

Read-Ahead Package for the Site Inspection (SI) Technical Project Planning (TPP) Meeting for the Formerly Used Defense Site (FUDS) Mitchel Field

FUDS Project #:

C02NY064503

Contract No.:

W912DY-04-D-0017

Delivery Order #:

00170001

Alion Science and Technology

1000 Park Forty Plaza Suite 200



Durham, North Carolina 27713

September 2007

1.0 INTRODUCTION

This document does not require comment; however, the Alion Team requests that stakeholders be prepared to share current information about the site (e.g. land use, other stakeholders, and additional site information) and to provide input at the Technical Project Planning (TPP) meeting on the proposed sampling for the site.

1.1 PURPOSE

The purpose of this read-ahead package is to provide information to stakeholders involved in the Site Inspection (SI) TPP meeting for the Defense Environmental Restoration Program (DERP) Formerly Used Defense Site (FUDS) for Mitchel Field, located in Garden City, New York.

The U.S. Army Corps of Engineers (USACE) has an initiative to conduct SIs under the Military Munitions Response Program (MMRP) on Munitions Response Sites (MRSs) located on eligible FUDS by the end of Fiscal Year 2010,

under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The Department of Defense (DoD) established this goal to ensure that all MRSs are evaluated in accordance with Engineer Regulation (ER) 200-3-1, DERP FUDS Program Policy, and prioritized for further action. The SI is a critical step in identifying and assessing potential hazards and collecting the data necessary for determining priorities under the MMRP

The SI is a limited scope study, i.e., the SI is not a full-scale study of the nature and extent of munitions contamination or explosive hazards. The SI results will determine whether individual project sites within the FUDS program warrant further response action in accordance with CERCLA, or whether the site can proceed to No DoD Action Indicated (NDAI) status. Alion Science and Technology Team (Alion Team), under contract to the USACE-Baltimore District, will collect the necessary information to meet this objective. In support of this SI, a TPP meeting will be conducted to define Data Objectives (DQOs), review the Quality conceptual site model (CSM), and discuss proposed field and analytical activities.

These objectives will be achieved by assessing existing site information, conducting site reconnaissance, and collecting environmental samples (as well as other site-specific data). The Mitchel Field FUDS boundary, as well as the individual Munitions Response Sites (MRS), are shown in Figure 1.

1.2 PROJECT ORGANIZATION

Numerous organizations are involved in the Mitchel Field SI. The project team includes:

- USACE District (New England District)
- USACE MEC Design Center (Baltimore District)
- Federal agencies (U.S. Environmental Protection Agency, Region 2)
- State agencies (New York State Department of Environmental Conservation)
- Current land owners (Hofstra University, Nassau Coliseum, County of Nassau, Nassau Community College, US Postal Service, numerous private residents)

- Alion Science and Technology, Corporation (prime contractor)
- · Alion's Team Members
 - GPL Laboratories, LLLP.
 - Environmental Data Services
 - Integral Consulting Inc.

The roles of the project team include active participation in the TPP process, sharing information/data, and review of the TPP Memorandum, the site specific-work plan (SS-WP) Addendum, and SI Report.

2.0 MITCHEL FIELD BACKGROUND INFORMATION

Included below is a general discussion of the site history, history of munitions of explosive concern (MEC) use and/or stored onsite and potential areas of concern related to MEC/munitions constituents (MEC/MC). The available information about the site may be superseded by more relevant/current data. The Alion Team has used historic information to develop the overall approach to the SI, including the proposed sampling approach, which will be presented at the TPP meeting.

2.1 PROJECT LOCATION

Mitchel Field, FUDS Property No. C02NY064503, includes 1,453 acres of land in Garden City, Nassau County, New York (USACE, 2004).

2.2 GENERAL SITE HISTORY

The use of Mitchel Field dates back to the Revolutionary War, when it was used as an Army enlistment center. The area was not formally utilized until 1917 when Government leased the property for Aeronautical General Supply Depot. During the 1930's and WW II, Mitchel Field was heavily used as a training base. The 1st Air Force was quartered at Mitchel Field in 1941 with responsibilities for training, organizing, and sending scores of tactical air units overseas into combat. In 1954, Mitchel Field became known as the home of the Air Force Reserve, including the 2233rd Air Reserve Flying Center, the 514th Troop Carrier Wing, and several other Reserve

organizations. Mitchel Field was officially deactivated in April 1961.

Currently, the site is virtually totally developed. It is situated in an urban setting and major portions are occupied and developed by Hofstra Univiversity, Nassau College, NY Islanders coliseum, and a sports complex. Several portions have been utilized for parkway construction.

