



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
2405 GUN SHED ROAD
JOINT BASE SAN ANTONIO FORT SAM HOUSTON, TX 78234-1223

December 31, 2015


ATTN: Document Control Desk
Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
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US Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Deputy Director:

Reference our June 1, 2015 letter, which is our application to amend the source materials license for depleted uranium from Davy Crockett M101 munitions (SUC-1593, Docket No. 40-09083), and subsequent correspondence to date between your staff and us.

In response to your requests for additional information, we made extensive changes to some of the documents we enclosed with our June 1 letter. We also corrected and updated several items on our own.

Your project manager suggested that I provide "clean" current copies of these documents. This is so that the resulting license condition can reference this letter for clarity. Therefore, I am enclosing the following, all dated December 31, 2015:

- Decommissioning Funding Plan
- M101 Impact Areas
- Physical Security Plan 
- Programmatic Approach for Preparation of Installation-specific Environmental Radiation Monitoring Plans
- Radiation Safety Plan

You may reach me at (210) 466-0368 or robert.n.cherry.civ@mail.mil.

Sincerely,



Robert N. Cherry
License Radiation Safety Officer

Enclosures

SunST Review Completed
by Amy Snyder

NM5501

Physical Security Plan for US Army Installation Management Command Ranges Affected by Depleted Uranium in M101 Davy Crockett Spotting Rounds

31 December 2015

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Abbreviations and Acronyms

AR	Army Regulation
ASR	Archive Search Report
CFR	Code of Federal Regulations
DA PAM	Department of the Army Pamphlet
DOD	Department of Defense
DTM	Directive-Type Memorandum
DU	depleted uranium
FOUO	FOR OFFICIAL USE ONLY
IMCOM	US Army Installation Management Command
km	kilometer
m	meter
NRC	US Nuclear Regulatory Commission
PSP	Physical Security Plan
RCA	radiation control area
RCO	range control officer
RSO	Radiation Safety Officer
RSP	Radiation Safety Plan
RTA	range and training area
UXO	unexploded ordnance

1 Introduction

This Physical Security Plan (PSP) is applicable at US Army Installation Management Command (IMCOM) ranges that Davy Crockett M101 spotting rounds may have affected. The M101 spotting round contains depleted uranium (DU). The Army controls these affected areas (called *radiation control areas* or RCAs) for radiation safety purposes.

This PSP references, for Nuclear Regulatory Commission (NRC) licensing purposes, existing Army security measures for Army training ranges and installations that are in existing regulations (see section 4.1 below). This PSP does not discuss these measures in detail.

This PSP does not introduce any new security measures specifically for M101 DU on installations and training ranges.

The License Radiation Safety Officer (RSO) will obtain NRC approval for all changes to this PSP (other than correction of typographical or grammatical errors) before implementation of those changes.

1.1 Background

See section 1.1 in the Radiation Safety Plan (RSP).

1.2 Purpose

The purpose of this PSP is to describe physical security for M101 spotting round DU in RCAs on IMCOM ranges, in accordance with Title 10, Code of Federal Regulations (CFR), Part 20, § 20.1802, "Control of material not in storage."¹

1.3 Applicability

The physical security requirements referenced in this PSP applicable to all personnel, including members of the public, who may seek access to an RCA.

¹ The RSP addresses handling, storage, and security of DU removed from IMCOM ranges, in accordance with 10 CFR 20, § 20.1801, "Security of stored material."

2 Physical Security Organization and Responsibilities for M101 Spotting Round DU

2.1 US Army Installation Management Command Commander

See section 2.1.1 of the RSP.

2.2 Garrison Commander

See section 2.2 of the RSP.

2.3 License Radiation Safety Officer

See section 2.3.2 of the RSP.

2.4 US Army Garrison RSO

See section 2.4.2 of the RSP.

2.5 Personnel in the RCA

See section 2.5.2 of the RSP.

2.6 Visitors

See section 2.6 of the RSP.

3 Radiation Control Areas

The St. Louis District of the US Army Corps of Engineers executed the Archive Search Report (ASR) Project from 2006 to 2011.² The result was a report with annexes for specific installations that described Army efforts to identify Army ranges where the Army fired M101 Davy Crockett spotting rounds. The typical Davy Crockett range impact area is a one-kilometer (km) square; area = $1 \text{ km}^2 = 1,000,000 \text{ m}^2 \approx 247 \text{ acres}$.

