Seagoville Local Training Area, Texas

Seagoville LTA, Texas | January 2021

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 Army ORA effort was developed to address Department of Defense (DoD) requirements detailed in DoD Directive 4715.11 (10 May 2004) and DoD Instruction (DoDI) 4715.14 (15 November 2018). These documents require all Services to identify operational ranges, identify munitions constituents (MC) contained in military munitions used or being used on operational ranges, and assess whether MC from military munitions used on operational ranges are migrating to off-range areas at levels posing an unacceptable risk to off-range human health and/or the environment. 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.

Range Overview

Seagoville Local Training Area (LTA) is currently owned by the Department of Defense (DoD). As of the Advanced Assessment, the installation encompasses 236.23 acres of which 198 acres consists of the operational footprint which includes 13 operational ranges. The remaining 38.23 acres consist of non-operational areas, including a cantonment area. The only firing range on the installation is the small arms range which uses small caliber munitions.

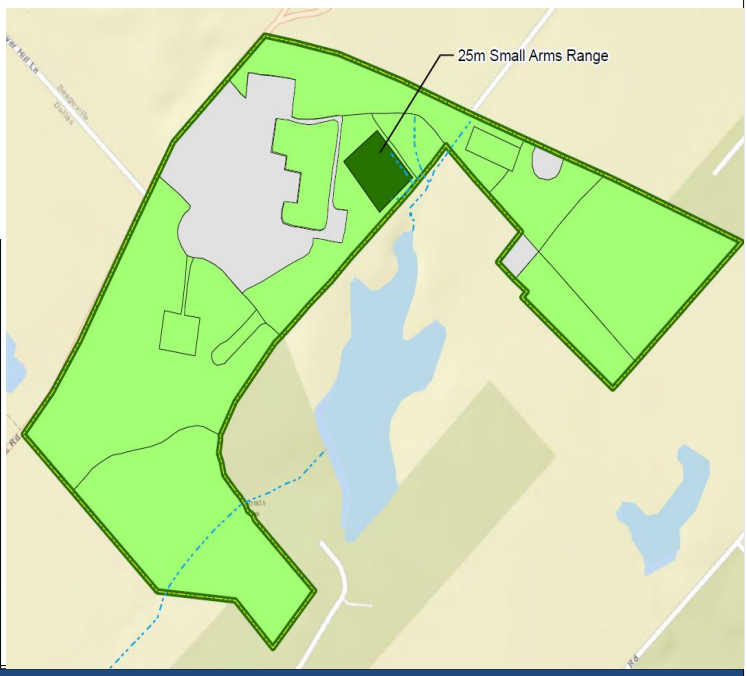
Operational Range Assessment Advanced Assessment Findings (12/2020)

Based on surface water and sediment sampling results of the assessment, no off-range MC release or substantial threat of an off-range MC release currently exists at the Seagoville LTA.

Next Steps

No off-range MC release or substantial threat of an off-range MC release currently exists at Seagoville LTA and the installation's Unlikely ranges should be included in the FY23-27 cycle of ORAs to satisfy re-assessment requirements.

Map of Range/Range Area



Previous ORA Investigations

In 2008, an ORAP Phase I Qualitative Assessment was conducted for all operational ranges at Seagoville LTA to determine if there has been, or potentially could be, an interaction between potential MC and off-range human and/or ecological receptors. The Phase I concluded that current and/or historical sources of potential MC from 1 out of the 13 active operational ranges, a live-fire small arms range has the potential to mitigate off the installation at levels that pose an unacceptable risk to off-range human and/or ecological receptors. The small arms range was categorized as Inconclusive and was recommended for further investigation as part of a Phase II Quantitative Assessment.

In 2013, a Phase II Quantitative Assessment was conducted to determine whether MC were migrating off-range from the Inconclusive range, along surface water pathways, at concentrations that posed an unacceptable risk to human health or the environment. As part of this investigation, surface water and sediment samples were collected along the intermittent channel draining the small arms range. Surface water samples were analyzed for metals and hardness; sediment samples were analyzed for total organic carbon and Simultaneously Extracted metals (SEM)/ Acid Volatile Sulfide(AVS).

The Initial Phase II Investigation results revealed a potential for copper and lead to migrate off-range at concentrations that may pose an unacceptable risk to environmental receptors. An Expanded Investigation was conducted in order to satisfy the aquatic habitat requirements for further evaluation of the results via a Screening Level Ecological Risk Assessment (SLERA). Similar to the Phase II Initial Investigation, the results from the Expanded investigation showed concentrations of copper and lead in surface water exceeding the freshwater ecological screening levels. However, the SLERA indicated that MCOC concentrations detected in the initial and expanded Phase II Assessments were not expected to have a potential for risks to benthic, aquatic, or piscivorous ecological receptors. Based on the conclusions drawn

Previous ORA Investigations continued

from the SLERA, MCOC concentrations migrating off range are not expected to present an unacceptable risk to downstream ecological receptors. Therefore, the small arms range was recategorized as Unlikely and the operational ranges at Seagoville LTA were placed into a periodic review program under the ORAP.

Advanced Assessment Overview (2020)

For the Advanced Assessment, downstream surface water and sediment samples were collected from the same locations as the Phase II Expanded Investigation, since source-pathway-receptor conditions were consistent with the Phase II conceptual site model.

Surface water sampling results indicated no concentrations of metals MCOC were detected above their respective freshwater ecological screening levels. Based on these results, the assessment determined no migration of metals in surface water to downstream receptors is occurring, and no associated risk exists. The 95 percent UCLM of lead in sediment exceeded the ecological screening level, however no metals MCOC were significantly greater than average reference concentrations. Additionally, SEM/AVS analysis determined that metals in sediment do not pose a direct risk to benthic organisms. Therefore, no migration of MCOC in sediment was identified and no risk to off-range receptors is occurring.

Based on sampling results of the Advanced Assessment, metals MCOC are not migrating from the small arms range and concentrations detected downstream are not expected to pose an unacceptable risk to off-range receptors. Based on these conclusions, the small arms range was determined to remain Unlikely. This downward trend in lead and copper concentrations since the Phase II may be attributable to renovations and best management practices implemented at the small arms range in 2013. The renovations included vegetating the range floor, providing a more substantial cover overtop the impact berm, and installing a new drainage system. All 13 operational ranges at Seagoville LTA should be included in the FY23-27 ORA cycle to meet DoDI requirements.

For more information on Seagoville LTA contact the 63rd Readiness Division's PAO at usarmy.usarc.63-rsc-mbx.pao@mail.mil. For more information on the DoD Operational Range Assessment Program visit [https://www.denix.osd.mil/orap/home/]