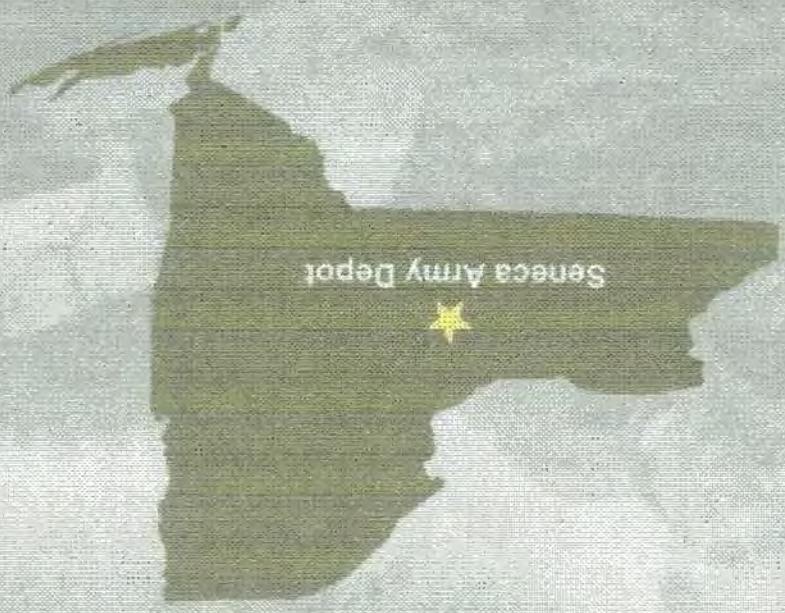




**Draft CTT  
Inventory Report**

**URS**

**5 December 2002**



**Seneca Army Depot**

**Army Materiel Command**

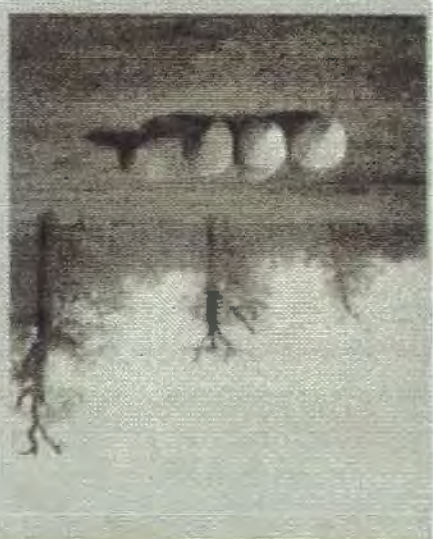
**PROPERTY,  
NEW YORK**

**SENECA ARMY DEPOT ACTIVITY BRA**



01301

**Closed, Transferring, and  
Inventory Report  
Transferred Range and Site**







6 December 2002

Mr. Samuel Bryant  
US Army Environmental Center  
5179 Hoadley Road  
Aberdeen Proving Ground, MD 21010-5401

Subject: Transmittal of draft BRAC CTT Range Inventory Report for Seneca Army Depot,  
New York

Dear Mr. Bryant:

URS Group, Inc. is pleased to submit two copies of the subject draft BRAC CTT Range report for Army Environmental Center review and comment. Four additional copies are submitted to other reviewers, as shown in the distribution list below. The document consists of text, a CTT Range, UXO-DMM-MC Sites Map, a printout of ARID data, and RAC score sheets. No electronic files are included in this draft.

According to the schedule provided in Mr. Boldt's 14 March 2002 e-mail, comments are due from reviewers at AEC, BRACO, BRAC Regional offices, and the installation within 45 days. URS will then have 30 days to resolve comments and return the final document to AEC.

If you have questions or comments, please call me at (865) 220-8134 or Chris Wieland at (865) 220-8202.

Sincerely,



Thomas D. Sherrod  
Project Manager

c: G. Boldt, USACE, Los Angeles (1 copy)  
J. Davidson, BRAC-NCR (1 copy)  
R. Stauber, BRACO (1 copy)  
S. Absalom, Seneca Army Depot (1 copy)  
C. Wieland (1 copy)  
R. Marshall (electronic)



**DRAFT**  
**U.S. ARMY CLOSED, TRANSFERRING, AND TRANSFERRED**  
**RANGE and SITE INVENTORY**  
**FOR**  
**SENECA ARMY DEPOT ACTIVITY BRAC PROPERTY, NEW YORK**

**5 December 2002**

**Prepared for:**  
**U.S. Army Environmental Center and**  
**Seneca Army Depot Activity, New York**

**Prepared by:**

**URS Group, Inc.**  
**1093 Commerce Park Drive**  
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<b>EXECUTIVE SUMMARY .....</b>	<b>ES-1</b>
Purpose of the Closed, Transferring, and Transferred Inventory .....	ES-1
Purpose of the Range Inventory Report .....	ES-2
Summary of Results .....	ES-2
<b>A. INTRODUCTION.....</b>	<b>A-1</b>
Background.....	A-1
Project Drivers .....	A-2
Report Objectives .....	A-2
Project Participants .....	A-2
<b>B. DEFINITIONS AND DATA REQUIREMENTS .....</b>	<b>B-1</b>
Inventory Definitions .....	B-1
Inventory Data Requirements .....	B-3
Range and Site Map Requirements.....	B-4
ARID Data Requirements .....	B-4
Risk Assessment Code Methodology .....	B-4
DERP Eligibility Determination.....	B-5
<b>C. INSTALLATION SUMMARY.....</b>	<b>C-1</b>
Installation Overview and Description.....	C-1
Contractor Team Composition.....	C-2
Installation Points of Contact .....	C-2
Nature of Data Collection and Coordination.....	C-2
Summary of Critical Data Sources.....	C-2
<b>D. INSTALLATION CTT RANGE AND SITE DATA.....</b>	<b>D-1</b>
Summary of CTT Ranges and UXO-DMM-MC Sites .....	D-1
CTT Range and Site Summaries .....	D-2
CTT Range and Site Details Table .....	D-7
CTT Range and Site Ownership, Use and Access Control Summary Table..	D-10
DERP Eligibility Table .....	D-11
<b>E. CTT RANGE AND SITE MAPS.....</b>	<b>E-1</b>
<b>F. ARID DATA FILES.....</b>	<b>F-1</b>

<b>G. RISK ASSESSMENT CODE (RAC) ANALYSIS .....</b>	<b>G-1</b>
<b>H. DIGITAL FILES.....</b>	<b>H-1</b>
<b>I. DOCUMENT LOG .....</b>	<b>I-1</b>
Reports .....	I-1
Maps .....	I-1
<b>J. NOTES .....</b>	<b>J-1</b>



## ABBREVIATIONS/ACRONYMS

AEC	Army Environmental Center
AFB	Air Force Base
A/I	Active and Inactive
ARID	Army Range Inventory Database
ARS	Advance Range Survey
ASR	Archives Search Report
BRAC	Base Realignment and Closure
CTC	Cost to Complete
CTT	Closed, Transferring, and Transferred
DERP	Defense Environmental Restoration Program
DMM	Discarded Military Munitions
DoD	Department of Defense
DOE	Department of Energy
DSERTS	Defense Site Environmental Restoration Tracking System
EE/CA	Engineering Evaluation/Cost Analysis
EOD	Explosive Ordnance Disposal
FFID	Federal Facility Identification
FUDS	Formally Used Defense Site
GIS	Geographic Information System
HE	High Explosives
IRP	Installation Restoration Program
LPA	Limited Public Access
LTA	Local Training Area
LZ	Landing Zone
MACOM	Major Command
MC	Munitions Constituents
MMRP	Military Munitions Response Program
NPA	No Public Access
NYDOC	New York Department of Corrections
OB	Open Burn
OD	Open Detonation
OE	Ordnance and Explosives
RA	Remedial Action
RAC	Risk Assessment Code
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RMIS	Restoration Management Information System
RPA	Restricted Public Access
SEAD	Seneca Army Depot
UPA	Unlimited Public Access
USACE	U.S. Army Corp of Engineers
USCG	U.S. Coast Guard
UXO	Unexploded Ordnance
WMM	Waste Military Munitions
WP	White Phosphorus







## EXECUTIVE SUMMARY

### **Purpose of the Closed, Transferring, and Transferred Inventory**

The Army is conducting its closed, transferring, and transferred (CTT) inventory in three phases to meet immediate, short-term, and long-term needs. Phase 1 involved a data call issued to each U.S. Army Major Command (MACOM) requesting general information about ranges on their installations. This phase, referred to as the Advance Range Survey (ARS), allowed the Army to meet its immediate needs; however, a more detailed inventory was necessary. The Army divided the detailed follow-on inventory into two parts, an active and inactive (A/I) inventory (Phase 2) and a CTT inventory (Phase 3).

No Phase 2 inventory was performed for Seneca Army Depot Activity (SEAD) because no A/I ranges are reported to exist at the facility. The installation has been included under 1995 Base Realignment and Closure (BRAC), and all ranges are in closed, transferring, or transferred status.

