



Operational Range Assessment

Vance Air Force Base

Air Force Operational Range Assessment Program

December 2023

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 (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 DAF Operational Range Assessment Program (ORAP), established to comply with DoD policy, sets forth procedures for consistently conducting ORAs throughout the Air Force. The DAF 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

Vance Air Force Base (AFB) encompasses roughly 2,133 acres of land in Garfield County, approximately three miles southwest of the city of Enid. Vance AFB also manages Kegelman Auxiliary Airfield, which encompasses approximately 1,066 acres of land within Alfalfa County in north-central Oklahoma. Kegelman Auxiliary Airfield is located approximately 27 miles northwest of Vance AFB.

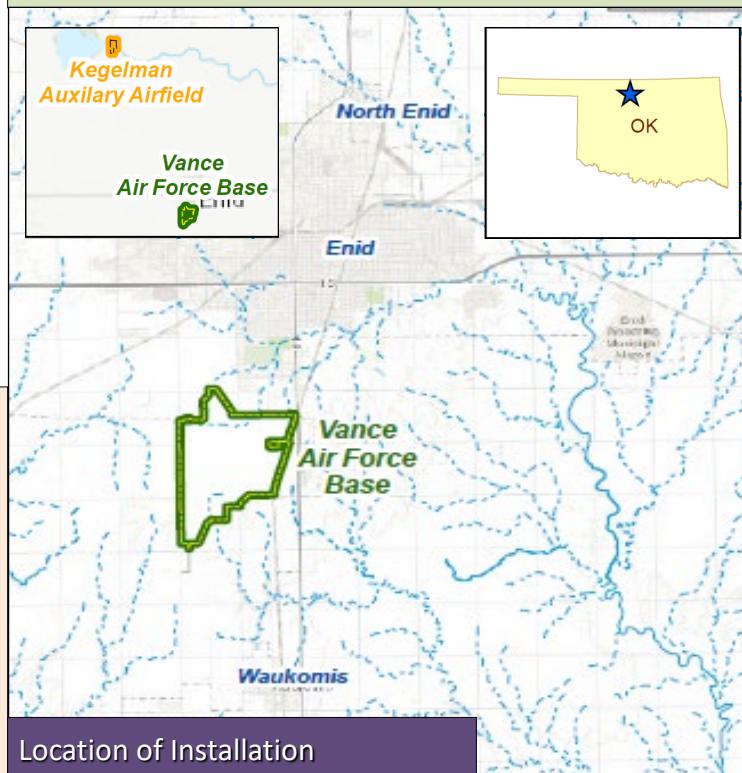
ORAP Findings: December 2023 ORA Report

Vance AFB has five operational areas.

- MC of potential concern for the operational areas are metals and explosives
- No actual or substantial threat of an off-range MC release exists for any of the areas assessed
- No unacceptable risks to human health or the environment were identified

Next Steps

Vance AFB is scheduled to be assessed in accordance with DAF and DoD policy specifying periodic assessment at least every five years or sooner if significant changes occur that may impact assessment decisions.



Installation Overview Continued

Vance AFB has five operational areas which use munitions during training: Canine Training Area; Shoot, Move, Communicate (SMC) Area; Practice Grenade Range; Emergency Disposition Area (EDA); and Combat Arms Training Maintenance (CATM) Facility.

The installation also contains various munitions and seat ejection cartridge storage areas. However, no range activities occur at these storage areas (no MC source) and as such are not further evaluated.

Canine Training Area Overview

The Canine Training Area, encompassing 0.60 acre, is located within the central portion of Vance AFB. Small caliber blanks are used for training and the unit is authorized to conduct training throughout the base. There is a limited number of blanks fired annually, and all casings are policed following training and turned in for recycling. Based on information collected, there is no known or suspected significant quantity of MC being deposited into the environment. Minimal use (limited MC source) shall be reconfirmed during the next periodic assessment.

SMC Area Overview

The SMC Area, encompassing 0.47 acre, is located within a fully enclosed facility in the central portion of Vance AFB. Training involves only dye marker rounds for active shooter and breach training. Based on data collected, the SMC Area meets the criteria of an indoor range and as such, no MC are known or suspected of being deposited into the environment. Use of the SMC Area shall be reverified during the next assessment.

Practice Grenade Range Overview

The Practice Grenade Range, encompassing 9.23 acres, is located within the southern portion of Kegelman Auxiliary Airfield. The range was established for weapon qualification training with the M203 grenade launcher. Limited information on historical use of the range was identified. It was indicated that the range was used for a short period during the 1990s, and from 2019 to 2021 with minimal expenditures of practice M781 40-millimeter (mm) rounds.

Practice Grenade Range Overview (continued)

All 40-mm practice grenade rounds expended on the range were collected after use. Personnel indicated the range will not likely be used going forward. It was recommended the operational status and limited use be confirmed prior to further evaluation.

CATM Facility Overview / Assessment Summary

The CATM Facility encompasses 2.08 acres and includes a fully contained 25-meter outdoor range located in the southeastern portion of Vance AFB. The Facility includes historical earthen side and back berms and is defined by a security fence. The range has been used for small arms weapons training since 1961.

The prior Phase 1 ORAs (2012, 2018) determined a potential source of MC (primarily metals) present; but all exposure pathways were deemed incomplete.

During this periodic Phase 1, it was determined that MC may potentially be transported during heavy precipitation events. Though the active portion of the CATM Facility is fully covered, stormwater could potentially flow into a trench drain and subsequently off-range. Additionally, MC present within the historical impact berm could potentially leach to shallow groundwater which is suspected of discharging to surface water. Based on available data, all exposure pathways to human receptors were confirmed incomplete. However, a potential exposure pathway was identified for ecological receptors as wetlands are located downstream and downgradient of the CATM Facility. The range was recommended for an initial Phase 2 during the next schedule ORAP.

EDA Overview / Assessment Summary

The EDA encompasses 1.02 acres in the southeastern portion of Vance AFB. The EDA has been used since 2014 for infrequent, approximately one to four times annually, emergency dispositions. The EDA has not been used since 2019.

This initial ORA determined a limited MC source due to minimal use and maintenance activities (policing of debris). As such, there no threat of release nor risks to receptors. The operational status and limited use shall be confirmed prior to further evaluation.

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/>