



California NOLF San Nicolas Island

Facility and Location

Navy Outlying Field (NOLF) San Nicolas Island is the northwestern island of the four southern Channel Islands. Naval Base Ventura County is responsible for its administration. The field is located on the edge of a 500-foot mesa. The Barge Landing Area is used to transfer barge cargo to large or bulky aircraft. Cargo can be offloaded and trucked to the main compound or one of the many project areas. Water is supplied via desalination of seawater through reverse osmosis.

Media Sampled and Findings

Drinking Water — In 2007, one of two samples detected perchlorate at 0.34 ppb. Prior to 2007, 9 of 16 samples detected perchlorate from 5.2 to 13 ppb.

Raw Reverse Osmosis Water — In 2011, one sample detected perchlorate at 2.7 ppb. In 2010, one sample reported no detection. In 2009, one sample reported no detection. In 2008, two samples reported no detection.

Soil — Prior to 2007, 13 of 13 samples detected perchlorate from 50 to 192,570 ppb.

Surface Water — In 2008, three of five samples detected perchlorate from 0.48 to 16 ppb. In 2007, two samples reported no detection. Prior to 2007, 62 of 95 samples detected perchlorate from 6.5 to 3,000 ppb.

Wastewater — In 2011, one sample detected perchlorate at 3.5 ppb. In 2010, three of three samples detected perchlorate from 0.17 to 75 ppb. In 2009, two of three samples detected perchlorate from 1.3 to 30 ppb. In 2008, one sample detected perchlorate at 5.9 ppb. In 2007, one sample reported no detection. Prior to 2007, one sample detected perchlorate at 0.1 ppb.

Appropriate Actions

Samples were below EPA and DoD Preliminary Remediation Goal of 15 ppb. Prior year's drinking water samples were above the California Maximum Contaminant Level of 6 ppb and soil concentrations were above the 55,000 ppb residential but below the 720,000 ppb industrial soil screening levels recommended by EPA Region IX.

To address perchlorate concentrations and examine the environmental impacts of munitions use on ranges, NOLF San Nicolas Island is conducting a Range Condition Assessment under the Range Sustainability Environmental Program Assessment. The explosive ordnance disposal area where perchlorate was found is on an operational range. Additional sampling was also initiated due to the elevated level of perchlorate in the wastewater effluent.