



Marine Corps Logistics Base (MCLB) Albany, Georgia

Range Environmental Vulnerability (REVA) Factsheet

July 2019

Background

DoD uses and manages operational ranges to support national security objectives and maintain the high state of operational readiness essential to its mission requirements.

DoD conducts non-regulatory, proactive, and comprehensive operational range assessments (ORAs) to support the long-term sustainability of these ranges while protecting human health and the environment.

The purpose of an ORA is to determine if there is a release or substantial threat of a release of munitions constituents (MC) from an operational range to an off-range area that exceeds an applicable regulatory standard or creates a potential unacceptable risk to human health or the environment.

The Range Environmental Vulnerability Assessment (REVA) Program is the U.S. Marine Corps (USMC) program to meet the DoD ORA requirements.

Operational Ranges Overview

MCLB Albany is located in southern Georgia, approximately five miles southeast of the center of the city of Albany, in Dougherty County. The mission of MCLB Albany is to provide facilities infrastructure and a range of tailored support services.

The installation is divided approximately into thirds and includes industrial buildings and warehouses; administrative, community support, and recreation facilities; and family housing, natural resources, ranges and a non-live fire maneuver area.

Munitions use was recorded at three small arms ranges (SARs) during the periodic review period (2013-2018). Primary munitions used are small arms, where REVA focuses on potential migration of lead. High explosives (HE) are not currently used at the installation.

ORA Findings (6/2019)

The MCLB Albany REVA Periodic Review concluded MC source – receptor pathways are incomplete; consequently, there is no known off-range migration of MC that presents a potential unacceptable risk to human health or the environment. The quantity of lead generated at the SARs is relatively low, and appreciable off range migration of lead is unlikely due to the small MC source, vegetated earthen berm, bullet capture system, and deep groundwater; therefore, the limited human and ecological receptors are unlikely to be exposed to MC.

Next Steps

The operational ranges will be reassessed during the next REVA Periodic Review (5 years) or sooner if there are changes to site conditions.

Location of MCLB Albany, Georgia





Range Assessment Overview

Scope: This REVA Periodic Review for MCLB Albany covers munitions use on operational ranges that occurred from 2013 through 2018. The previous REVA study at MCLB Albany (for the years 2007 through 2012) concluded lead was migrating in sediment from the Small Arms Ranges (SARs) (based on sample results collected at the edge of the Range boundaries); however, samples collected did not exceed screening values and the potential for exposure to human receptors was very limited. There was a potential for exposure to ecological receptors in a wildlife area, but low surface water lead concentrations indicate that the exposures of lead to ecological receptors were minimal.

Approach: REVA uses a conceptual site model (CSM) to inform decision making. A complete CSM pathway consists of a source of MC, transport mechanism of MC to an off-range exposure media, and receptor interaction with the off-range exposure media. For this REVA Periodic Review, data were collected to update the CSM since the previous REVA review was completed in 2012. This included a review of the operational ranges (e.g., range inventory and changes in design), changes in range use (e.g., amounts and types of munitions expenditure), changes in potential migration pathways, and changes to receptors (e.g., newly installed groundwater supply wells, ecological).

Results: At MCLB Albany, the CSM pathways for MC migration from the operational ranges to off-range receptors are incomplete, predominantly due to the relatively low quantity of lead generated at the SARs, SAR engineering controls, deep groundwater, and limited human and ecological receptors interaction with MC.

Source: The quantity of MC (primarily lead) generated is low. Engineering and natural controls inhibit MC migration off-range.

Transport Mechanisms: Off-range MC migration is unlikely based on a limited current MC source, previous range maintenance activities, vegetation, and engineering controls, which limit surface runoff and erosion. Minimal off-range transport of lead in surface soil and sediment via surface water is indicated by low munitions expenditures during the current review period and environmental factors that are not conducive to the mobilization of lead in surface water. The depth to groundwater and clay overburden makes vertical migration of lead to groundwater unlikely.

Off-Range Receptors: Surface water is not used as a drinking water source. Human recreational receptors and ecological receptors may interact with exposure media (surface water, sediment, and surface soil) in this area; however, site conditions at the MC source areas make it unlikely that lead will migrate off range in appreciable quantities.

Conclusion: The REVA Periodic Review of MCLB Albany concludes that there is no known off-range migration of MC that presents a potential unacceptable risk to human health or the environment. The operational ranges will be reassessed during the next REVA Periodic Review.

For more information on this range/range complex/installation contact Jennifer Wilber (jennifer.wilber@usmc.mil). For more information on the DoD Operational Range Assessment Program visit <http://www.denix.osd.mil/sri/home/>