The Army and the NRC consider RCAs to be any M101 DU-affected areas identified in ASR annexes. Figures included with the license amendment application to the NRC show locations of all the RCAs that the ASR Project identified.

² USACE St Louis. *Project Archive Search Report: Use of Cartridge, 20mm Spotting M101*. St Louis, Missouri: US Army Corps of Engineers, St Louis District, 2011.

4 Access Control

4.1 References

The following are primary references governing access control to Army installations and ranges. All are available to the NRC and the public on Army websites, except Army Regulation (AR) 190-13, which is FOR OFFICIAL USE ONLY (FOUO). The Army will provide AR 190-13 to the NRC upon request.

- AR 190-13, *The Army Physical Security Program* (FOUO)
- AR 190-16, *Physical Security*
- AR 385-63, *Range Safety*
- Department of the Army Pamphlet (DA PAM) 385-63, *Range Safety*
- Directive-Type Memorandum (DTM) 09-012, "Interim Policy Guidance for [DOD] Physical Access Control" (Under Secretary of Defense)

4.2 Some Pertinent Extracts from the References

4.2.1 AR 190-13

(Paragraph 1-1 Purpose) This regulation prescribes policy and assigns responsibility for developing, executing, and maintaining practical, economical, and effective physical security programs.

4.2.2 AR 190-16

(Chapter 1 Introduction, 1-1 Purpose) a. This regulation provides realistic guidance and prescribes uniform physical security policies and procedures for installation access control ... on Department of Defense ... installations

(1-4 Responsibilities, c Installation or activity heads) (1) Commanders, directors, supervisors, and officers in charge ... will protect personnel and property in their commands against trespass, terrorism, sabotage, theft, arson, and other illegal acts.

(Chapter 2 Installation Access Control, paragraph 2-1 Controlled entry and exit) This chapter prescribes general policies for controlling entry into and exit from military installations. Access control is an integral part of the installation physical security program. Each installation must clearly define the access control measures (tailored to local conditions) required to safeguard the installation and ensure accomplishment of its mission.

(2-2 Policy) Installation commanders will develop, set up, and maintain policies and procedures to control installation access.

(2-4 Restricted access plan) a. Each installation commander will develop a plan for increasing vigilance and restricting installation access as events require.

4.2.3 AR 385-63

(Chapter 1 Introduction, Section II Responsibilities, 1-9 Installation and unit-level range safety programs, c. Installation range control officer) The installation range control officer [(RCO)] will ... (6) [approve], control, and monitor personnel access into the installation [range and training area (RTA)] complex for both training and administrative activities. All visitors to RTAs will be approved by the RCO.

(Glossary, Section II Terms)

Range [when] used in a geographic sense, means a designated land or water area that is set aside, managed, and used for range activities of the [Department of Defense (DOD)]. Such term includes ... [firing] lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas.

Range activities [include] [research], development, testing, and evaluation of military munitions, other ordnance, and weapon systems [and the] training of members of the armed forces in the use and handling of military munitions, other ordnance, and weapon systems.

4.2.4 DA PAM 385-63

(Chapter 1 Introduction, 1-1 Purpose) This pamphlet provides minimum requirements for the U.S. Army ... Range Safety [Program] prescribed in [AR] 385-63

(Chapter 2 Ranges, 2-1 Restricting access to and activities on impact areas)

a. Unauthorized persons are prohibited from entering the installation training complex. ...

b. Unauthorized persons are prohibited from entering impact areas and other areas known or suspected to contain [UXO] by use of positive controls to include fencing and/or posting of UXO hazard warning signs. Commanders will ensure appropriate measures are used to restrict access to areas known or suspected to contain UXO. ...

...

j. Unauthorized personnel are prohibited from handling UXO and munitions or removing them from the training complex. ...

4.2.5 DTM 09-012

It is [DOD] policy that ... [installation access] control standards shall include identity proofing, vetting to determine the fitness of an individual requesting and/or requiring access to installations, and issuance of local access credentials.

4.3 Access to Radiation Control Areas

See section 15 of the RSP.

5 Aspects of Physical Security Addressed in the Radiation Safety Plan

5.1 Precautionary Procedures

5.1.1 Posting Requirements

See section 14 of the RSP.

5.1.2 Markings on Containers and Equipment

See section 16 of the RSP.

5.2 Security of Stored Material and Waste Disposal

See section 18 of the RSP.

5.3 Program Audits

See section 19 of the RSP.

5.4 Training

See section 20 of the RSP.

5.5 Recordkeeping

See section 21 of the RSP.