



U.S. AIR FORCE

FINAL

**OPERATIONAL RANGE ASSESSMENT
MUNITIONS CONSTITUENT MIGRATION REPORT
ROSECRANS AIR NATIONAL GUARD BASE**

**UNITED STATES AIR FORCE
OPERATIONAL RANGE ASSESSMENT PROGRAM**

**Prepared for:
Rosecrans Air National Guard Base, Missouri
Air National Guard
and
Air Force Civil Engineer Center
Joint Base San Antonio – Lackland, Texas**



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Operational Range Assessment *Rosecrans Air National Guard Base*

Air Force Operational Range Assessment Program

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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

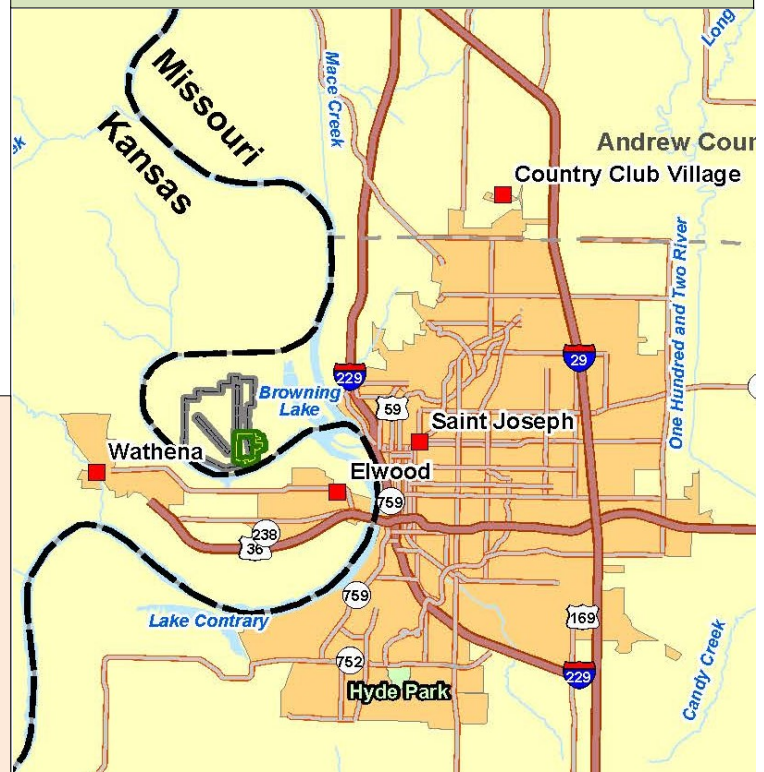
Rosecrans Air National Guard Base (ANGB) is collocated with Rosecrans Memorial Airport located in St. Joseph, Missouri. The 480 acre base is leased from the airport and is situated west of St. Joseph, Missouri.

ORAP Findings: February 2020 ORA Report

- *Munitions Constituents(MC) may be transported to off-range locations through the groundwater and surface water/sediment (via groundwater discharge to surface water) pathways.*
- *No off-range release or unacceptable risks to human health or the environment were identified for the areas evaluated at Rosecrans ANGB.*

Next Steps

Rosecrans ANGB is scheduled to be assessed in accordance with USAF 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

During implementation of the ORAP at Rosecrans ANGB, one area was verified as eligible and assessed under the USAF ORAP – Small Arms Range (SAR).

The following sections summarize USAF ORAP efforts for the SAR. This is the second ORA conducted at the SAR.

SAR Assessment Overview

The partially contained 25-meter SAR includes a 105-acre SDZ and a 8.3 primary use area. The SDZ overlaps with 1.56 acres of the primary use area; therefore, the total acreage for the range is 111.74 acres. The SAR was constructed in 1998 for small arms qualification training for deployment of troops. Prior to construction, the land was undeveloped. The range is regularly used (twice a week and every drill weekend) with non-frangible rounds. Approximately 10,000 frangible rounds (9 mm and 5.56 mm) were expended between 2004 and 2009. The range utilizes a negative pressure bullet trap system that captures all munitions and related dust. MC may be present in the form of unburnt powder that may develop on the range floor.

The initial Phase I was completed in 2009. The ORA determined that it is unlikely that potential uncontained MC can be attributed to the SAR and that no complete pathways existed for human receptors.

In 2019, the follow up Phase I was completed for the SAR. Phase I efforts included a record review, personnel interviews, and a site reconnaissance. A viable transport mechanism exists for groundwater and surface water/sediment (via groundwater discharge to surface water). Although a potential source is present in the form of unburnt powder, the subsurface geology prevents the potential migration of MC from the SAR. Therefore, no complete exposure pathways and no unacceptable risk was identified for off-range human and ecological receptors.

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/>