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**NMED
Hazardous Waste Bureau**

Colonel Tom D. Miller
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB NM 87117

JAN 27 2014

Federal Facilities Division
United States Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas TX 75202

Dear Sir/Ma'am

Pursuant to the provisions of the Defense Environmental Restoration Program (10 USC Part 160, *Environmental Restoration*) (DERP), Kirtland Air Force Base (KAFB) has conducted preliminary assessments and site inspections of the Military Munitions Response Program (MMRP) sites within the boundary of the installation.

KAFB's restoration personnel have recently completed remedial actions for MMRP Skeet Range sites TS775 and TS776, including excavation and disposal of contaminated soils to residential standards. As required by 10 USC §2710(c)(2), E.O. 12580, E.O. 13016 and Office of Solid Waste and Emergency Response Directive 9200.3-60, I am submitting KAFB's Final Record of Decision for No Further Action for MMRP Sites TS775 and TS776 for your review, comment, and records retention.

As we continue to implement the provisions of DERP and the Superfund Amendments and Reauthorization Act to complete the identification, investigation and cleanup of contamination within KAFB, we look forward to your input on accomplishing these goals. If you have any questions or concerns, please contact Mr. Wayne Bitner, Chief, Environmental Restoration Program, (505) 853-3484.

Sincerely

TOM D. MILLER, Colonel, USAF
Commander

Attachment:

1. Final Record of Decision, Military Munitions Response Program Sites TS775 and TS776

cc:

J. Kieling, NMED HWB



KIRTLAND AIR FORCE BASE ALBUQUERQUE, NEW MEXICO

RECORD OF DECISION

Military Munitions Response Program Sites TS775 and TS776

December 2013



**377 MSG/CEIR
2050 Wyoming Blvd. SE
Kirtland AFB, New Mexico 87117-5270**

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**KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO**

RECORD OF DECISION

**Military Munitions Response Program
Sites TS775 and TS776**

**Final
December 2013**



Prepared for

Air Force Civil Engineer Center
Lackland Air Force Base, Texas
Project Number: MHMV20108001A
Contract Number: FA4890-06-D-0011-0006

Prepared by

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NOTICE

Environmental Chemical Corporation prepared this Record of Decision for the Air Force Civil Engineer Center and Kirtland Air Force Base (AFB) to support the execution of the Air Force Military Munitions Response Program. As the report relates to actual or possible releases of potentially hazardous munitions constituents, its release prior to a final approval may be in the public's interest. The limited objectives of this document and the ongoing nature of the Environmental Restoration Program, along with the evolving knowledge of site conditions and potential impacts to human health and the environment, must be considered when evaluating this document, since subsequent facts may become known which may require modification to subsequent actions.

Government agencies and their contractors registered with the Defense Technical Information Center should direct requests for copies of this report to: Defense Technical Information Center, Cameron Station, Alexandria, Virginia 22304-6145.

Non-government agencies may purchase copies of this document from: National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161.

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REPORT DOCUMENTATION PAGE		Form Approved OMB No. 0704-0188	
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1. AGENCY USE ONLY	2. REPORT DATE 11 December 2013	3. REPORT TYPE AND DATES COVERED Kirtland AFB Record of Decision, December 2013	
4. TITLE AND SUBTITLE Kirtland Air Force Base, New Mexico Record of Decision Military Munitions Response Program Sites TS775 and TS776		5. FUNDING NUMBERS Contract No. FA4890-06-D-0011 Task Order No. 0006	
6. AUTHOR(S) David Synakorn, Environmental Chemical Corporation			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Environmental Chemical Corporation 1746 Cole Boulevard, Suite 350 Lakewood, CO 80401		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Air Force Civil Engineer Center 3515 S. General McMullen, Building 171 San Antonio, TX 78226-2018		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION/AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE	
13. ABSTRACT This Record of Decision presents the selection of No Further Action for the Military Munitions Response Program (MMRP) Sites TS775 and TS776 at Kirtland AFB.			
14. SUBJECT TERMS Record of Decision, MMRP Sites TS775 and TS776, Kirtland AFB		15. NUMBER OF PAGES 28	
17. SECURITY CLASSIFICATION OF REPORT Unclassified		18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION Unclassified
		20. LIMITATION OF ABSTRACT	

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**40 CFR 270.11
DOCUMENT CERTIFICATION
DECEMBER 2013**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.