This CTT inventory began as an inventory of U.S. Army CTT ranges. However, as a result of the congressional requirements in the Defense Authorization Act of 2002 (Public Law 107-107) and resultant changes to the Defense Environmental Restoration Program (DERP), the CTT inventory has become a comprehensive inventory of both CTT ranges and other defense sites with unexploded ordnance, discarded military munitions, and/or munitions constituents (UXO-DMM-MC). All locations previously or currently owned, leased, or possessed by the Department of Defense (DoD) (except those currently classified as A/I ranges or permitted military munitions treatment and/or disposal facilities) are included in this inventory. The U.S. Army Environmental Center (AEC) is the Program Manager for the Army's CTT inventory at BRAC sites. This inventory specifically focuses on non-A/I areas within the BRAC parcel, and areas associated with the installation that may have been used in the past for ordnance-related testing or training, except where such properties are defined as Formally Used Defense Sites (FUDS). FUDS properties are being inventoried under a separate effort.

Specific requirements of the CTT inventory for SEAD included (1) mapping the CTT military ranges and UXO-DMM-MC sites; (2) collecting and preparing data to be uploaded into the Army Range Inventory Database (ARID); (3) conducting an assessment of explosives safety risk using the Risk Assessment Code (RAC) methodology for each CTT military range or site containing UXO or DMM identified in the inventory; and (4) determining which sites on the inventory qualify for the Military Munitions Response Program (MMRP).

The data collection portion of the CTT inventory was conducted in October and November 2001 and involved a site visit to the installation. While on-site, the CTT

inventory team reviewed historical records and interviewed installation personnel concerning potential CTT ranges UXO-DMM-MC sites. This report presents the results of the CTT inventory conducted at SEAD and presents the inventory findings.

## Purpose of the Range Inventory Report

The purpose of this report is to present the results of the CTT inventory for SEAD BRAC Property, located in Romulus, New York. The report includes an individual CTT map for the installation, a copy of the data tables that will be submitted electronically to AEC for uploading into ARID, completed RAC worksheets for all sites with UXO-DMM-MC, DERP eligibility determination, and identification of which ranges and sites qualify for the MMRP. Although an exhaustive archive search was not performed for this inventory, historical research was performed to identify sites subject to this inventory, including locations, periods of use, the types of ordnance used, and other specific information regarding the site. The majority of these data were obtained by reviewing installation records and interviewing personnel at, or involved with, SEAD. Although the data presented in this report are believed to be accurate, they have not been verified by inspection or field sampling. Therefore, it is possible that additional ranges or sites may be discovered in the future.

## Summary of Results

SEAD [Federal Facility Identification (FFID): NY213820803] is a 10,622.8-acre former ammunition depot built in 1941 and active until closure in July 2000. Its mission was to receive, store, and issue munitions and general stores. At the close of World War II, SEAD was tasked with maintaining and servicing munitions, and carried out demilitarization operations on vast stores of unneeded munitions returned from the war zones. SEAD handled virtually every conventional munition used by ground and air forces, including projectiles, mines, grenades, bombs, pyrotechnics, rockets, fuzes, and bulk explosives. It also served as a troop training facility. SEAD was closed as part of the 1995 BRAC round.

During the CTT inventory, 20 CTT ranges and 3 UXO-DMM-MC sites were identified on SEAD BRAC property. The estimated total acreage of the CTT ranges and UXO-DMM-MC sites is:

- **Closed:** 3,033.9 acres
- **Transferring:** 0 acres
- **Transferred:** 220.8 acres

As part of the CTT inventory, the CTT inventory team performed an assessment of explosives safety risk using the RAC process for each CTT military range and UXO-DMM site in the CTT inventory. RAC scores are not appropriate for sites containing only MC. The RAC process essentially involves completion of a worksheet that consists of a series of questions regarding the range. As the worksheet is completed, it defines a relative overall score (RAC score) for each military range. The RAC score is an estimate



of the relative explosive safety risk, which is reported as a number from 1 [high explosives (HE) safety risk] to 5 (negligible explosives safety risk). The following is a description of the RAC scores.

RAC 1	High Risk - Highest priority for further action.
RAC 2	Serious Risk - Priority for further action.
RAC 3	Moderate Risk - Recommend further action.
RAC 4	Low Risk - Recommend further action.
RAC 5	Negligible Risk - Indicates that no DoD action is necessary.

The results of the CTT inventory for SEAD are summarized in Table ES-1.

**Table ES-1: CTT Range and Site Details**

Installation	Range or Site Name	Classification	Total Area (Acres)	Munitions Type(s)	Munitions Constituents	RAC Score	DERP Eligibility
SEAD	40mm Grenade Range XD	Transferred	21.8	Small arms ammunition	Unknown	5	MR
SEAD	Abandoned Deactivation Furnace	Closed	5.0	Small arms ammunition	Unknown	3	IR
SEAD	Abandoned Powder Burn Area	Closed	1.2	Propellants	Unknown	5	IR
SEAD	Bazooka Range	Closed	32.5	Ground rockets, practice; small arms ammunition	Unknown	2	IR
SEAD	Demolition Range	Closed	40.1	Grenades, artillery shells, pyrotechnics, small arms ammunition; demolition materials	Unknown	1	MR
SEAD	EOD Range 1	Closed	193.6	Grenades, artillery shells, pyrotechnics, small arms ammunition; demolition materials	Unknown	1	IR
SEAD	EOD Range 2	Closed	5.3	Grenades, artillery shells, pyrotechnics, small arms ammunition; demolition materials	Unknown	1	MR
SEAD	EOD Range 3	Closed	0.4	Grenades, artillery shells, pyrotechnics, small arms ammunition; demolition materials	Unknown	1	MR

Installation	Range or Site Name	Classification	Total Area (Acres)	Munitions Type(s)	Munitions Constituents	RAC Score	DERP Eligibility
SEAD	Existing Deactivation Furnace	Closed	5.0	Small arms ammunition	Unknown	3	IR
SEAD	Function Test Range XD	Transferred	15.1	Small arms ammunition	Unknown	5	IR
SEAD	LTA-1XD	Transferred	8.2	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-2 (III)	Closed	319.9	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-3 (II)	Closed	151.0	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-4 (I)	Closed	906.7	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-4 XD	Transferred	172.0	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-5	Closed	48.4	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-6	Closed	380.3	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-7	Closed	183.0	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	LTA-IV	Closed	188.0	Small arms ammunition (live and blanks), pyrotechnics	Unknown	4	MR
SEAD	Open Burn/Open Detonation Grounds	Closed	364.3	Grenades, artillery shells, pyrotechnics, small arms ammunition; demolition materials	Unknown	1	IR
SEAD	Rifle Grenade Range	Closed	49.8	Rifle grenades	Unknown	2	MR
SEAD	Sampson Rifle Range	Closed	159.4	Small arms ammunition	Unknown	5	MR

<b>Installation</b>	<b>Range or Site Name</b>	<b>Classification</b>	<b>Total Area (Acres)</b>	<b>Munitions Type(s)</b>	<b>Munitions Constituents</b>	<b>RAC Score</b>	<b>DERP Eligibility</b>
SEAD	Sampson Rifle Range XD1	Transferred	3.7	Small arms ammunition	Unknown	5	MR









## **A. INTRODUCTION**

The U.S. Army is in the process of inventorying all of its past and current ranges to support its range sustainment and munitions response programs. The Army is conducting the inventory in a series of phases. The first and second phases only addressed properties meeting the definitions of a military range. The third phase involves an inventory of closed, transferring, and transferred (CTT) ranges and unexploded ordnance, discarded military munitions, and/or munitions constituents (UXO-DMM-MC) sites. This report documents the results of the CTT inventory for SEAD Base Realignment and Closure (BRAC) and non-Formerly Used Defense Sites (FUDS) transferred property located in Romulus, New York.

### **Background**

The Army is conducting the range inventory in a series of three phases to meet immediate, short-term, and long-term planning needs. Phase 1 involved a data call issued through the Army Environmental Center (AEC) requesting general information about ranges on various installations under each U.S. Army Major Command (MACOM). Phase 1 was conducted using a questionnaire called the Advance Range Survey (ARS). The purpose of the ARS was to allow the Army to meet the short-term data goal of supporting the Department of Defense (DoD) response to Senate Report 106-50. The SEAD ARS data were submitted to AEC and compiled into a master database.

The ARS allowed the Army to meet its short-term needs; however, the Army's long-term needs required a more detailed inventory of its ranges that was not achievable through the ARS. For management and budgetary reasons, the Army divided the detailed follow-on inventory into two phases: Phase 2 covers active and inactive (A/I) ranges, while Phase 3 is slightly broader and covers all CTT ranges and UXO-DMM-MC sites.

No Phase 2 inventory was performed for SEAD because no A/I ranges are reported to exist at the facility. The installation has been included under 1995 BRAC, and all ranges are in closed, transferring, or transferred status.

