

EXECUTIVE SUMMARY

This report presents the Preliminary Screening Synopsis and Decision Point Two Report for the Comprehensive Range Evaluation (CRE) Phase I at the Naval Weapons System Training Facility (NWSTF) Boardman, in Boardman, Oregon. The purpose of the Range Sustainability Environmental Program Assessment (RSEPA) CRE Phase I is to gather data that will aid in answering the question of whether or not there has been an off-range release of munitions constituents (MC). The CRE Phase I field activities were conducted between May 16 and June 24, 2005. Soil samples were collected at three source areas including the Army Open Burning/Open Detonation (OB/OD) Area, the Demolition Crater Area, and the West Bomb Crater Area. Groundwater samples were collected from monitoring wells installed at three range border locations, at three Army OB/OD Area locations, and at one Demolition Crater Area location.

Groundwater samples collected from two of the three range border wells exhibited detections of perchlorate at 3.7 µg/L at the eastern well and 3.0 µg/L at the northern well. Associated nitrate levels for these two wells were the highest of the reported samples, at 34.6 and 10.4 mg/L respectively. No groundwater samples exhibited detections for 2,4,6-Trinitrotoluene (TNT), Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX), Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), nitroglycerine, or nitroguanidine.

Only soil samples collected from the Army OB/OD Area exhibited detections of MC. Three of the five sampled segments at the Army OB/OD Area had MC detections reported, with two samples exhibiting detections above RSEPA screening levels. No soil samples indicated perchlorate contamination.

To answer RSEPA Decision Point Two: Is there likely to be an off-range release that poses a potential risk to human health and the environment? CRE data indicates that no off-range release has occurred. Perchlorate detections at the eastern border well and the northern border well are consistent with the range of perchlorate contamination found throughout the Lower Umatilla Basin Groundwater Management Area. The eastern border well also exhibited the highest nitrate concentrations. Both wells are also in areas that are adjacent to neighboring agricultural properties that use irrigation extensively. None of the potential source area wells exhibited detections of perchlorate. The CRE Phase I supports the conclusion of the Range Condition Assessment for the Whidbey Island Complex; that a perchlorate contamination source does not exist at NWSTF Boardman. No HMX, RDX, or TNT was found in wells at NWSTF Boardman or to the north in the Lower Umatilla Basin Study. Based on these considerations, it is recommended that NWSTF Boardman does not proceed to the CRE Phase II of the RSEPA process.