

MARINE DEBRIS FACT SHEET: CREOSOTE-TREATED WOOD



NORTHWEST STRAITS
marine conservation initiative



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

What is creosote?

Creosote has been used as a wood preservative for decades. Creosote treated wood is commonly used to for telephone poles, railroad ties, piers, docks and floats. An average marine piling contains about 61 gallons of creosote. Creosote contains over 300 different chemicals that, in combination, are very effective at achieving their intended purpose: preventing decay. PAH's (polycyclic aromatic hydrocarbons) are the primary chemicals of concern that make up creosote.

Many of these chemicals are known carcinogens and coal-tar creosote is regulated as a hazardous waste.



Creosote in the marine environment

When creosote treated wood shows up in unintended places such as beaches, the wood preservatives can come into contact with both human and marine life. Chemicals in treated wood materials can be harmful and even toxic to some marine species. Studies of herring eggs exposed to creosote in solution have shown up to a 95% mortality rate. When exposed to ultra-violet light, or sunshine, the chemicals in creosote become more toxic and are more likely to leach from pilings.

Creosote logs wash up on beaches and many end up buried in the beaches for years. Kids use them to make forts, adults sit on them and they are used for campfires by people unaware of the dangers.

Where does it come from?

Creosote contaminated materials and other treated wood debris has been found on beaches throughout the Northwest Straits region. The sources of these materials are often derelict docks and piers falling apart in storms, old bulkheads, as well as improperly disposed construction debris. The railroad tracks are also a significant source.

What's being done?

The Northwest Straits Initiative, the Washington Department of Natural Resources, Washington State Parks and several Marine Resources Committees and Beach Watchers are working together to find, quantify and remove creosote debris on the beaches. In some areas of extremely high accumulation, such as near Ebey's Landing State Park, 100 tons of creosote-treated materials were removed in less than 4 miles.



Creosote laden wood is easily identified and removal is clearly achievable. Creosote wood can be systematically identified, measured and recorded using trained work crews or volunteers. Removal can occur in different ways - either hand carried upland, loaded on barges in the water or placing them in slings and carried out by helicopter. The preferred method for disposal is to transport them to the hazardous waste facility.

Ultimately, the sources of creosote debris need to be clearly understood and steps need to be taken to prevent creosote debris from occurring in the marine waters and shorelines.



Proper Use of Treated Wood

All treated wood is not equal. Creosote treated wood should not be used in marine waters or in areas that may be in contact with marine waters at high tides. Creosote treated wood should not be used where humans come in contact with the wood. Before buying treated wood, consider the different types of wood available and the type of project it is used for.

Governor Gregoire launches new initiative, adds funding

Governor Chris Gregoire identified creosote removal as a high priority issue through the 'Puget Sound Initiative,' and added \$2 million for DNR to expand its program throughout all of Puget Sound and include removal of derelict pilings.

For more information about this program contact:

Lisa Kaufman
Washington Department of Natural Resources
(360) 854-2808
lisa.kaufman@wadnr.gov

Ginny Broadhurst
Northwest Straits Commission
(360) 428-1064
broadhurst@nwstraits.org