TOM D. MILLER, Colonel, USAF
Commander, 377th Air Base Wing

This document has been approved for public release.



KIRTLAND AIR FORCE BASE
377 ABW Public Affairs

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ACRONYMS

AFB	Air Force Base
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSE	Comprehensive Site Evaluation
MMRP	Military Munitions Response Program
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NMED	New Mexico Environmental Department
PAH	polycyclic aromatic hydrocarbon
SARA	Superfund Amendment and Reauthorization Act
USEPA	United States Environmental Protection Agency

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PART 1. DECLARATION

1.1 SITE NAME AND LOCATION

Site Name: Military Munitions Response Program Sites TS775 – Air Field Skeet Range and TS776 – Skeet Range (hereafter *the sites*)

Federal Facility Identifier: NM9570024423

The sites are located on an elevated mesa in the northwest portion of Kirtland Air Force Base (AFB), in Albuquerque, New Mexico. Figure 1 in Attachment 1 depicts the locations of Sites TS775 and TS776 within Kirtland AFB.

1.2 STATEMENT OF BASIS AND PURPOSE

This Record of Decision presents No Further Action for these two sites at Kirtland AFB, in Albuquerque, New Mexico, which was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendment and Reauthorization Act (SARA), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record file for the sites.

The United States Air Force has provided copies of the Abbreviated Remedial Investigation Report, Engineering Evaluation/Cost Analysis Report, Action Memorandum, and the Removal Action Plan to the United States Environmental Protection Agency for review and comment. No comments were received on these removal action documents, and as such, the USAF moved forward with the selected remedy, including excavation and disposal of contaminated soils to residential standards. Since the removal action objectives have been achieved, the United States Air Force considers the lack of comments from the United States Environmental Protection Agency as concurrence with the Selected Remedy of No Further Action at these two sites.

1.3 DESCRIPTION OF SELECTED REMEDY

The lead agency has determined that no CERCLA remedial action is necessary for the sites because all contaminated soils have been removed.


1.4 STATUTORY DETERMINATIONS

The lead agency has determined that no remedial action is necessary at the sites. Previous removal actions at the sites have eliminated the need to conduct further remedial action. Because there are no hazardous substances, pollutants, or contaminants remaining on-site at levels that restrict unlimited use and unrestricted exposure, a five-year review will not be required as part of the selected remedy.

1.5 AUTHORIZING SIGNATURE

This Record of Decision presents the selection of No Further Action for these two sites. The U.S. Air Force is the lead agency under the Defense Environmental Restoration Program Military Munitions Response Program at the sites and has developed this Record of Decision consistent with CERCLA, as amended by SARA, and the NCP. This Record of Decision will be incorporated into the larger Administrative Record file for Kirtland AFB, which is available for public view at the Central New Mexico Community College-Montoya Campus Library, 4700 Morris NE, Albuquerque, New Mexico 87106. This document is approved by the undersigned.

APPROVED:



Signature

Date

PART 2. DECISION SUMMARY

2.1 SITE NAME, LOCATION, AND DESCRIPTION

The sites are named Military Munitions Response Program Sites TS775 – Air Field Skeet Range and TS776 – Skeet Range.

The sites are located on an elevated mesa in the northwest portion of Kirtland AFB, in Albuquerque, New Mexico. Figure 1 in Attachment 1 depicts the locations of Sites TS775 and TS776 within Kirtland AFB. The Comprehensive Environmental Response, Compensation, and Liability Information System Identification number for Kirtland AFB is NM9570024423.

Site TS775 encompasses 25.2 acres of land area, immediately adjacent to the Albuquerque International Sunport south airport taxiway and approximately 1 mile south of the northwestern installation boundary. TS775 is located with the fence that restricts access to the flightline. Site TS776 encompasses 29.3 acres of land area, approximately 1 mile east-southeast of the taxiway and approximately 1.5 mile southeast of the northwestern installation boundary. TS776 is located on an open, unfenced area.

2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

The sites are former skeet ranges initially operated during World War II. Site TS775 was used until the end of World War II. Site TS776 was used as a recreational skeet range through 1998.

Historical records indicate that approximately 84,000 pounds of lead shot were removed from Site TS776 every 3 years as part of range clearance. The historical records did not indicate whether lead shot were removed from Site TS775, or whether clay target fragments were removed from either of the sites.

