



Lead Contaminated Soil Analysis & Removal, North Head and Point Wilson Lighthouses, Ilwaco and Port Angeles, WA;
United States Coast Guard

White Shield conducted a lead-contaminated soil Investigation and removal at these two USCG lighthouses on the Washington coast under its GSA Schedule 899 Environmental Services contract. The source of the elevated lead concentrations in the soils was due to paint chip debris from the active lighthouse structures. WSI was contracted by the USCG Civil Engineering Unit (CEU) Oakland to conduct further sampling and analysis, and to excavate the areas of impacted soil around the perimeter of the lighthouses and oil houses.

At the North Head Lighthouse, excavations ranged from a depth of six to twelve inches, dependent on previous X-ray Fluorescence (XRF) readings. Sampling and additional XRF analysis was conducted periodically at the bottom of the excavations to verify that the majority of the impacted soils was being removed using the current excavation methods. A total of 55 tons of contaminated soil was removed, stabilized, and transported to an approved disposal facility. At the Point Wilson Lighthouse, WSI performed an updated soil

characterization inspection to establish what changes have occurred to the lead concentration levels in the soil since the last inspection in 2000. A portable XRF analyzer was used to provide real-time (*in-situ*) readings of lead concentrations at 30 sampling locations. Five discrete soil samples were also collected for analysis. Upon comparing the current results with the data submitted in the June 2000 investigation, a large increase in Pb levels was clearly shown, averaging 77% across the site. WSI submitted a detailed summary, and recommended actions to mitigate further contamination and remediation of the site.

Professional Fees: \$49,000

