

**RESTORATION INFORMATION MANAGEMENT SYSTEM  
FORMERLY USED DEFENSE SITES (FUDS)  
PROJECT FACT SHEET  
AUGUST 1996  
HNC REVISION: 13 MAY 1998  
TAG REVIEW DATE: 19 May 1998**

1. **SITE NAME:** Kirtland Demolition Bombing Range

**SITE NUMBER:** K06NM045300

**LOCATION:**

City: Grants  
County: Cibola County  
State: New Mexico

**PROJECT NUMBER:** K06NM045301

**CATEGORY:** OE

**INPR RAC:** 4

**ASR RAC:** 3

**TAG RAC:** 3

2. **POC'S:**

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3. **SITE DESCRIPTION:** The former Kirtland Demolition Bombing Range consisted of 5,760 acres located 35 miles south of Grants and 80 miles southwest of Albuquerque, Cibola County, New Mexico.

A historical document indicates that the latitude and longitude of the range was 34° 49' 20" North and 107° 59' 00" West, respectively. **The ASR recommended that an additional 3,200 acres be added to the INPR acreage, for a total of 8,960 acres.** The site covers a three mile by three mile square encompassing nine square miles that consists of nine sections, sections 14, 15, 16, 21, 22, 23, 26, 27, and 28 in Township 7 North, and Range 11 West. The former Kirtland Demolition Bombing Range is currently part of the El Malpais (Spanish for "the bad country") National Monument which is managed by a joint effort between the National Park Service and the Bureau of Land Management.

The land is a lava flow full of extremely rough broken lava rock with crevasses, boulders, and thin crusty rock covering caverns and lava tubes in what is generally treacherous terrain. The lava flows have sharp, jagged surfaces, crevices, and angular blocks. The whole area is covered with small trees and bushes. Access into the area can only be accomplished by foot or helicopter. Travel is extremely hazardous and any walking must be done with great care. The area around Kirtland Demolition Bombing Range is drained on the east by the Cebolla Canyon and Cebolla Creek.

Annual precipitation is 10 to 12 inches. Although seasonal totals vary from two to 37 inches, average seasonal snowfall is 11 inches during the period of November through April. Average annual temperature is 58° F. Average annual highs are 75° F and lows are 41° F. The lowest temperature observed at Albuquerque was -17° F in January 1971, and the highest temperature was 105° F in June 1980.

4. **SITE HISTORY:** The War Department acquired the 5,760 acre Kirtland Demolition Bombing Range in 1943 following a request on 26 August 1942 by the Air Force Advanced Flying School at Albuquerque for a demolition bomb target. The range was located in what was Valencia County, but is now Cibola County. The site consisted of sections 14, 15, 16, 21, 22, 23, 26, 27, and 28, Township 7 north, and Range 11 west. Acquisition occurred in two phases. Bureau of Land Management (BLM) land, which included sections 14, 22, 26 and 28 (2,560 acres), was withdrawn from the public domain by Public Land Order (PLO) No. 108, dated 31 March 1943. The remaining 3,200 acres was acquired in fee simple from the State of New Mexico (640 acres) and the New Mexico-Arizona Land Company (2,560 acres) by condemnation on 15 June 1943.

Bombardiers flying AT-11s from Kirtland Field used the range for training from the latter part of 1942 to May of 1944. These planes carried 100 pound AN-M30 demolition bombs. The target of choice was McCarty's Crater, a volcanic cone, located in section

28, which is in the southwest portion of the range. No structures or improvements were added to the site during the time of military use. Between May 1944 and 25 September 1944, the range was transferred to the 2d Air Force flying out of Clovis and Alamogordo, New Mexico. The 2d Air Force determined that the range was of little value due to its remote location and rugged terrain.