Previous investigations and removal actions at the sites include:

- Comprehensive Site Evaluation (CSE) Phase I that fulfills the requirement to perform a Preliminary Assessment under CERCLA;
- CSE Phase II that fulfills the requirement to perform a Site Inspection under CERCLA;
- Abbreviated Remedial Investigation that included the Baseline Risk Assessment;
- Engineering Evaluation/Cost Analysis that evaluated removal alternatives for the sites based on the criteria of effectiveness, implementability, and cost.;
- Action Memorandum that formally selects and authorizes removal actions for the sites; and
- Removal action (cleanup action) at both sites.

The CSE Phase I identified the sites as former skeet ranges and recommended further investigation to evaluate the potential for soil contamination.

The CSE Phase II identified concentrations of polycyclic aromatic hydrocarbons (PAHs) in soil above New Mexico Environment Department (NMED) and United States Environmental Protection Agency (USEPA) residential soil screening levels at Site TS775 and concentrations of lead and PAHs in soil above NMED and USEPA residential soil screening levels at Site TS776, indicating a potential risk to human health and the environment. The concentrations of lead and PAHs were not above NMED and USEPA industrial soil screening levels.

Additional soil samples were collected during the Remedial Investigation to further characterize the nature and extent of contamination at the sites.

The Baseline Risk Assessment identified PAHs in soil at concentrations that pose an unacceptable level of risk to hypothetical future residents at both sites. The clay target fragments, which are made from coal tar and limestone, were identified as the primary source of the PAHs in soil near the firing points. The Baseline Risk Assessment also evaluated the potential risk from exposure to lead in soil and concluded that the concentrations of lead in soil at the sites do not pose a risk to human health or the environment.

The Engineering Evaluation/Cost Analysis identified excavation and offsite disposal of contaminated soil as the preferred removal action for both sites.

From October through December 2012, the U.S. Air Force excavated and disposed of 4,300 tons of contaminated soil as part of the removal action. Soil samples collected from the bottom of the excavations confirmed that the concentrations of PAHs in soil remaining at the site were at levels that allow for unlimited use and unrestricted exposure.

2.3 COMMUNITY PARTICIPATION

In accordance with CERCLA, Department of Defense, and U.S. Air Force regulations, the U.S. Air Force has kept the local community involved throughout the remedial action process. Community involvement was facilitated through public meetings, the Administrative Record file for the Site, and announcements published in the Albuquerque Journal, which allowed the members of the community to provide comments and recommendations during the site characterization and remedy selection process.

The U.S. Air Force held a 30-day public comment period on the Proposed Plan from January 20 – February 19, 2013 that allowed the public an opportunity to convey any questions and/or concerns about the sites for consideration in the remedy selection process. The U.S. Air Force also held a meeting to present the public with the Proposed Plan for the sites on April 23, 2013. At this meeting, U.S. Air Force representatives answered questions related to the selection of No Further Action for the sites. The questions and responses have been recorded in the transcript for the public meeting, which is available in the Administrative Record.

All documents were made available to the public prior to the comment period through the Administrative Record filed at the Central New Mexico Community College-Montoya Campus Library, 4700 Morris NE, Albuquerque, New Mexico 87106; as well as online at the Kirtland AFB website at <http://www.kirtland.af.mil/environment.asp>.

2.4 SCOPE AND ROLE OF RESPONSE ACTION

The selected response will involve no further investigation or remedial action at the sites.

2.5 SITE CHARACTERISTICS

The U.S. Air Force has removed all contaminated soil from the sites and there are no hazardous substances, pollutants, or contaminants remaining on-site at levels that restrict unlimited use and unrestricted exposure.

2.6 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

The current and potential future use of the sites is for light industrial, administrative, and research purposes. The future land use of Site TS775 depicted in the Kirtland Air Force Base General Plan is Aircraft Operations/Maintenance. The future land use of Site TS776 depicted in the Kirtland Air Force Base General Plan is Administration and Research. The sites are currently under Department of Defense control and will remain under Department of Defense control after implementation of the selected remedy.

2.7 SITE RISKS

There is no residual human health or ecological risk present at the sites. During the 2012 removal action, the U.S. Air Force has removed all contaminated soil at levels that restrict unlimited use and unrestricted exposure. No additional remedial action is necessary to ensure protection of human health and the environment.