2.3 INITIAL SUMMARY OF RISK FROM MUNITIONS AND EXPLOSIVES OF CONCERN

Conventional munitions were used at Mitchel Field and included the following ordinance items:

- Small Arms (.50 cal., .30 cal., .22 cal. And shot guns)
- Practice Bombs AN-MK 23 3 lb.
- Medium Caliber Arms (20mm, 25mm, 30mm)
- Large Caliber Arms (37mm and larger)
- Practice Mortars (61mm and 81 mm)

Based on information in the ASR and ASR Supplement, six MRSs are defined (i.e., Landscape – 1000" range, Skeet range, Demonstration Bombing Range, Firing-in Butt Range, Machine Gun range, Unknown Mortat Rnage). The various munitions listed above were predominantly used for training purposes. Small arms were used at several locations in order to train ground force combat troops as well as for target practice. The larger caliber weapons were used in order to test aircraft weaponry as well as to align the sites of the weapons. Firing points and impact areas for these ranges may have been re-graded and developed subsequent to military use. A skeet range was also present at the site and was used for both target practice and recreation. Demonstration bombing targets were constructed at Mitchel Field and were typically utilized for competition and/or public demonstrations. At the practice bombing range only AN-MK 23 miniature practice bombs were used.

There is also one area of concern (AOC) which was identified in the ASR and ASR Supplemental (USACE 1998 and 2004):

• Unknown Mortar Range – This AOC was possibly used from 1943 to 1945, but dates of use are unknown, but recovered MEC dates to WWII era. Little is known about the mortar range, other than conjecture. Several 60mm and 81mm mortar rounds were reportedly discovered during excavation work around 1982. Further research will be needed to accurately identify the location of this AOC. This AOC was identified during the construction of Meadowbrook State Highway (AOC not shown in Figure 1).

During the operation of the various ranges at Mitchel Field, black powder (potassium nitrate, sulfur, and charcoal) and a variety of explosives and ordnance propellants, components were utilized. These constituents are commonly referred to as munitions Although black powder constituents (MC). degrades into non-explosive byproducts over time various other explosives used with the munitions items at Mitchel field may persist. Additionally, many of the projectiles, bombs and practice munitions used at Mitchel Field contained a variety of metals. Therefore, samples will be collected and analyzed for select explosives, explosive breakdown products and select metals.

Both MC and MEC are contaminants of concern during this SI. The proposed sampling program, therefore, will address both MC and MEC and be based on, among other considerations, the understanding of the fate and transport of these contaminants in the environment to potential receptors (e.g., humans and biota) as defined in the CSM.

3.0 PROPOSED SAMPLING

The Mitchel Field TPP meeting will be used to evaluate data (including data collected since the Inventory Project Report [INPR], Archives Search Report [ASR], and Supplemental ASR were completed) and determine the sample media, number, locations, and depths representative of where potential MEC and MC are likely to be located. Geophysical surveys will be done within various portions of the FUDS site. Additional information on the proposed sampling plans will be presented at the

TPP meeting and the sampling information will be included in the Draft SS-WP Addendum to the Programmatic Work Plan (Alion 2005) for the FUDS MMRP SI at Mitchel Field.

4.0 SCHEDULE

Alion is contracted to complete the SI at Mitchel Field within 18 months. The site specific project schedule for the SI of Mitchel Field will be provided at the TPP meeting. The final schedule will be included in the SS-WP Addendum for the Mitchel Field FUDS.

5.0 REFERENCES

Alion Team. 2005. Programmatic Work Plan for Formerly Used Defense Sites (FUDS) Military Munitions Response Program (MMRP) SIs at Multiple Sites in the Northeast Region.

USACE. 1998. Defense Environmental Restoration Program for Formerly Used Defense Sites Ordnance and Explosives, ASR Findings for Mitchel Field Garden City, New York. October.

USACE. 2004. Supplemental ASR for Mitchel Field FUDS Property NumberC02NY064503. November.

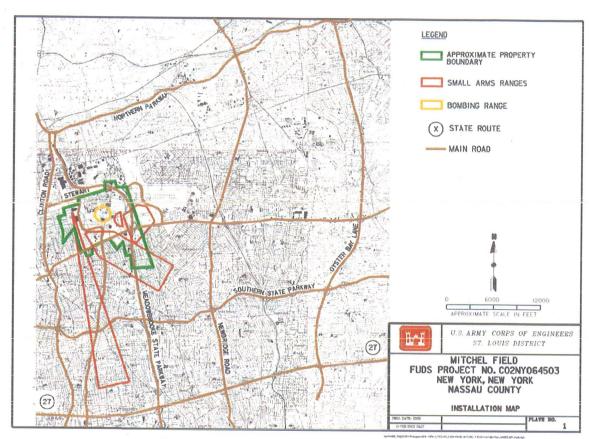


Figure 1. Mitchel Field FUDS Boundary, MRSs.

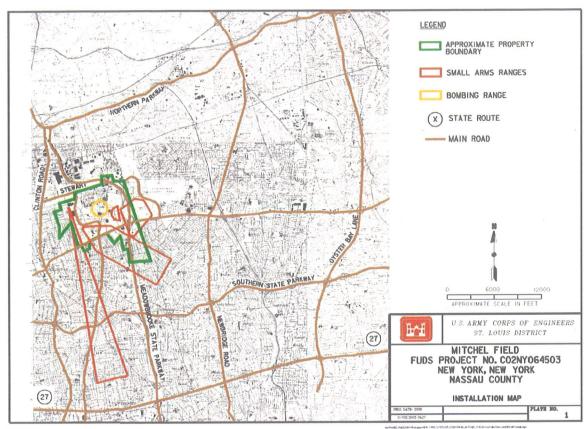


Figure 1. Mitchel Field FUDS Boundary, MRSs.

