



Westminster Armory, Vermont

October 2019

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 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 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.

Installation Overview

Westminster Armory (Westminster) is located in southeastern Vermont (VT) approximately two miles southwest of the town of Westminster, and just east of Interstate 91 in Windham County. The installation was established in the mid-1970s with additional maintenance and storage buildings constructed in 1976. Westminster is owned by the State of Vermont and is home to Company B, 2nd Battalion, 172 Armor Regiment of the Vermont Army National Guard (VTARNG) and serves as a training and maintenance facility for the VTARNG.

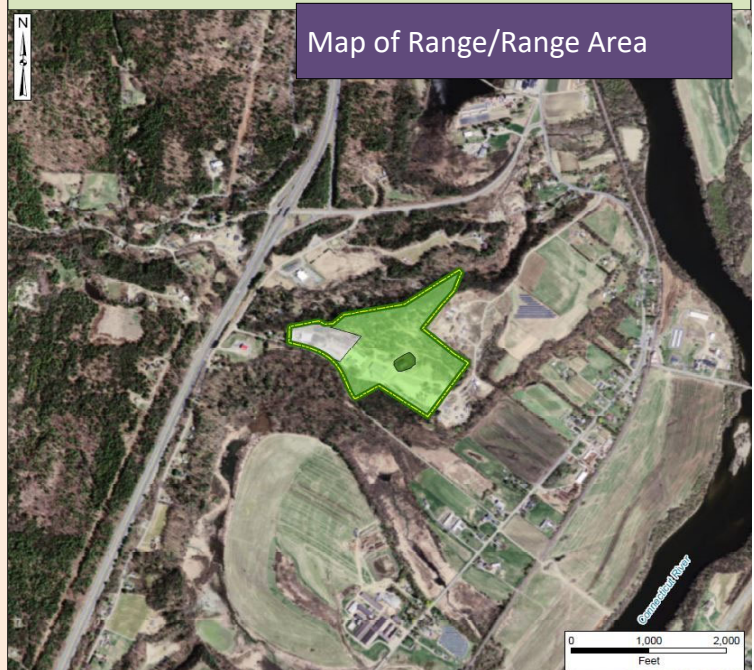
Currently, the installation covers a total of 45.42 acres. Westminster's operational footprint includes a 0.34-acre small arms range and a 38.7-acre maneuver and training area. The remaining 6.72 acres comprise a non-operational cantonment area which is located in the western section of the installation.

Operational Range Assessment Findings (10/2019)

No source was identified at the maneuver and training area. Based on range renovations and the conclusions of the 2012 SESOIL modeling, MC are not migrating from the Westminster's small arms range at concentrations that pose an unacceptable risk to human health or the environment.

Next Steps

The Westminster Armory should be placed into the Periodic Review cycle to be re-assessed in five years.



Installation Overview (continued)

No munitions are used within the maneuver and training area, which is utilized for non-live –fire field training, maneuvers, and heavy equipment training. The small arms range is primarily utilized by VTARNG for live-fire small caliber training. However, local law enforcement and local recreational shooters also use the small arms range.

Previous ORA Investigations

In 2006, a Phase I qualitative assessment was performed at Westminster to determine if MC were migrating from the installation's two ranges at levels that posed an unacceptable risk to human health or the environment. The Phase I determined that a limited source was present within the maneuver and training area and no MC were migrating from the range at unacceptable concentrations. However, at the installation's small arms range, the Phase I identified a potential MC source, a potential groundwater pathway, and downgradient human and ecological receptors. As such, the small arms range was classified as Inconclusive and recommended for a Phase II groundwater investigation.

In 2012, a Phase II was conducted to determine if MC were migrating from Westminster's small arms range within groundwater. In lieu of sampling, the potential migration of MC was assessed using a seasonal soil compartment model (SESOIL). The model concluded that lead was migrating through the soil at a rate of approximately 8 centimeters per 100 years. Based on the data presented in the model, for the conditions assessed in 2012, MC are not migrating into underlying groundwater (100 ft below ground surface). As such, the small arms range was re-categorized as Unlikely and Westminster's operational ranges were placed into a five-year Periodic Review cycle.

Periodic Review (2017)

In 2017, an ORA Periodic Review was conducted for Westminster's maneuver and training area and small arms range to determine if components of the Phase II CSM had changed. The ORA determined that no live-

fire had occurred at the maneuver and training area training area since 2012.

During the Periodic Review site visit, a number of renovations were noted at the small arms range including: the addition of concrete enclosure wall, and the addition of a bullet trap. The implementation of these improvements reduced the amount of MC available for migration and further reduced migration potential. Based on these renovations and the conclusions of the 2012 SESOIL modeling, the 2017 Periodic Review determined that MC are not migrating from the Westminster's small arms range. As a result, the Unlikely categorization reflected in the 2012 Phase II remains unchanged, and installation's ranges have been placed into the five-year Periodic Review cycle.

For more information on Westminster Armory , visit <https://vt.public.ng.mil/>
For more information on the DoD Operational Range Assessment Program visit <https://www.denix.osd.mil/orap/home/>