This CTT inventory is a comprehensive inventory of both CTT military ranges and UXO-DMM-MC sites. All locations currently owned, leased, or otherwise possessed by the Army and all such properties previously owned, leased, or possessed by DoD are included in this inventory. However, properties currently classified as operational (A/I) ranges, operating storage or manufacturing facilities, or permitted military munitions treatment and/or disposal facilities are excluded. Closed ranges and sites are no longer in use and have no potential future use as ranges and sites, but remain under military control. A range or site is referred to as transferring if it is no longer being used and is proposed to be released from military control within the next year. A range or site is considered transferred at the time it is officially released

from military control. Properties that are owned by DoD but leased to other entities are not transferred. Further definitions are provided in Section B.

Initial pre-site visit coordination was accomplished by telephone and e-mail on 19 and 25 September 2001. Follow-up coordination occurred by e-mail on several occasions in October 2001. The site visit was conducted on 16 November 2001. While on-site, the CTT inventory team reviewed historical records and interviewed appropriate installation personnel.

## **Project Drivers**

There are several drivers for the CTT inventory, including Defense Environmental Restoration Program (DERP), as amended by the Defense Authorization Act of 2002 (Public Law 107-107), federal financial accounting standards, and DoD guidance. The most important driver is the DERP. DERP requires an "inventory of defense sites that are known or suspected to contain UXO-DMM-MC" be conducted and completed by 31 May 2003. The revised Management Guidance for the DERP (September 2001) created the Military Munitions Response Program (MMRP) and outlines the specific program requirements for the CTT inventory. Federal financial accounting standards require DoD to determine the estimated cost of cleaning up sites under the MMRP and report this cost in its annual financial statements. A complete inventory of CTT ranges and UXO-DMM-MC sites will ensure that future financial reporting estimates are defensible and supported by accurate data.

## **Report Objectives**

The objective of this report is to present the results of the CTT inventory for SEAD BRAC and non-FUDS transferred property. Although an exhaustive archive search was not performed for this inventory, historical research was performed to identify sites subject to this inventory, including locations, periods of use, and types of ordnance used. The majority of these data were obtained by reviewing installation records and interviewing personnel at, or involved with, SEAD. Although the data presented in this report are believed to be accurate, they have not been verified by inspection or field sampling.

## **Project Participants**

AEC is the Program Manager for the Army's CTT inventory. AEC provides overall management and guidance, identifies significant issues, develops and maintains the Army Range Inventory Database (ARID), defines achievable schedules and milestones, coordinates with relevant U.S. Army organizations, and reports on the inventory's status. The AEC Project Manager for BRAC installations is Mr. Glen Boldt.

URS Group, Inc. (URS) is one executing organization for the CTT inventory at BRAC installations and properties and is responsible for conducting the record searches;

gathering, compiling, and validating data; and submitting the validated data to AEC in the specified file formats. URS is responsible for completing the CTT inventory for SEAD. The data collection team leader for the SEAD CTT inventory is Mr. Christopher Wieland.

SEAD offices and personnel were contacted and interviewed as part of the CTT inventory. The SEAD primary point of contact for the CTT inventory was Mr. Steve Absolom. Mr. Tom Grasek also provided important information. Mr. Absolom's address is:

Seneca Army Depot  
5786 State Route 96  
Romulus, NY 14541-5001  
(607) 869-1309









## B. DEFINITIONS AND DATA REQUIREMENTS

Before the results of the inventory can be presented, the reader must have an understanding of the definitions and data requirements associated with the inventory. This section outlines the definitions used in the inventory and the data requirements established by the Army.

### Inventory Definitions

The following definitions are applicable to the Army's range inventory program.

**Active Range** – A Military Range that is currently in service and is being used regularly for range activities. For the purposes of the inventory, "in service" is defined as currently in operation, construction, maintenance, renovation, or reconfiguration to meet current Army training and/or test requirements. An active range qualifies as an operational range.

**Base Realignment and Closure (BRAC)** – A DoD program that focuses on compliance and cleanup efforts at military installations undergoing closure or alignment, as authorized by Congress in four rounds of base closures for 1988, 1991, 1993, and 1995. A BRAC parcel is eligible for the MMRP if the release occurred prior to September 30, 2002; the release is not an operational range, FUDS, active munitions demilitarization facility, or active waste military munitions (WMM) treatment or disposal unit that operated after September 30, 2002; and the site was not identified or included in the Restoration Management Information System (RMIS) prior to September 30, 2002.

**Closed Range** – A Military Range that has been taken out of service as a range and that either has been put to new uses that are incompatible with range activities or is not considered by the military to be a potential range area. A closed range is still under the control of a DoD component. Closed ranges cannot occupy an area that has been identified as an A/I range. Closed ranges are those areas of land that used to be operational, are still owned by the Army, but are now used for non-range purposes.

**Defense Site** – Locations that are or were owned by, leased to, or otherwise possessed or used by DoD. Does not include operational ranges, operating storage or manufacturing facilities, or facilities that are or were permitted for the treatment or disposal of military munitions.

**Defense Site Environmental Restoration Tracking System (DSERTS) Site** – A site included in the Army's DSERTS database. DSERTS is the database the Army uses to track Installation Restoration Program (IRP) sites under DERP.

**Discarded Military Munitions (DMM)** – Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine

or other storage area for the purpose of disposal. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of.

**Formerly Used Defense Site (FUDS)** – A DoD program that focuses on compliance and cleanup efforts at sites that were formerly used by DoD. A FUDS property is eligible for the MMRP if the release occurred prior to October 17, 1986; the property was transferred from DoD control prior to October 17, 1986; and the property or project meets other FUDS eligibility criteria.

**Inactive Range** – A Military Range that currently is not being used, but that is still considered by the Army to be a potential range area, and that has not been put to a new use that is incompatible with range activities. An inactive range qualifies as an operational range.

**Limited Public Access (LPA)** – The public does have some access to the range or site, but that access doesn't involve any digging, only surface access, such as livestock grazing or use as a wildlife preserve or refuge.

**Military Munitions** – All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of DoD, the Coast Guard, the Department of Energy (DOE), and the National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, except that the term does include non-nuclear components of nuclear devices that are managed under the nuclear weapons program of DOE after all required sanitization operations under the Atomic Energy Act of 1954 (42 United States Code 2011 et seq.) have been completed.

**Military Range** – A designated land or water area set aside, managed, and used to conduct research on, develop, test and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

**Munitions Constituents (MC)** – Any materials originating from UXO, DMM, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

**No Public Access (NPA)** – The public does not have any access to the range or site.

**Operational Range** – A military range that is currently in service and is being regularly used for range activities, or a military range that is not currently used, but that is still considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities. Both active and inactive ranges qualify as operational ranges.

**Restoration Management Information System (RMIS) Site** – A site included in the DoD's RMIS database. Includes any building, structure, impoundment, landfill, storage container, or other site or area where a hazardous substance was or has come to be located. Installations and ranges may have more than one site.

**Restricted Public Access (RPA)** – The public does have some access to the range or site and that access may involve some surface disturbance, such as agricultural use, forestry, recreation, and vehicle or supply storage facility use.

**Transferred Range** – A Military Range that is no longer under military control and has been leased by DoD, transferred, or returned by DoD to another entity, including federal entities. This includes a Military Range that is no longer under military control, but that was once used by the Army. This includes use under the terms of an executive order, special-use permit or authorization, right-of-way, public land order, or other instrument issued by the Federal land manager.

**Transferring Range** – A Military Range that is proposed to be leased, transferred, or returned by DoD to another entity, including federal entities. This includes a Military Range that was used under the terms of a withdrawal, executive order, special-use permit or authorization, right-of-way, public land order, or other instrument issued by the Federal land manager or Property Owner. An active range will not be considered a "transferring range" until the transfer is imminent.

**Unexploded Ordnance (UXO)** – Military munitions that have been primed, fused, armed, or otherwise prepared for action; have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and remain unexploded either by malfunction, design, or any other cause.

**Unrestricted Public Access (UPA)** – There are no restrictions on the use of the range or site (excavation is allowed).

## **Inventory Data Requirements**

The goal of this CTT inventory is to identify locations, periods of use, and types of ordnance used on CTT ranges and UXO-DMM-MC sites associated with SEAD. Specific requirements included (1) mapping the CTT military ranges and UXO-DMM-

MC sites; (2) collecting and preparing data to be uploaded into ARID, (3) conducting an assessment of explosives safety risk using the Risk Assessment Code (RAC) methodology for each CTT military range or site containing UXO or DMM identified in the inventory; and (4) determining which sites on the inventory qualify for the MMRP. Descriptions of the data requirements for the maps, ARID, and the RAC methodology are outlined below.

### **Range and Site Map Requirements**

An individual CTT map was created as part of the inventory and is included in Section E. The CTT map provides a complete picture of the CTT ranges and sites on SEAD BRAC and non-FUDS transferred property.

### **ARID Data Requirements**

The CTT inventory data are driven by the requirements of ARID. The *ARID Upload Instructions* (19 September 2002) outline the minimum data elements required for completing the range inventory. According to the instructions, the following files are required for the inventory:

- Points of Contact
- Installation
- Range
- Munitions
- Ownership
- Land Use Restriction and Access Controls
- Range Demographics
- Map
- RMIS Site Information
- DSERTS Site Information

A printed copy of each file submitted to ARID is provided in Section F.

