



# Camp Pendleton, Virginia

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

Camp Pendleton is located Virginia Beach, Virginia. In 1911, the Commonwealth of Virginia began using 350 acres as a known distance range (referred to as the State Rifle Range). The VAARNG and the District of Columbia ARNG used the area from 1912 to 1917 for summer encampments, and the U.S. Navy leased the property from 1917 to 1920. The Department of the Army leased the installation during World War II and renamed the installation Camp Pendleton. In 1946, the installation was returned to the Commonwealth of Virginia. The installation's property was leased to various government agencies for development between 1970 and 1985.

Camp Pendleton is currently comprised of 8 operational range areas totaling 87.8 acres and 225.3 acres of other than operational area. The operational

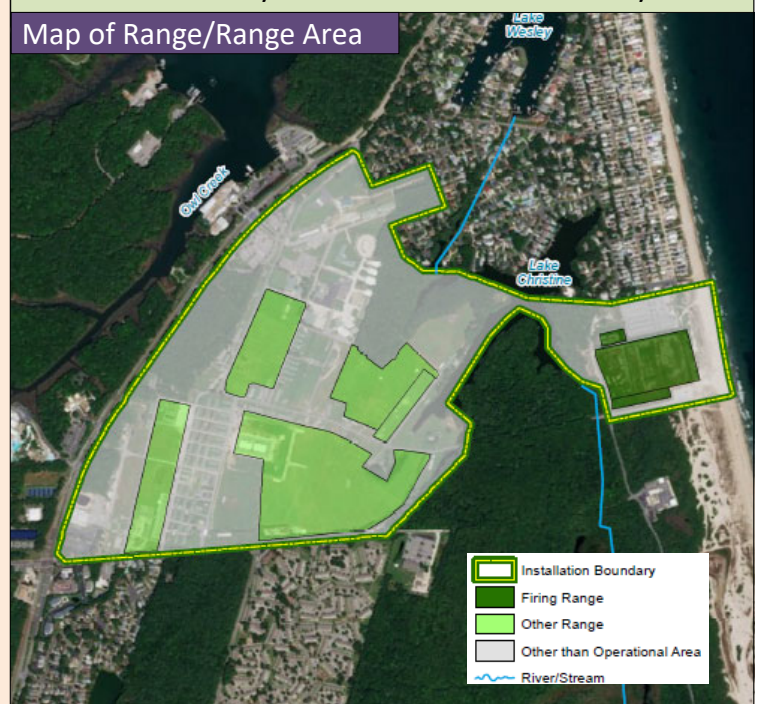
## Operational Range Assessment Findings (03/2018)

No source was identified at the maneuver and training area. Based on observed migration control measures and results of previous sampling, the periodic review determined that MC are not migrating from the installation at concentrations that pose an unacceptable risk to human health or the environment.

## Next Steps

Camp Pendleton should be placed into the Periodic Review cycle to be re-assessed in five years.

## Map of Range/Range Area



Installation Overview (continued)

range areas consist of 3 small arms firing ranges and 5 maneuver and training areas.

The Virginia Army National Guard (VAARNG) currently uses Camp Pendleton to provide professional military training while simultaneously maintaining positive community relations and environmental sustainment.

Previous ORA Investigations

In 2008, a Phase I qualitative assessment was performed at Camp Pendleton to determine if MC were migrating from the installation's 11 ranges at levels that posed an unacceptable risk to human health or the environment. The Phase I determined that a limited source was present at 8 operational ranges and no MC were migrating from the ranges at unacceptable concentrations. The Phase I determined that Camp Pendleton's 3 small arms ranges contained a source of potential MCOC, however the associated surface water and groundwater flow into Lake Christine. Surface water and sediment samples collected from the lake indicated that no metals were migrating at levels that posed an unacceptable risk to human health or the environment. As such, all ranges at Camp Pendleton were classified as Unlikely.

Periodic Review (2018)

Based on the completion of the 2018 Periodic Review, munitions use had decreased and changes to the operational range layout have been minor at Camp Pendleton.

Camp Pendleton's maneuver and training areas do not contain a concentrated source area due to limited or no military munitions usage.

The small arms firing ranges are a potential source of MCOC, but it is unlikely that MCOC could migrate off-range via the surface water pathway or groundwater pathway at concentrations that could create an unacceptable risk to human health and/or the environment.

All drainage associated with the small arms ranges

flows to a ditch that runs along the southern edge of the Rifle Range ( and eventually discharges to Lake Christine) or dissipates within the range boundaries to shallow groundwater that flows towards Lake Christine and its associated wetlands; however, previous sampling conducted at Camp Pendleton determined that MCOC were not discharging to Lake and associated wetlands at levels that would pose an unacceptable risk to human and/or ecological receptors. Based on the lack of changes in conditions since the ORA Phase I Addendum (i.e., range layout, topography) at Camp Pendleton, it is unlikely that MCOC could migrate off-range via the surface water pathway or groundwater pathway.

For more information on Camp Pendleton, visit <https://vaquard.dodlive.mil/contactpao/>  
For more information on the DoD Operational Range Assessment Program visit <https://www.denix.osd.mil/orap/home/>