVOCs, pentachlorophenol (PCP), metals, and dibenzo-p-dioxins/dibenzofurans (dioxins/furans). Further, many of these hazardous substances were documented to have migrated to surface water, soil, and air targets. Air contamination is documented up to 1 mile from the site. Actual contamination has also been documented in residential surface soils for up to a 1/2 mile of the site. Contaminants include barium, lead, mercury, zinc, cadmium, pyrene, bis(2-ethylexyl)phthalate, and several dioxins.

**Status (June 2001):** An emergency removal was performed during the fall 2000. Approximately 5,000 tons of contaminated soil was placed in a temporary on-site holding cell. A slurry wall was constructed around the wood treatment plant and an asphalt cap was placed over the contaminated area to help contain contaminated groundwater. A surface water treatment plant started operating in November 2000 and several of the drainage ditches were cleaned out.