2.8 DOCUMENTATION OF SIGNIFICANT CHANGES

The U.S. Air Force did not receive any comments during the public comment period and determined that no changes to the remedy were necessary or appropriate.

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PART 3. RESPONSIVENESS SUMMARY

This Responsiveness Summary provides an overview of community and support agency comments and concerns regarding the contamination identified at the sites.

3.1 STAKEHOLDER COMMENTS AND LEAD AGENCY RESPONSES

The U.S. Air Force did not receive any stakeholder comments during the 30-day public comment period nor during the public meeting.

3.2 PUBLIC COMMENTS AND LEAD AGENCY RESPONSES

The following summarizes the public comments received during the April 23, 2013 public meeting on the Proposed Plan and lead agency responses to those public comments. Additional details can be found in the transcript for the public meeting, which is available in the Administrative Record.

Public Comment 1: Is that [PAH contamination] in the soil or the water?

Lead Agency Response 1: It was in the soil. The PAHs themselves are not highly soluble. They tend to stick to the soil pretty well and not migrate.

Public Comment 2: [Is there] no lead in the water?

Lead Agency Response 2: No. These skeet ranges have records of historical range maintenance where approximately 84,000 pounds of lead shots were sent to recycling facility every three years and the lead concentrations in soil are below New Mexico residential standards.

Public Comment 3: How deep was your sample [referencing the CSE Phase II sampling data]?

Lead Agency Response 3: The CSE Phase II samples were collected from zero to six inches.

Public Comment 4: Was this after the removal of the four thousand tons of materials [referencing Remedial Investigation soil samples with PAH concentrations above the New Mexico residential levels]?

Lead Agency Response 4: It was before. The four thousand tons of material was removed during the follow-on cleanup.

Public Comment 5: Are those stratums lower or higher [referencing the subdivision of the each skeet range to support the Remedial Investigation]?

Lead Agency Response 5: The stratums are subdivision with each site, based the fall area for the targets and the lead. So they are not lower or higher in depth, they are just areas within that range itself.

Public Comment 6: What is the area of the cleanup?

Lead Agency Response 6: The area of excavation was approximately two and a half acres for each site. And, and they were excavated to various depths.

Public Comment 7: How much [tons] per acre? How deep did you go?

Lead Agency Response 7: That's somewhere around a thousand, if you do the straight math between the tons and the acres. The sites were excavated to various depths.

Public Comment 8: How do you know 15 inches was removed [referencing depth of removal and effectiveness of the cleanup]?

Lead Agency Response 8: Following the excavation, we collected another sample at the very bottom and sent that to a lab and confirmed that that sample was clean.

Public Comment 9: What's the very bottom?

Lead Agency Response 9: [For example] After excavating to 15 inches, we collect another sample at 15 to 18 inches, and send that to the lab to see whether that sample is clean or whether it has concentrations that pose a risk.

Public Comment 10: How many of those [confirmation samples] did you do [collect and analyze]?

Lead Agency Response 10: We took a sample for every 100 foot by 100 foot area unless there were multiple depths within that 100 by 100, in which case for every depth we took a sample for every 100 by 100 ft area.

Public Comment 11: What was the total cost for removal project and what was the total area that you excavated?

Lead Agency Response 11: The total area of excavation was right around four and a half acres. The total cost for the contract, which included the upfront investigation and the cleanup, was one point four million.

Public Comment 12: As they go along and do these various acres, do they also check if it has any effect on the water supply at all?

Lead Agency Response 12: The potential for impact to the water supply was evaluated in both the CSE Phase II and the Remedial Investigation. Based on the lack of lead in surface soil, there really isn't a source for groundwater impact. The PAHs are not water soluble. We sent samples to the lab for leaching and nothing came out, indicating that they would not affect the water.

Public Comment 13: And will it stabilize itself?

Lead Agency Response 13: The sites have been completely removed of any contamination.

Public Comment 14: Was the New Mexico Environmental Department actively involved in this on reviews and so forth?

Lead Agency Response 14: The Air Force Military Munitions Response Program is run under the CERCLA process and the regulatory oversight is provided by EPA. So the answer is no.

Public Comment 15: Do you feel they did a good job? What's your opinion of the job they did of backing you up and reviewing your work?