### **Risk Assessment Code Methodology**

The CTT inventory team was required to perform an explosives safety risk assessment, using the RAC methodology, on each CTT military range and UXO-DMM sites identified in the inventory. RAC scores are not appropriate for sites containing only MC. The RAC methodology is a process that U.S. Army Corp of Engineers (USACE) designed to evaluate the relative explosive risk associated with past ordnance-related disposal, testing, or training. The RAC score assists in prioritizing and sequencing projects. The RAC process is described in Appendix B of USACE Engineering Pamphlet 1110-1-18, *Ordnance and Explosive Response* (24 April 2000) and referenced in the updated management guidance for DERP. The analysis involves a worksheet that, when completed, assigns a relative score (RAC score) to the sites. The RAC score is a number from 1 (highest explosives safety

risk) to 5 (negligible explosives safety risk). A summary of the calculated RAC scores and the completed RAC worksheets for each CTT range and UXO-DMM site inventoried are included in Section G.

### **DERP Eligibility Determination**

The CTT inventory team is required to determine the DERP eligibility of each range and site included in the inventory. This is done to ensure ranges and sites are not double counted if already included under the IRP. It is also performed to ensure only ranges with UXO-DMM-MC meeting the requirements identified in the DERP Management Guidance, September 2001, are included in the MMRP. Results of the DERP eligibility determination include IRP, MMRP, or other (not eligible). To make this determination the following must be considered.

- Does the site have a DSERTS Site ID?
- Does the current DSERTS cost to complete (CTC) include a response to all UXO-DMM-MC?
- Does the DSERTS site have a BRAC UXO flag?
- When the DSERTS site is listed as response complete (RC), is it listed as RC because of ineligibility of funding for UXO or munitions?

After the determination of whether the range or site, including its associated UXO-DMM-MC aspects, is currently covered under the IRP, it must be determined whether the range or site is eligible for the MMRP. If the range or site is not currently covered under the IRP and is not eligible for the MMRP, it should be classified as "other." As appropriate, based on the eligibility determination, RMIS range ID and RMIS site ID numbers are then assigned.









## C. INSTALLATION SUMMARY

This section provides a brief summary of the history of SEAD and a summary of the data collection portion of the CTT inventory, including the types of records reviewed and offices contacted.

### Installation Overview and Description

The former SEAD [Federal Facility Identification (FFID): NY213820803] is a 10,622.8-acre facility located on the eastern shore of Seneca Lake at Romulus, Seneca County, New York. It is surrounded primarily by agricultural land, with the communities of Varick, New York to the north and Romulus, New York to the east. The U.S. Army purchased the property in 1941 for use as a munitions storage facility during World War II. Excess munitions were returned from overseas for storage, maintenance, and demilitarization after the war ended. Operations at the installation from 1945 until closure in 1995 included receipt, storage, and issuance of munitions; munitions maintenance, testing, and service; and explosive ordnance disposal (EOD) training, troop training, and medical services. During the war, SEAD operated a branch prisoner of war camp. SEAD also housed the National Guard and Army Reserve, U.S. Coast Guard (USCG) (Loran C Transmitting Station), and a Medical and Dental Operations Unit. The installation was selected for BRAC in 1995, and formally ceased operations in July 2000.

Munitions handled at SEAD have included HE aerial bombs up to 1,000 lb.; HE, smoke, and white phosphorus (WP) artillery shells (75mm to 155 mm), small and medium caliber solid and tracer ammunition; practice, smoke, tear gas, and HE hand and rifle grenades; antipersonnel and anti-tank mines [high explosives (HE)]; ground rockets; fuzes; pyrotechnics; and bulk explosives, such as TNT, RDX, and tetryl. In addition, SEAD stored special weapons in bunkers in the northern part of the installation.

The installation has been undergoing environmental investigation and remediation, including UXO-DMM-MC sites. Sampling of selected 100 by 100-ft grids has been conducted over parts of the installation to identify areas containing UXO. Remediation activities are currently being conducted on lands transferred to the New York Department of Corrections (NYDOC).

SEAD had 20 ranges, including a 40mm grenade range, rifle range, 3.5-in. rocket range, grenade ranges, a function test range, maneuver/pyrotechnic ranges, and small arms ranges. The safety fan for the Sampson Rifle Range extended beyond the installation boundary. By definition, the area beyond the boundary is considered to be transferred range. Additionally, SEAD has three UXO-DMM-MC sites.

Overlapping range areas were counted only once in acreage totals. For example, only the portion of the Northeast Troop Training Complex that does not fall under EOD Ranges 2 and 3 and the Northwest Training Range [Local Training Area

(LTA)-7] that does not fall under the EOD Ranges are separately counted toward range acreage totals.

### **Contractor Team Composition**

The CTT inventory team for SEAD BRAC property was represented by URS. The CTT inventory team leader for SEAD was Mr. Christopher Wieland. Team members included Mr. Jusbyn Lockard, Ms. Melanie White, Mr. Brent Collier, and Mrs. Linda Leonard.

### **Installation Points of Contact**

The primary CTT inventory point of contact for SEAD was Mr. Steve Absolom, BRAC Environmental Coordinator, Organizational Support Command. Mr. Absolom's address is:

Seneca Army Depot  
5786 State Route 96  
Romulus, NY 14541-5001  
(607) 869-1309

### **Nature of Data Collection and Coordination**

Specific records and maps reviewed are listed in the document log (see Section I).

### **Summary of Critical Data Sources**

The Archives Search Report (ASR) for this site and the installation point of contact both reported that several threatened and endangered species are known to exist within SEAD. However, a list was not available during or following the site visit. The ASR reports that there are a number of pre-historic and historic sites within SEAD. The IRP has numerous sites currently under investigation and/or restoration at SEAD.





## D. INSTALLATION CTT RANGE AND SITE DATA

This section details the CTT ranges and UXO-DMM-MC sites on or associated with SEAD. It includes a summary of the total range and site area in acres, a summary of each individual CTT range and, a table listing the details of each CTT range and site, a table with ownership and accessibility information, and a table illustrating the DERP eligibility determination.

### Summary of CTT Ranges and UXO-DMM-MC Sites

The following is a summary of the range and site area at SEAD:

CTT Range and Site Area: 3,254.7 acres

The CTT acreage figures and ownership are provided in Table D-1.

**Table D-1: Ownership Summary Table**

Installation	Range or Site Name	Ownership	CTT Acreage
SEAD	40mm Grenade Range XD	State Agency (NYDOC)	21.8
SEAD	Abandoned Deactivation Furnace	Federal Agency (DoD)	5.0
SEAD	Abandoned Powder Burn Area	Federal Agency (DoD)	1.2
SEAD	Bazooka Range	Federal Agency (DoD)	32.5
SEAD	Demolition Range	Federal Agency (DoD)	40.1
SEAD	EOD Range 1	Federal Agency (DoD)	193.6
SEAD	EOD Range 2	Federal Agency (DoD)	5.3
SEAD	EOD Range 3	Federal Agency (DoD)	0.4
SEAD	Existing Deactivation Furnace	Federal Agency (DoD)	5.0
SEAD	Function Test Range XD	State Agency (NYDOC)	15.1
SEAD	LTA-1 XD	State Agency (NYDOC)	8.2
SEAD	LTA-2 (III)	Federal Agency (DoD)	319.9
SEAD	LTA-3 (II)	Federal Agency (DoD)	151.0
SEAD	LTA-4 (I)	Federal Agency (DoD)	906.7
SEAD	LTA-4 XD	State Agency (NYDOC)	172.0
SEAD	LTA-5	Federal Agency (DoD)	48.4
SEAD	LTA-6	Federal Agency (DoD)	380.3
SEAD	LTA-7	Federal Agency (DoD)	183.0
SEAD	LTA-IV	Federal Agency (DoD)	188.0
SEAD	Open Burn/Open Detonation Grounds	Federal Agency (DoD)	364.3
SEAD	Rifle Grenade Range	Federal Agency (DoD)	49.8

Installation	Range or Site Name	Ownership	CTT Acreage
SEAD	Sampson Rifle Range	Federal Agency (DoD)	159.4
SEAD	Sampson Rifle Range XD1	Private Sector	3.7

## CTT Range and Site Summaries

Below are summaries for the individual CTT ranges and UXO-DMM-MC sites inventoried on SEAD. Each summary typically includes a brief history of the area, total acreage, relative location, types of ordnance used or discarded, periods of use, information on any UXO responses conducted, and current usage. The sites reported to ARID and included in the CTT range and site summary details table are adjusted so that areas are not counted more than once in the inventory. Some summaries are more detailed than others based on the level of data available.

This CTT inventory identified 20 CTT ranges and 3 UXO-DMM-MC sites on SEAD BRAC property. One range safety fan extends off base property, and six other ranges or parts of ranges have been transferred. All transferred portions of ranges are, for the purpose of the inventory, counted as separate ranges. Range locations are depicted on Figure 1 (Section E). Information used in these descriptions was obtained from the sources listed in Section I.