On 27 October 1944, the Under Secretary of War determined that there was no longer a military necessity for the range and requested revocation of PLO No. 108. PLO No. 108 was revoked effective 2 April 1947. The 2560 acres acquired from the BLM were returned to the public domain by the issue of PLO 344 dated 29 January 1947. On 21 June 1944, fee simple title for 640 acres was revested to the State of New Mexico and a leasehold interest was acquired from 21 June 1944 to 30 June 1944. On 21 August 1944, fee simple title for 2560 acres was revested to the New Mexico-Arizona Land Company at which time the Government ceased use of the land. **The stipulation revesting fee title to the State of New Mexico and the New Mexico-Arizona Land Company included the condition that the United States of America was absolved of all liability or claims resulting from unexploded ordnance.**

The New Mexico-Arizona Land Company subsequently sold their land interests to the Navajo Tribe who in turn exchanged the land with the BLM for land in another area. The BLM also acquired the single section of land owned by the State of New Mexico. On December 31, 1987, the US Department of the Interior - National Park Service established the El Malpais National Monument which includes the former bombing range.

## 5. PROJECT DESCRIPTION:

### AREA A

Size, Acres:	720
Former Use:	Target Area
Present Use:	Part of National Monument
Probable End Use:	Part of National Monument
Ordnance Presence:	<b>Confirmed</b>
Type:	100 pound, AN-M30, General Purpose

### AREA B

Size, Acres:	480
Former Use:	Buffer zone
Present Use:	Part of National Monument
Probable End Use:	Part of National Monument

Ordnance Presence: **Confirmed**  
Type: 100 pound, AN-M30, General Purpose

**AREA C**

Size, Acres: 480 (Additional Acreage)  
Former Use: Buffer zone, Additional Acreage  
Present Use: Part of National Monument  
Probable End Use: Part of National Monument  
Ordnance Presence: **Confirmed**  
Type: 100 pound, AN-M30, General Purpose

**AREA D**

Size, Acres: 1,360  
Former Use: Safety Zone  
Present Use: Part of National Monument  
Probable End Use: Part of National Monument  
Ordnance Presence: **Potential**  
Type: 100 pound, AN-M30, General Purpose

**AREA E**

Size, Acres: 2,720 (Additional Acreage)  
Former Use: Safety Zone, Additional Acreage  
Present Use: Part of National Monument  
Probable End Use: Part of National Monument  
Ordnance Presence: **Potential**  
Type: 100 pound, AN-M30, General Purpose

**AREA F**

Size, Acres: 3,200  
Former Use: Remaining Land  
Present Use: Part of National Monument  
Probable End Use: Part of National Monument  
Ordnance Presence: **Potential**  
Type: 100 pound, AN-M30, General Purpose

6. **CURRENT STATUS:** The draft Archives Search Report (ASR) for Kirtland Demolition Bombing Range was completed by the U.S. Army Corps of Engineers, Rock Island District, in August 1996.

7. **STRATEGY:**

- AREA A:** RAC 3;EE/CA
- AREA B:** RAC 3;EE/CA
- AREA C:** RAC 3;EE/CA (Not part of INPR acreage)
- AREA D:** RAC 3;EE/CA

**AREA E:** RAC 3;EE/CA (Not part of INPR acreage)

**AREA F:** RAC 3;EE/CA

8. **ISSUES AND CONCERNS:** The Huntsville Center Technical Advisory Group (TAG) reviewed this ASR on 19 May 98 and determined a strategy of EE/CA, RAC 3 for all areas A, B, C, D, E, and F to include areas C and E, which are recommended for addition to the FDE acreage of 5,760 acres for a total of 8,960 acres. EE/CA is recommended for **Areas A, B, and C** because: (1) These areas have a confirmed ordnance presence as evidenced by findings of OE in the 1994 and 1995 clearances shown on Plates 4 and 5, respectively. (2) The pattern formed by the previous finds of OE indicate that the bombing runs were by aircraft flying from the northeast to the southwest so that the OE is concentrated in these three areas. (3) All historical information indicates that the natural target for the bombers was McCarty's Crater in section 28, which is in the middle of these three areas along the northeast to southwest axis where the bombs would have been dropped. EE/CA for **Areas D, E, and F** is based on the potential for OE in these adjacent lands.