Lead Agency Response 15: We sent the project documents for their document review, but this project primarily involves digging and hauling and is not very technically difficult. We did not expect a lot

comments and we didn't receive any comments from them on the work plan or the Engineering Evaluation/Cost Analysis Report.

3.3 TECHNICAL AND LEGAL ISSUES

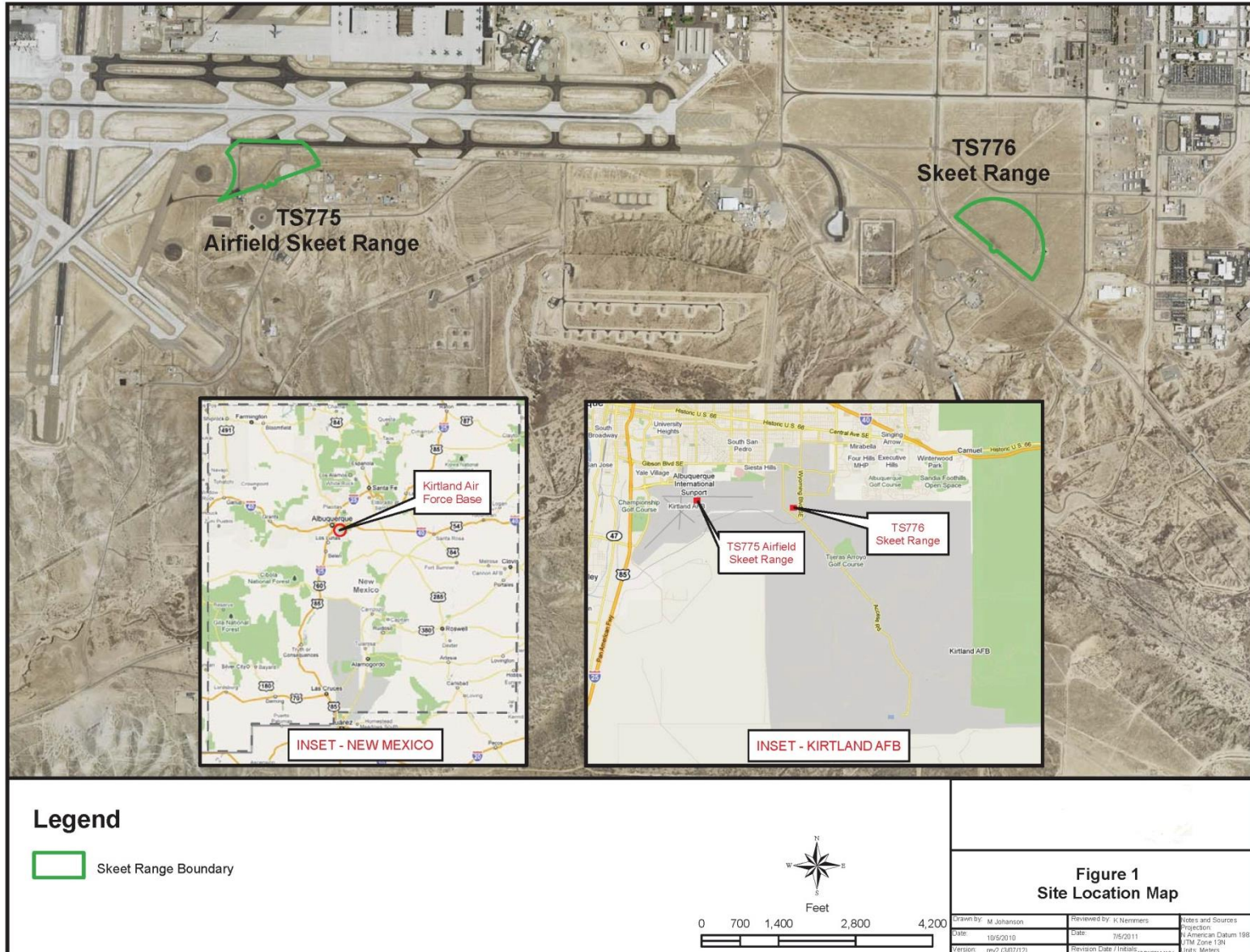
The U.S. Air Force has not identified any technical or legal issues.

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ATTACHMENT 1
FIGURES

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