Leach Range, Pennsylvania

April 2018

Background

The Department of Defense (DoD) uses and manages operational ranges to support national security objectives and maintain the high state of operational readiness essential to its mission requirements. The Department non-regulatory, proactive, and comprehensive conducts 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 Army National Guard (ARNG) ORA effort was developed to address DoD requirements detailed in DoD Directive 4715.11 (10 May 2004) and DoD Instruction 4715.14 (15 November 2018). The overall objective of the ORA is to assess operational ranges/range complexes to determine if an off-range MC release or substantial threat of an off-range MC release exists; if an off-range MC release exists, does it exceed an applicable regulatory reporting standard; and if an MC release or substantial threat of a release exists, determine whether it creates a potentially unacceptable risk to off-range human health or the environment.

Operational Range Assessment Findings (04/2018)

The 2018 Periodic Review determined that MC were Unlikely to migrate off-range at levels that pose an unacceptable risk to human health or the environment.

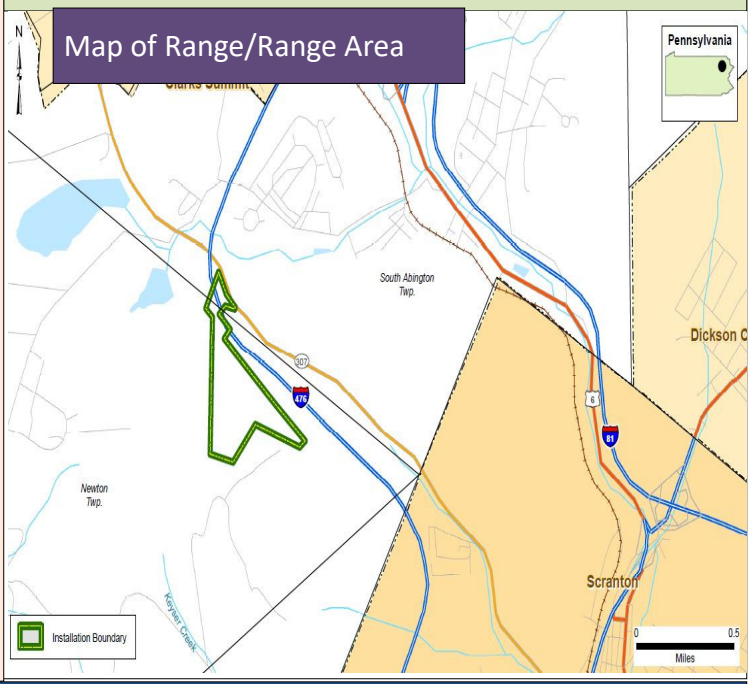
Next Steps

The installation's operational ranges should be placed into the Periodic Review cycle to be re-assessed in five years.

Installation Overview

Leach Range is located in Lackwanna County in northeastern Pennsylvania, approximately one-mile northwest of Scranton Pennsylvania. The installation is situated within the Pocono Mountains, and bordered to the east by Interstate Highway 476. Established in 1937, the installation has primarily been used for weekend training by the Pennsylvania Army National Guard (PAARNG) and local law enforcement. Today, two operational ranges are present at Leach Range including one small arms range totaling 3.71 acres, and one maneuver and training area totaling 72.2 acres. No cantonment or non-operational area exists at Leach Range. Historically, a 200-meter (m) range was present on the installation. The 200 m range, also identified as the .45 caliber range, was utilized from 1977 to 1983 by Pennsylvania State Troopers. The range was located in the footprint of the current

Map of Range/Range Area



Installation Overview (Continued)
small arms range. Small caliber munitions were historically used on the .45 caliber range; however, no fixed firing points or impact berms were associated with the range. Live-fire was directed from north to south toward a natural hillside.

Previous ORA Investigations
In 2007, a Phase I ORA was conducted to determine if MC were migrating from Leach Range's two operational ranges at concentrations that posed an unacceptable risk to human health and/or the environment. The assessment determined that MC from the installation's small arms range had the potential to migrate off-range within surface water and groundwater at concentrations that posed an unacceptable risk to off-range receptors. As such, this range was recommended for further evaluation as part of a Phase II assessment.

The 2010 Phase II evaluated the Inconclusive small arms range situated within the Leggetts Creek drainage. During the Phase II reconnaissance it was determined that a limited source was present at the small arms range. This conclusion was based on observations and annual munition expenditure data (approximately 29,000 rounds per year) provided by range personnel. One drainage swale provided the primary pathway for surface water to migrate off-range to Summits and Leggetts Creek. Installation personnel indicated flow in the drainage swale only occurs during major storms and annual snow melt.

Based on observations, expenditure data, and limited surface water flow, it was determined that no MC is migrating off-range at concentrations that pose an unacceptable risk to off-range receptors. The small arms range was re-categorized as Unlikely and into a five-year periodic review cycle.

Periodic Review (2018)
As part of the 2018 Periodic Review, each component of the conceptual site model (CSM) developed during the previous assessments was reviewed. The Periodic Review determined that the Scranton Police Department had installed bullet traps since the Phase II. As such, the associated MC source was being contained. Based on the implementation of this source management BMP and a lack of changes to associated pathways or receptors, the unlikely conclusions from the Phase II remain valid.

For more information on Leach Range, contact RA-MVPUBLICAFFAIRS@pa.gov
For more information on the DoD Operational Range Assessment Program visit https://www.denix.osd.mil/orap/home/