**40mm Grenade Range XD (DSERTS SEAD-118)** – This 21.8-acre transferred range is located within the current boundaries of the State Prison, on the south end of the base. It is adjacent to the former Function Test Range (SEAD-44) and was with LTA-4 (I). Numerous intact and fragmented M385 (practice) and M382 (spotting charge) grenades, as well as fuzes, were observed on the surface of this area. The Army retains access rights in order to complete remedial actions (RAs). Remediation of this range is being conducted at this time.

**Abandoned Deactivation Furnace 16 (DSERTS SEAD-16)** – This closed 5.0-acre site and its companion site, SEAD-17, are nominally exempt from the range/site inventory, but are included here because of the large amount of munitions debris scattered over the surrounding area. SEAD-16 (Building S311) is located on the eastern side of the munitions storage area, northwest of the main housing area. This furnace (Building S311) was built in 1943 and used to demilitarize small arms ammunition until 1961, when it was replaced by a new facility (SEAD-17). The Engineering Evaluation/Cost Analysis (EE/CA) Report (Parsons 2001) recommends that this area be cleared to a depth of 6 in., since the munitions debris is confined to the surface.

**Abandoned Powder Burn Area (DSERTS SEAD-24)** – Located on the western portion of the base, this closed 1.2-acre site is found on a number of installation maps. The site is equipped with water pipes and a drain, but there is no information available about the materials that may have been burned here. The ASR noted that



no ordnance and explosives (OE) was found and recommended no further action for this site.

**Bazooka Range (DSERTS SEAD-46)** – This 32.5-acre closed range is within LTA-2, based on the map *Seneca Army Depot Activity Current Site Identification Operable Units Site Layout as of 15 June 2001*. Documentation found in the ASR indicates this range was used for the firing of small arms munitions, including tracers and blanks. A 3.5-in. rocket was found on this range. This range is closed at this time, and will be transferred to the state as a conservation/recreation area.

**Demolition Range (DSERTS SEAD-57)** – This closed range, located in the northwestern section of the installation, was used as an EOD Range. It covers 40.1 acres. Documentation was found in the ASR stating that small arms ammunition and flares were destroyed at this location. This range is closed and will be transferred to two different groups. The northern portion will eventually be transferred to the state as a conservation/recreation area. The southern portion is expected to transfer to the White Deer Corporation at an undetermined date.

**EOD Range 1 (DSERTS SEAD-57)** – EOD Range 1 was used from 1941 until installation closure in 1995. The range was used for open detonation (OD) of munitions and EOD training. The range occupies about 194 acres and has a 6 ft high, 30 ft diameter earthen berm. The safety radius for this site is 1,800 ft. The berm first appears in air photos from 1978 (Parsons 2001). Additionally, shot holes have been found outside the berm along access roads. The ASR noted that the remnants of numerous flares were found in the area, and the EE/CA (Parsons 2001) found 20mm and 105mm projectiles and a live fragmentation grenade.

**EOD Range 2 (DSERTS SEAD-118)** – EOD Range 2 is a closed 5.3-acre range located along the northeastern portion of the base within the LTA. The ASR reported that explosive devices were used in this area, and non-explosive metal projectiles were thrown into the nearby Duck Pond. An EE/CA investigation was not completed due to the heavy brush cover over the area, but the portion that was completed identified one UXO item and six munitions-related geophysical anomalies at the site. EOD Range 2 has therefore been recommended (Parsons 2001) for clearance to a depth of 6 in. to removed near-surface munitions debris. This site is expected to transfer into the private sector at a yet to be determined date.

**EOD Range 3 (DSERTS SEAD-118)** – This closed 0.4-acre range is adjacent to the Bazooka Range and within LTA-2. The site has a roughly 150 ft diameter berm that is open to the south and contained little vegetation at the time of the ASR. An EE/CA investigation performed by Parsons (2001) identified 13 munitions-related geophysical anomalies, none of which was UXO. They included practice rifle grenades, fuze lighter, and a slap flare. Inspection by ASR team members and contractor personnel indicates that the area may not have been used for EOD operations. The ASR speculated that these items may be related to the nearby

Bazooka Range rather than EOD at the site. The EE/CA recommended munitions clearance to the depth of instrument detection for this site.

**Existing Deactivation Furnace 17 (DSERTS SEAD-17)** – SEAD-17 was active from 1962 to 1989. It is located about 0.5 miles southwest of SEAD-16 and served the same purpose. The 5.0-acre area around SEAD-17 is, like SEAD-16, littered with OE debris. The EE/CA Report (Parsons 2001) recommends that this area be cleared to a depth of 6 in., since the munitions debris is confined to the surface.

The Existing Deactivation Furnace was placed under Resource Conservation and Recovery Act (RCRA) interim status in about 1984, and a Part B permit application was submitted to the state. However, the permit had not been issued at the time SEAD closed and the furnace ceased operation in 2000. The site is being cleaned up to RCRA standards under the aegis of the IRP. The small arms munitions and debris on surrounding land areas is a pre-RCRA legacy. This site is included in this inventory because site contamination is from legacy operations. No final permit was issued and the cleanup is being carried out under the IRP.

**Function Test Range XD (DSERTS SEAD-44)** – This transferred range occupies 15.1 acres in the parcel that was transferred to the NYDOC. The area was used for testing of 3.5-in. rocket motors and may have been used to function test fuzes. Various UXO and OE scrap were recovered. Remains of 40mm grenades and spent small arms were observed near the test area along the road. Additionally, there are two 15 by 5-ft pits near the Function Test Range that may have been used for open burn (OB), but no UXO was observed by the ASR team. The EE/CA Report (Parsons 2001) recommended that this site be cleared to instrument detection depth.

**Open Burn/Open Detonation Grounds (DSERTS SEAD-23 and SEAD-45)** – The OB/OD Grounds are two adjacent sites in the northwest corner of SEAD. Their DSERTS numbers are SEAD-23 and SEAD-45, respectively. The OD Grounds are also covered by SEAD-115 for RCRA actions taken at the site. The OB Grounds consist of eight U-shaped earthen berms used to contain fire and debris during OBs. There may also have been two pads without berms immediately north of the bermed sites. The safety radius for the OB Grounds is 1,800 ft. The USACE ASR team observed numerous remnants of munitions on the ground throughout this area.

The OD Grounds are slightly north of the OB Grounds. This site occupies an open area of roughly 60 acres with a bermed detonation area at the center. The safety radius is 1,800 ft. Separate inspections by USACE and Parsons-Engineering Science, Inc. personnel in 1999 identified abundant ordnance and explosives (OE) material in the area. This site covers 364.3 acres. This figure represents the total of non-overlapping areas for safety circles. Safety circles are shown on the map in Tab E.

Two other sites, the Explosive Scrap Furnace and the Fuze (or Detonator) Destruction Furnace, are also located in this area, but are not within the scope of this inventory. No UXO or DMM is known to exist at these sites.

Items found in this area by an EE/CA investigation include live .50 cal., 20mm, 37mm, 57mm, 75mm, 81mm mortar, 90mm, and 105mm shells, some of which contained HE. One live 105mm shell contained WP. An EE/CA (Parsons 2001) conducted for this and other areas recommended that the OB/OD Grounds be cleared by mechanical sorting and sifting to remove UXO and munitions debris.

The OD Grounds were placed under RCRA interim status in about 1984. A burn pan for propellants was added later. A RCRA Part B permit application was submitted, but was still pending when SEAD ceased operations in 2000. The UXO and munitions debris in the OD Grounds is largely a legacy of EOD operations from 1942 until 1984. The cleanup of this area is being completed under both the IRP (SEAD-45) and RCRA (SEAD-115). The OD Grounds have been included in this inventory because of the legacy UXO contamination. No final RCRA permit was ever issued and the cleanup is being completed mainly under the IRP.

**Rifle Grenade Range (no DSERTS number)** – The closed Rifle Grenade Range is a 49.8-acre rectangular area located on the west side on SEAD near the Demolition Range and within LTA-7. This range was used for an undetermined period for rifle grenade and 40mm grenade training, and contains mannequins and vehicles used as targets. Intact 35mm subcaliber munitions containing HE, M385 grenades (practice only), and 40mm grenades have been found on this range. One fragmentation grenade was also found here, as was a fuzed M83 fragmentation bomb. The EE/CA report (Parsons 2001) recommends that this area be cleared to the instrument detection depth.

**Sampson Rifle Range (no DSERTS number)** – Also called Range 114, this closed range extends across much of the southern end of the base. This range was not mentioned in the ASR, but was found on range maps during the range inventory site visit (*Seneca Army Depot, General Site and Building Plan, I-70, August 29, 1984, and Detail Site Plan, Surface Danger Zone at Small Arms Firing Range and Riot Gun Familiarization Firing Range, August 3, 1973*). The maps show the firing fan oriented in slightly different directions. One firing fan lies over the current federal prison (*General Site and Building Plan, August 29, 1984*). Another map shows the fan along the border of the prison (*Surface Danger Zone at Small Arms Firing Range and Riot Gun Familiarization Firing Range, August 3, 1973*). This difference does not appear to be related to the prison, since the range ceased operation before the prison was constructed. The difference in range orientation may reflect changes in the range, weapons used, or mission requirements.