**HNC Safety Comments:** There were several comments to which the ASR author either agreed or disagreed (See HNC Safety Comments and responses/action). However, the most important comment was a change from a strategy of EE/CA to one of NOFA based on a revised RAC with a RAC score of 5. The RAC 5 was achieved by reducing values for Part II, B and E of the RAC form, which basically is a statement that the site is too remote to be concerned that someone would happen upon a 100 lb HE bomb or bombs that may still be present at the site. **The TAG concurred with the ASR on a strategy of EE/CA for all site areas.**

Other safety comments with which the ASR author did not concur do not measurably alter the content and strategy of the ASR and can remain as is.

**Policy Considerations:** The INPR stated: "The stipulation reverting fee title to the State of New Mexico and the New Mexico-Arizona Land Company included the condition that the United States of America was absolved of all liability or claims resulting from unexploded ordnance." The TAG requested the opinion of the USAESCH Office of Counsel on the eligibility of the site for a strategy of EE/CA, RAC 3 based on this clause. Margaret P. Simmons responded that a strategy of EE/CA, RAC 3 is appropriate at this time because: (1) There is a rule, albeit unwritten, that if the ordnance presence is a result of military use, then remediation is the responsibility of the government, which has the expertise and wherewithal to do the cleanup. (2) The clause, as mentioned in the INPR, is not restrictive enough;

one that would be is about three inches long. (3) The government (US Department of the Interior) now owns the land again so that there is no effect to the clause. (4) Pending the finalization of the Range and Munition Rules and until further action is taken on RAC 3 sites, a strategy of EE/CA, RAC 3 is now the best course of action.

**AREA A, Target Area, 720 acres:** McCarty's Crater, the natural target for this range, is located in Area A. The crater is located in a lava flow. The 1994 clearance team found 21 AN-M30 bombs and numerous nose and tail fuzes. The ASR SI team found numerous pieces of nose and tail fuzes and bomb shrapnel at the crater which lessened with movement away from the crater until no OE remnants was observed ½ mile north of the crater.

**AREAS B(480 acres) and C(480 acres), Buffer Zone and Buffer Zone, Additional Acres, respectively:** These areas were the subjects of the 1995 clearance efforts based on the NE/SW flight pattern observed during the locations of OE found during the 1994 clearance of section 28. Two bombs and a fuze were found in **Area B** and one bomb and a fuze was found in **Area C**. The ASR site inspection team did not find any OE in **Area B**. The team did not enter **Area C** due to the extremely rough terrain.

**AREA D, Safety Zone, 1,360 acres; AREA E, Safety Zone, Additional Acreage, 2,720 acres; AREA F, Remaining Land, 3,200 acres:** The ASR site inspection team saw no evidence of OE in **Area D** and the part of **Area F** that was observed. Because of the extreme ruggedness of the land, **Area E** and part of **Area F** was not inspected.

#### **ASR Concerns:**

The former range is part of a National Monument. Although the terrain is very rugged, parts of the range are frequently used by hikers, especially the McCarty's Crater area which was the target of choice during range use. Visitors should be warned of OE danger.

The terrain is such that any clearance effort must be supported by helicopter. No wheeled or tracked vehicle could traverse the lava flow.

The lava flow is such that bombs or bomb components could be wedged in fissures with fuzes exposed to falling rocks. Walking on the flow must be done with extreme care.

Clearance efforts by the National Guard in the past revealed possible cultural/historical sites. Future clearance efforts by

National Guard EOD units would provide valuable training for those units.

**CWM:** The ASR does not mention that there is or is not any probability of CWM at this site.

**Other Projects: None**

**Natural Resources:** Federally and State threatened species occur within the site area and are listed in the ASR Findings, pages 5 and 6, paragraph 3f. An on-site inspection by appropriate State and Federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities.

**Historical Resources:** The SHPO did not indicate that any historical/ cultural resources were present at the site. However, several areas were identified during previous site clearances that may be of historical/ cultural significance. Any intrusive measures taken at the site will require oversight by the State Historical Preservation Office (SHPO) and/or other like organizations.

9. **SCHEDULE SUMMARY:** EE/CA

10. **FUNDING/BUDGET SUMMARY:** For Official Use Only