



Arizona

Yuma Proving Ground

Facility and Location

Yuma Proving Ground is located near the Arizona-California border, adjacent to the Colorado River, approximately 24 miles north of the city of Yuma, Arizona. The principal mission of Yuma Proving Ground is to plan, conduct, analyze, and report the results of military material tests in development and production phases; review plans and monitor developmental testing; conduct operational testing and troop training exercises; and provide technical support and guidance to other military services and federal agencies. Recent projects have included munitions and weapons testing (e.g., artillery pieces, smart munitions, mines, mortars), tank and automotive testing, natural environment testing, aviation system testing and specialized forces training. Yuma Proving Ground is one of three installations in the study area that operates an active open burn/open detonation (OB/OD) facility.

Media Sampled and Findings

Drinking Water — Prior to 2007, 94 samples taken at six drinking water systems reported a high detection of 31.9 ppb, which is believed to be an inaccurate result. Confirmatory sampling of the high detect well has shown results less than 4 ppb. Over 90 percent of the samples were within 4 to 5 ppb range, consistent with Colorado River concentrations, and 97 percent of the samples were below 10 ppb.

Groundwater — In 2011, two of two samples detected perchlorate at 1.1 and 1.8 ppb. In 2007, two of eight samples detected perchlorate at 1.2 ppb.

Sediment/Soil — Prior to 2007, 37 of 88 samples detected perchlorate with a high of 1,160 ppb. Samples were collected from dry washes associated with three OB/OD zones. All samples were below the Environmental Protection Agency Region IX soil level of concern.

Surface Water — Prior to 2007, one sample drawn from puddled rainwater near the OB/OD site detected perchlorate at 214 ppb.

Appropriate Actions

Prior to 2007 Surface water samples at the OB/OD site were above the EPA and DoD Preliminary Remediation Goal of 15 ppb. To address perchlorate levels, Yuma Proving Ground monitoring wells were installed at the state permitted OB/OD facility. Groundwater samples were well below the PRG. Additionally, soil concentrations are below the 55,000 ppb residential and 720,000 ppb industrial soil screening levels recommended by EPA Region IX.