The area of the range, as accounted for in ARID, is 159.4 acres. Acreage overlapped by LTA-4 was taken into account and was not double-counted.

**Sampson Rifle Range XD1 (no DSERTS number)** – This 3.7-acre area is located on railroad property outside the southwest boundary of the base, and lies under part of the Sampson Rifle Range fan. This area was never owned, leased, or controlled by the Army, and is therefore considered transferred land.

### **Training and Maneuver Areas**

SEAD had eight separate training and maneuver areas during its history. Troop training appears to be a late development, as the first map showing training areas is dated May 1985. This map showed only three unnamed areas, corresponding approximately to LTAs 4, 5, and 7, described below. A map dated 14 January 1988 shows four LTAs, numbered I through IV. This map shows LTAs I, II, and III in the same general areas as LTAs 2, 3, and 4. LTA-IV was outside the main installation. Finally, a map dated 6 January 1989 shows seven LTAs, numbered 1 through 7. Because these were inclusive of most of the training areas from the 1985 and 1988 maps, they are used as identifiers for this inventory. Roman numerals are added in parentheses to indicate numbering changes between the 1988 and 1989 maps. The map in Section E of this report represents an areal composite of the three known generations of training areas.

The munitions used at SEAD training and maneuver areas are not documented. Common Army practice in training areas was to use blank small arms ammunition; practice, flash, and smoke grenades; and pyrotechnics, such as flares.

None of the training and maneuver areas has been independently addressed by the IRP, and none have been assigned DSERTS numbers.

**LTA-1 XD (no DSERTS number)** – This transferred range comprises 8.2 acres within the transferred area at the north end of SEAD. A 1988 map indicates that there was a hard-stand (permanent) bivouac site here.

**LTA-2 (III) (no DSERTS number)** – This closed 319.9-acre range is located on the east side of SEAD, and includes the Bazooka Range, EOD Range 2, and EOD Range 3. One helicopter landing zone (LZ), LZ-3, was located on the west edge of LTA-2

**LTA-3 (II) (no DSERTS number)** – LTA-3 is a 151.0-acre closed range in the southeast corner of SEAD, adjacent to the USCG Loran-C Station. This range is expected to be transferred to the USCG as part of the Loran C Station.

**LTA-4 (I) (no DSERTS number)** – LTA-4 is a 906.7-acre range at the south end of SEAD. The range varied in size and configuration on the 1985, 1988, and 1989 maps. The 1989 map indicates that there was a sizeable buffer zone around the Liquid Propellant Storage Area and the Ammunition Workshop Area. The ASR states that riot control agents were used for training on this range. Four helicopter LZs, LZ-12, LZ-13, LZ-14, and LZ-15, were located on LTA-4. This range is closed

and is expected to transfer to the state to become part of a conservation/recreation area.

A small (2-acre) Pistol Range (DSERTS SEAD-120) was located in the east part of LTA-4. USACE inspectors found spent .38 and .45 caliber bullets in a berm at the site, but did not find any live rounds or UXO. The period of use for this site is unknown. This site has not been remediated.

**LTA-4 XD (no DSERTS number)** – This 172-acre transferred range has been transferred to the state as a prison site. Remediation of this range is being conducted at this time. A portion of the Sampson Rifle Range fan also covers much of this area. Additionally, LTA-4-XD surrounds the 40mm Grenade Range and the Function Test Range. This area is undergoing remediation as part of the transfer of property to the state. Remediation includes UXO and munitions-related debris.

**LTA-5 (no DSERTS number)** – This closed 48.4-acre training and maneuver area is located on the west end of Sampson Airfield. It includes the Sampson Rifle Range and the Sampson Reaction Course. This range is closed.

**LTA-6 (no DSERTS number)** – Sampson Airfield, originally owned by the Navy from 1942 until 1949, then under Air Force control from 1950 to 1957, eventually became part of SEAD in 1958. It was used for an unknown period of time in the late 1980s as LTA-6, but was closed when SEAD ceased operation. The area covers 380.3 acres and was used by the Army as a troop training complex (*Special Facilities Recreation and Training, Sampson Air Force Base, February 27, 1955*). A skeet range is located within LTA-6. The ASR notes that this range was used for military training. The ASR noted that there was blank small arms ammunition observed on the ground near a parking area adjacent to the skeet range.

**LTA-7 (no DSERTS number)** – This closed 183.0-acre training range is located on the west side of SEAD. It overlies the Rifle Grenade Range and the Demolition Range. In its 1985 configuration, LTA-7 included EOD Range 1, but this area was marked as off-limits in the 1989 map. The 1988 map does not show this area as a training and maneuver range. One helicopter LZ, LZ-5, is located within LTA-7.

**LTA-IV (no DSERTS number)** – This closed 188.0-acre range is shown only on a map dated 6 January 1988. No further documentation is available for this range. Additionally, the Lake Housing Small Arms Range is within this area. The ASR states that no records were found that indicated that this range was ever active.

## CTT Range and Site Details Table

The CTT Range and Site Details Table (Table D-2) provides detailed information on the CTT areas included in the inventory.

**Table D-2: CTT Range and Site Details Table**

Installation	Range or Site Name	Classification	Total Area for ARID (Acres)	Munitions Type(s)	Munitions Constituents	RAC Score <sup>a</sup>	Historic Use
SEAD	40mm Grenade Range XD	Transferred	21.8	Small arms	Unknown	5	Rifle grenade
SEAD	Abandoned Deactivation Furnace	Closed	5.0	Small arms	Unknown	3	Other (demil. furnace)
SEAD	Abandoned Powder Burn Area	Closed	1.2	Propellants	Unknown	5	OB/OD
SEAD	Bazooka Range	Closed	32.5	Ground rockets, practice; small arms	Unknown	2	Rifle grenade/anti-tank rocket/small arms
SEAD	Demolition Range	Closed	40.1	Grenades, artillery shells, pyrotechnics, small arms; demolition materials	Unknown	1	OB/OD
SEAD	EOD Range 1	Closed	193.6	Grenades, artillery shells, pyrotechnics, small arms; demolition materials	Unknown	1	OB/OD
SEAD	EOD Range 2	Closed	5.3	Grenades, artillery shells, pyrotechnics, small arms; demolition materials	Unknown	1	OB/OD
SEAD	EOD Range 3	Closed	0.4	Grenades, artillery shells, pyrotechnics, small arms; demolition materials	Unknown	1	OB/OD
SEAD	Existing Deactivation Furnace	Closed	5.0	Small arms	Unknown	3	Other (demil. furnace)
SEAD	Function Test Range XD	Transferred	15.1	Small arms	Unknown	5	Other (OA testing)
SEAD	LTA-1 XD	Transferred	8.2	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/maneuver area

Installation	Range or Site Name	Classification	Total Area for ARID (Acres)	Munitions Type(s)	Munitions Constituents	RAC Score <sup>a</sup>	Historic Use
SEAD	LTA-2 (III)	Closed	319.9	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-3 (II)	Closed	151.0	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-4 (I)	Closed	906.7	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-4 XD	Transferred	172.0	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-5	Closed	48.4	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-6	Closed	380.3	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-7	Closed	183.0	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	LTA-IV	Closed	188.0	Small arms (live and blanks), pyrotechnics	Unknown	4	Training/ maneuver area
SEAD	Open Burn/Open Detonation Grounds	Closed	364.3	Grenades, artillery shells, pyrotechnics, small arms; demolition materials	Unknown	1	OB/OD
SEAD	Rifle Grenade Range	Closed	49.8	Rifle grenades	Unknown	2	Rifle grenade/anti-tank rocket
SEAD	Sampson Rifle Range	Closed	159.4	Small arms	Unknown	5	Small arms
SEAD	Sampson Rifle Range XD1	Transferred	3.7	Small arms	Unknown	5	Small arms

<sup>a</sup>The RAC score is a prioritization and sequencing tool used to rank the explosives safety risk at a site; 1 is the highest explosives safety risk, 5 is the lowest explosives safety risk. The RAC score is discussed further in Section G. The RAC score is only developed for range, UXO, and DMM sites, not MC sites.

## CTT Range and Site Ownership, Use and Access Control Summary Table

The CTT Range and Site Ownership Table (Table D-3) provides a summary of the owner, current use, and access restrictions associated with each CTT range and site in the inventory.

