



New Mexico Holloman AFB

Facility and Location

Holloman Air Force Base (AFB) is located ten miles west of Alamogordo and 70 miles east of Las Cruces. Established in 1942, Holloman AFB, then named the Alamogordo Army Airfield, served as the test site for the first atomic bomb detonation at Trinity site. From 1942 to 1945, the base served as the training grounds for over 20 different groups, flying primarily B-17s, B-24s, and B-29s. Currently, Holloman AFB is home of the 49th Fighter Wing and includes the F-22A Raptor, T-38 Tallon, MQ-1 Predator, MQ-9 Reaper, QF-4E Drone, F-4 Phantom II, and German Air Force Tornado. Holloman AFB serves as the primary testing facility for acceleration research and the training center for the German Air Force's Tactical Training Center. The Holloman High Speed Test Track occupies 11 square miles in the northwest area of Holloman AFB and is adjacent to the 4,000 square mile White Sands Missile Range. Test capabilities include aircraft munitions launch and infrared countermeasures, missile guidance systems and other components, crew life support systems, and munitions impact analysis.

Media Sampled and Findings

Drinking Water — Prior to 2007, one sample detected perchlorate at 0.3 ppb.

Groundwater — In 2011, 84 of 84 samples detected perchlorate from 0.05 to 170 ppb. In 2010, 41 of 41 samples detected perchlorate from 0.37 to 150 ppb. In 2009, 20 of 20 samples detected perchlorate from 15 to 190 ppb. In 2008, 11 of 11 samples detected perchlorate from 12 to 150 ppb. In 2007, eight samples from Site OT-37 detected perchlorate from 1.3 to 6.7 ppb and three samples from Site OT-38 detected perchlorate from 4.8 to 5.1 ppb. Additionally, four of four samples from Building 58 detected perchlorate from 0.32 to 0.35 ppb. Prior to 2007, 15 of 19 samples around Building 1176 detected perchlorate from 4.7 to 38 ppb and 11 of 11 samples from Site SS-39 detected perchlorate from 12 to 130 ppb.

Sediment — Prior to 2007, three samples around Building 1176 reported no detection. One of fourteen sediment samples from the Lost River Sites detected perchlorate at 105 ppb.

Soil — In 2011 24 of 24 samples detected perchlorate from 1.28 to 48.2 ppb. In 2007, 15 of 15 samples from Site OT-37 detected perchlorate from 0.3 to 14 ppb. Prior to 2007, 9 of 16 samples around Building 1176 at the 2nd, 3rd, and 4th Lost River Sites detected perchlorate from 70 to 2,800 ppb.

Surface Water — In 2011, four of four samples detected perchlorate from 0.29 to 10 ppb. Prior to 2007, 18 samples from the 2nd, 3rd, and 4th Lost River Sites reported no detection.

Appropriate Actions

Perchlorate was detected above the EPA and DoD Preliminary Remediation Goal of 15 ppb in groundwater at the AOC U (Lost River Basin) site, and SS-39.

The Lost River Basin (AOC-U) is a large intermittent drainage basin that receives surficial runoff from six Environmental Restoration Program (ERP) sites which include nine SWMUs and AOCs that are listed on the HAFB Hazardous Waste Facility Permit. Elevated concentrations of perchlorate were detected downgradient of ERP sites SS-39 (Missile Fuel Spill Area), OT-37



(Early Missile Test Site), and OT-04 (Acid Trailer Burial Site). In general, each of these sites either utilized solid rocket fuel (containing potassium perchlorate and/or ammonium nitrate) for launching missiles (or test sleds) or served as disposal areas from the late 1940s through the early 1960s. Further delineation of perchlorate is currently being conducted at AOC-U and the adjacent ERP sites SS-39 and OT-37.

At SS-39, detections of perchlorate occurred in groundwater. Total dissolved solids concentrations at SS-39 are above 10,000 ppb and not considered a public water supply by the New Mexico Administrative Code (NMAC, 20.6.2.3101). Additionally, all releases occurred prior to 1975 and the highest perchlorate concentrations occur within the Lost River Drainage Basin (downgradient of the site). Site SS-39 does not appear to be a continued source of perchlorate contamination. Based on the information presented above, no corrective action for groundwater is scheduled at SS-39 other than continued monitoring.