



Operational Range Assessment Dobbins Air Reserve Base

Air Force Operational Range Assessment Program

February 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. 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 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 USAF Operational Range Assessment Program (ORAP), established to comply with DoD policy, sets forth procedures for consistently conducting ORAs throughout the Air Force. The USAF ORAP assessment methodology uses an installation-wide approach to verify the ORAP inventory and accomplish range-specific assessments. An Air Force ORA is comprised of two primary phases: Qualitative Assessment, Phase 1 and Quantitative Assessment, Phase 2 (if required).

- A Qualitative Assessment, Phase 1, encompasses records review, interviews, and a visual survey.
- A Quantitative Assessment, Phase 2, encompasses records review, interviews, visual survey, and environmental media sampling.

Installation Overview

Dobbins Air Reserve Base (ARB) is located in Cobb County, Georgia. The area surrounding the installation is largely developed by metropolitan Atlanta, suburban communities, and other commercial development.

During implementation of the USAF ORAP, two ranges were assessed – a Small Arms Range (SAR) and an Explosives Ordnance Disposal (EOD) Range.

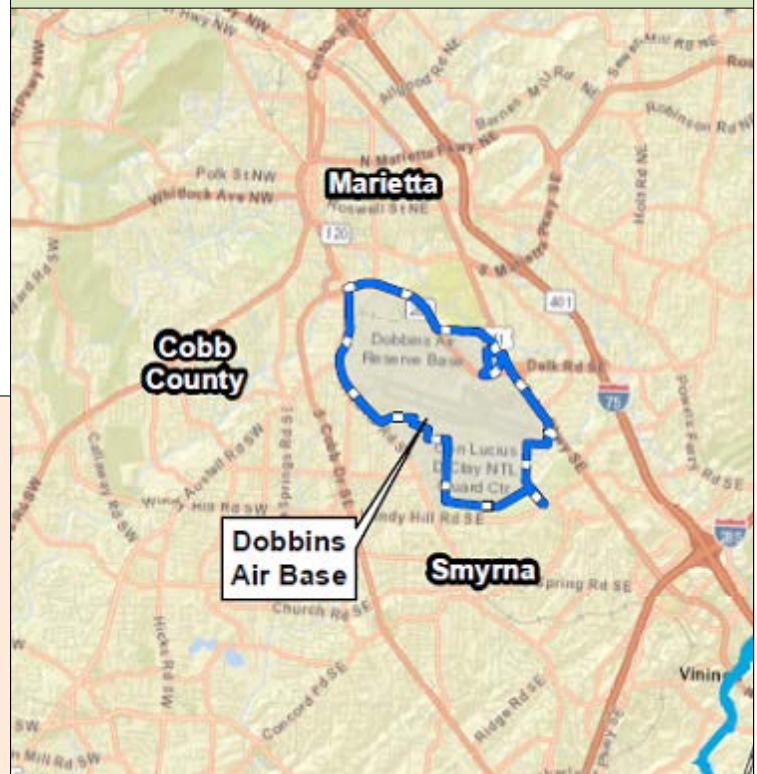
ORAP Findings: October 2017 ORA Report

- Munitions constituents (MC) may be transported to off-range locations through the surface water/sediment pathway.
- A potential off-range migration of MC exists for one of the two areas assessed at Dobbins ARB.
- No unacceptable risks to humans or the environment were identified for the areas evaluated at Dobbins ARB.

Next Steps

Dobbins ARB is scheduled to be assessed in accordance with USAF and DoD policy specifying periodic assessment at least every five.

- One area is scheduled for further evaluation earlier than the specified five years due to a potential off-range MC release finding.



Installation Overview Continued

The following summarizes USAF ORAP efforts for the SAR and EOD Range. This is the second ORA at the SAR and EOD Range.

SAR Assessment Overview

The SAR (also referred to as SAR #3) is located in the southeastern portion of Dobbins ARB. The range is 1.56 acres, which is defined by a fence that surrounds the area, including a small detention pond that collects surface runoff. The range became operational in 1996 and is used for small arms proficiency training. The SAR is a partially enclosed range with covered firing line, overhead baffles, a concrete floor, concrete sidewalls, and a rubber bullet trap mounted against steel panels. Frangible and non-frangible munitions have been expended; and the range is estimated to be used four days per week.

In 2011, an initial Phase I ORA was completed at the SAR. No complete source-receptor interactions were identified for air, soil, or groundwater. However, a potentially complete exposure pathway was identified for surface water/sediment. A Phase 2 ORA was recommended to further evaluate MC migration towards off-range human receptors.

The 2017 Phase 2 ORA effort at the SAR included soil and sediment sampling. A sample was collected from the on-range detention pond, and one was collected within a drainage ditch that leads from the detention pond to an unnamed stream. Samples were analyzed for MC metals (copper, lead, tungsten, and zinc). MCs were detected in the detention pond soil/sediment samples; however, off-range concentrations did not exceed screening criteria. Based on data, MC may be transported in stormwater; however, the detention pond limits further surface transport. MC metals are anticipated to be deposited in the on-range detention pond, and bind to soil particles before reaching shallow groundwater. Therefore an MC release was not identified for SAR via surface water/sediment, and no suspected risk to off-range human and ecological receptors exists.

EOD Range Assessment Overview

The EOD Proficiency Range, encompassing 5.7 acres, is located in the southeastern portion of Dobbins ARB. A 300-foot quantity distance safety arc (6.5 acres) is associated with the range. The EOD Range has been used for proficiency training approximately twice per month since 1999. Prior to EOD activities, the area was used as a small arms range from the late 1950s. Over the years the area was modified; however, parts of the former soil berms remain. The EOD Proficiency Range consists of a demolition bunker and has multiple training areas: a Military Operations in Urban Terrain (MOUT); land mine training area; a robotics training area; and cap workup area.

In 2011, a Phase I ORA was completed at the EOD Range. No complete source-receptor interactions were identified for air, soil, or groundwater. However, a potentially complete exposure pathway was identified for surface water/sediment. Further assessment was recommended and a Phase 2 ORA scheduled.

The 2017 Phase 2 ORA effort included soil, surface water, and sediment sampling to quantify any potential transport and/or accumulation of MC. Samples were collected from an on-range drainage swale; and from an off-range unnamed stream, spill pond, and outfall. Samples were analyzed for metals, explosives, and perchlorate. Metals and perchlorate were detected in the on-range drainage swale; however, no explosives were detected. Iron, zinc, and 1,3-Dinitrobenzene (1,3-DNB) were detected below screening criteria in an upgradient reference sample from the unnamed stream. These compounds were also detected at concentrations below screening criteria in the outfall sample. It should be noted, 1,3-DNB slightly exceeded screening criteria in the duplicate outfall sample. A substantial threat of release was identified for the EOD Range; however, no unacceptable risks to human health or the environment exist. Given the area receives runoff from the EOD Range, SAR, and a large portion of the southern half of the base the off-range detection of 1,3-DNB was not determined to be a release as it could not solely be attributed to the range.

For more information on this assessment or the Air Force Operational Range Assessment Program contact the Ranges Subject Matter Expert, Technical Branch, Environmental Quality Directorate, Air Force Civil Engineer Center
For more information on the DoD Operational Range Assessment Program visit <https://denix.osd.mil/orap/home/>