**Table D-3: CTT Range and Site Ownership, Use, and Access Control Summary Table**

Installation	Range or Site Name	Owner	Current Use	Restrictions
SEAD	40mm Grenade Range XD	State Agency (NYDOC)	Other (Prison)	None
SEAD	Abandoned Deactivation Furnace	Federal Agency (DoD)	Undeveloped	None
SEAD	Abandoned Powder Burn Area	Federal Agency (DoD)	Undeveloped	None
SEAD	Bazooka Range	Federal Agency (DoD)	Undeveloped	None
SEAD	Demolition Range	Federal Agency (DoD)	Undeveloped	Fences, locked gates
SEAD	EOD Range 1	Federal Agency (DoD)	Undeveloped	None
SEAD	EOD Range 2	Federal Agency (DoD)	Undeveloped	None
SEAD	EOD Range 3	Federal Agency (DoD)	Undeveloped	None
SEAD	Existing Deactivation Furnace	Federal Agency (DoD)	Undeveloped	None
SEAD	Function Test Range XD	State Agency (NYDOC)	Other (Prison)	None
SEAD	LTA-1 XD	State Agency (NYDOC)	Other (Prison)	None
SEAD	LTA-2 (III)	Federal Agency (DoD)	Undeveloped	None
SEAD	LTA-3 (II)	Federal Agency (DoD)	Undeveloped	None
SEAD	LTA-4 (I)	Federal Agency (DoD)	Undeveloped	None
SEAD	LTA-4 XD	State Agency (NYDOC)	Other (Prison)	None
SEAD	LTA-5	Federal Agency (DoD)	Undeveloped	None
SEAD	LTA-6	Federal Agency (DoD)	Undeveloped	None
SEAD	LTA-7	Federal Agency (DoD)	Undeveloped	None
SEAD	LTA-IV	Federal Agency (DoD)	Undeveloped	None
SEAD	Open Burn/Open Detonation Grounds	Federal Agency (DoD)	Undeveloped	Fences, locked gates



Installation	Range or Site Name	Owner	Current Use	Restrictions
SEAD	Rifle Grenade Range	Federal Agency (DoD)	Undeveloped	None
SEAD	Sampson Rifle Range	Federal Agency (DoD)	Other	None
SEAD	Sampson Rifle Range XD1	Private Sector	Commercial	None

## DERP Eligibility Table

The RMIS Information Table (Table D-4) and the DERP Eligibility Table (Table D-5) provide a summary of the process for determining a site's DERP eligibility. Specifically, if it should be covered under the MMRP or if it is already addressed under the IRP and should remain under that program. For those sites that are not DERP eligible due to a lack of UXO-DMM-MC contamination (i.e., bayonet ranges, drop zones), the table identifies the DERP eligibility as "other."

**Table D-4: RMIS Information Table**

Installation	Range or Site Name	DSERTS Site ID	DSERTS CTC Includes UXO and DMM	DSERTS Site ID Has BRAC UXO Flag	DSERTS Response Complete (RC)	DSERTS RC Flag	Active DSERTS Phase(s)
SEAD	40mm Grenade Range XD	SEAD-118	Y	Y	N	—	RD
SEAD	Abandoned Deactivation Furnace	SEAD-16	Y	N	N	—	RA(C)
SEAD	Abandoned Powdered Burn Area	SEAD-24	Y	N	N	—	RA(C)
SEAD	Bazooka Range	SEAD-46	Y	N	N	—	RD
SEAD	Demolition Range	None	—	—	—	—	—
SEAD	EOD Range 1	SEAD-57	Y	N	N	—	RD
SEAD	EOD Range 2	SEAD-118	Y	Y	N	—	RD
SEAD	EOD Range 3	SEAD-118	Y	Y	N	—	RD
SEAD	Existing Deactivation Furnace	SEAD-17	Y	N	N	—	RA(C)
SEAD	Function Test Range XD	SEAD-44	Y	N	N	—	RI

Installation	Range or Site Name	DSERTS Site ID	DSERTS CTC Includes UXO and DMM	DSERTS Site ID Has BRAC UXO Flag	DSERTS Response Complete (RC)	DSERTS RC Flag	Active DSERTS Phase(s)
SEAD	LTA-1 XD	None	—	—	—	—	—
SEAD	LTA-2 (III)	None	—	—	—	—	—
SEAD	LTA-3 (II)	None	—	—	—	—	—
SEAD	LTA-4 (I)	None	—	—	—	—	—
SEAD	LTA-4 XD	None	—	—	—	—	—
SEAD	LTA-5	None	—	—	—	—	—
SEAD	LTA-6	None	—	—	—	—	—
SEAD	LTA-7	None	—	—	—	—	—
SEAD	LTA-IV	None	—	—	—	—	—
SEAD	Open Burn/Open Detonation Grounds	SEAD-23, SEAD-45 (SEAD-115)	Y	N	N	—	RA(C)
SEAD	Rifle Grenade Range	SEAD-118	Y	Y	N	—	RD
SEAD	Sampson Rifle Range	None	—	—	—	—	—
SEAD	Sampson Rifle Range XD1	None	—	—	—	—	—

**Table D-5: DERP Eligibility Table**

Installation	Range or Site Name	Range	DERP Eligibility	RMIS Range ID	RMIS Site ID
SEAD	40mm Grenade Range XD	Y	MR	SEAD-001-R	SEAD-001-R-01
SEAD	Abandoned Deactivation Furnace	N	IR	—	—
SEAD	Abandoned Powder Burn Area	N	IR	—	—
SEAD	Bazooka Range	Y	IR	—	—
SEAD	Demolition Range	Y	MR	SEAD-002-R	SEAD-002-R-01
SEAD	EOD Range 1	Y	IR	—	—
SEAD	EOD Range 2	Y	MR	SEAD-003-R	SEAD-003-R-01
SEAD	EOD Range 3	Y	MR	SEAD-004-R	SEAD-004-R-01
SEAD	Existing Deactivation Furnace	N	IR	—	—
SEAD	Function Test Range XD	Y	IR	—	—

Installation	Range or Site Name	Range	DERP Eligibility	RMIS Range ID	RMIS Site ID
SEAD	LTA-1 XD	Y	MR	SEAD-005-R	SEAD-005-R-01
SEAD	LTA-2 (III)	Y	MR	SEAD-006-R	SEAD-006-R-01
SEAD	LTA-3 (II)	Y	MR	SEAD-007-R	SEAD-007-R-01
SEAD	LTA-4 (I)	Y	MR	SEAD-008-R	SEAD-008-R-01
SEAD	LTA-4 XD	Y	MR	SEAD-009-R	SEAD-009-R-01
SEAD	LTA-5	Y	MR	SEAD-010-R	SEAD-010-R-01
SEAD	LTA-6	Y	MR	SEAD-011-R	SEAD-011-R-01
SEAD	LTA-7	Y	MR	SEAD-012-R	SEAD-012-R-01
SEAD	LTA-IV	Y	MR	SEAD-013-R	SEAD-013-R-01
SEAD	Open Burn/Open Detonation Grounds	Y	IR	—	—
SEAD	Rifle Grenade Range	Y	MR	SEAD-014-R	SEAD-014-R-01
SEAD	Sampson Rifle Range	Y	MR	SEAD-015-R	SEAD-015-R-01
SEAD	Sampson Rifle Range XD1	Y	MR	SEAD-016-R	SEAD-016-R-01







## **E. CTT RANGE AND SITE MAPS**

An individual CTT map was generated for the CTT inventory of SEAD BRAC property. The individual CTT map shows all the range and site areas associated with SEAD. An electronic version (.pdf file) of the map will be provided as an upload to ARID in the final report. The individual CTT map for SEAD BRAC property is included in this section.







# CTT Range, UXO-DMM-MC Site Map Seneca Army Depot BRAC Property, NY

**URS**

Figure 1

Range	Acres
A/I	0.0
Closed	3,033.9
Transferring	0.0
Transferred	220.8
Non-Range	7,344.3



- County Boundary
- Pre-BRAC Boundary
- Installation Boundary
- Roads
- Water
- Buildings
- Various Internal Boundaries
- Open Burn/Open Detonation Grounds Additional Circles
- Range Status**
- A/I
- Non-Range, Non UXO-DMM-MC BRAC Property
- Closed
- Transferred
- Transferring

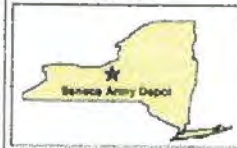
Projection UTM Zone 18  
Datum NAD83  
Units Meters  
Grid 2,500 Meter

1:24,000

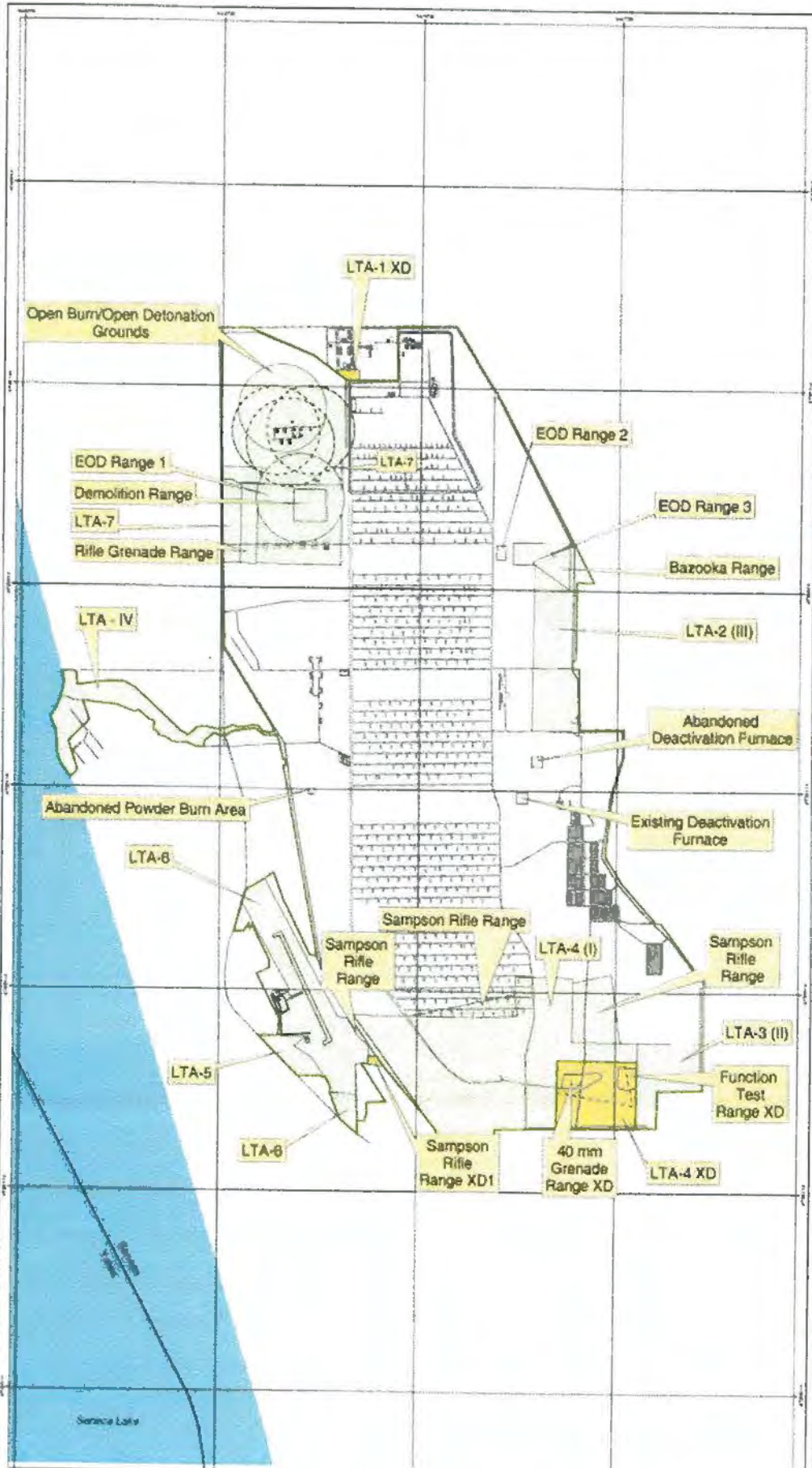
0 0.5 1 Kilometers

0 0.25 0.5 1 Miles

Installation Location  
New York



Closed, Transferring, and Transferred Ranges, UXO-DMM-MC, and all data are the property of the U.S. Army Corps of Engineers, New York District. This map is for informational purposes only. It is not to be used for any other purpose without the written permission of the U.S. Army Corps of Engineers, New York District. This map is not to be used for any other purpose without the written permission of the U.S. Army Corps of Engineers, New York District.





Seneca Army Depot BRAC Property, NY  
CTF Range, UXO-DMM-MC Site Map

Figure 1

UBS





## F. ARID DATA FILES

This section contains a printout of the ARID data files submitted to AEC for the CTT inventory for SEAD. The files were set up according to the guidelines in the *ARID Upload Instructions* (19 September 2002). The following files are included:

- Points of Contact
- Installation
- Range
- Munitions
- Ownership
- Land Use Restriction and Access Controls
- Range Demographics
- RMIS Site Information
- DSERTS Information



## POC Table

INSTALLATION NAME	FFID	LAST NAME	FIRST NAME	POC TITLE
SENECA DEPOT ACTIVITY NY213820830		ABSOLOM	STEVE	BRAC ENVIRONMENTAL COORDINATOR
POC TYPE: INSTAL			POC ORG: SENECA ARMY DEPOT	
PHONE			ADDRESS	
PHONE 607-869-1309			SENECA ARMY DEPOT	
DSN 489-5532			5786 STATE ROUTE 96	
FAX 607-869-1362			ATTN: S. ABSOLOM	
EMAIL ABSOLOMS@SENECA-HP.ARMY.MIL			ROMULUS, NY 14541	
			UNITED STATES	









### Installation Table

<u>INSTALLATION NAME</u>	<u>FFID</u>	<u>MACOM</u>	<u>MSC</u>	<u>PARENT INSTALLATION</u>	<u>A/I RANGE</u>	<u>CTT RANGE</u>	<u>BRAC ROUND</u>	<u>DERA FLAG</u>	<u>FUDS FLAG</u>
SENECA DEPOT ACTIVITY	NY213820830	AMC			N	Y	1995	N	N







## Range and Site Table

RMIS RANGE ID: SEAD-001-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	TRANSFERRED	V	E	5

### RANGE DESCRIPTION

Grenade range near Function Test Pits. Transferred to NYDOC for use as prison site.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
21.8		0		0		21.8	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	349278	4739503	1/1/1941			

### COMMENT

Site has been remediated - UXO has been excavated. Awaiting final documentation and approval.

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		LOW GRASS AND FEW SHRUBS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	OTHER		2001	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	RIFLE GRENADE/ANTI-TANK ROCKET		1941	2000
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

### RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE	CLOSED	III	B	3

### RANGE DESCRIPTION

Small arms ammunition deactivation furnace

CTT TOTAL ACRES	MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED
5	1		4		0
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	348727	4733492	1/1/1943	
COMMENT					

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		BARREN OR LOW GRASS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	OTHER		1961	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	OTHER		1943	1961
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			



## Range and Site Table

### RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA	CLOSED	III	B	3

### RANGE DESCRIPTION

Poorly defined area on southwest side of SEAD.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
1.2		0		0		1.2	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	345881	4733090				
COMMENT							

TOPOGRAPHY	VEGETATION	SOIL TYPE
FLAT	HEAVY GRASS WITH NUMEROUS SHRUBS	CLAY/SAND WITH STONE
START YEAR		
CURRENT USE 1	UNDEVELOPED	
CURRENT USE 2	N/A	
CURRENT USE 3	N/A	
START YEAR		
HISTORIC USE 1	OB/OD	
HISTORIC USE 2	N/A	
HISTORIC USE 3	N/A	

## Range and Site Table

RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE	CLOSED	II	B	2

### RANGE DESCRIPTION

Bazooka (3.5 in) and small arms range in northeast portion of SEAD.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED
32.5	0		32.5		0
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	348958	4735928	1/1/1941	

### COMMENT

Last use date based on ASR air photo interpretation - may not be exact.

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		LOW GRASS AND FEW SHRUBS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1963	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	RIFLE GRENADE/ANTI-TANK ROCKET		1941	1963
HISTORIC USE 2	SMALL ARMS		1941	1963
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID: SEAD-002-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE	CLOSED	II	B	2

### RANGE DESCRIPTION

Poorly documented OD range in west central SEAD, SE of EOD Range I.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED	MMR ACRES SUSPECTED	MMR ACRES NOT SUSPECTED
40.1	0	40.1	0

UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	345840	4736643	1/1/1941	

COMMENT

TOPOGRAPHY	VEGETATION	SOIL TYPE
FLAT	FOREST	CLAY/SAND WITH STONE

	START YEAR
CURRENT USE 1 UNDEVELOPED	1950
CURRENT USE 2 N/A	
CURRENT USE 3 N/A	

	START YEAR	END YEAR
HISTORIC USE 1 OB/OD	1941	1950
HISTORIC USE 2 TRAINING AREA/MANEUVER AREA	1984	1995
HISTORIC USE 3 N/A		

## Range and Site Table

### RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1	CLOSED	I	B	1

### RANGE DESCRIPTION

EOD range immediately south of the OB/OD Gounds.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
193.6		0		193.6		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	345692	4736752	1/1/1941			
COMMENT							

TOPOGRAPHY		VEGETATION		SOIL TYPE	
FLAT		BARREN OR LOW GRASS		CLAY/SAND WITH STONE	
				START YEAR	
CURRENT USE 1	UNDEVELOPED			1995	
CURRENT USE 2	N/A				
CURRENT USE 3	N/A				
				START YEAR	END YEAR
HISTORIC USE 1	OB/OD			1941	1995
HISTORIC USE 2	N/A				
HISTORIC USE 3	N/A				

## Range and Site Table

RMIS RANGE ID: SEAD-003-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	CLOSED	II	C	3

### RANGE DESCRIPTION

EOD range 2 is located in the northeast portion of SEAD.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
5.3		0		5.3		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	348254	4736082	1/1/1941			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		HEAVY SHRUBS WITH TREES	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1995	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	OB/OD		1941	1995
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID: SEAD-004-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	CLOSED	II	B	2

### RANGE DESCRIPTION

EOD Range 3 is in the northeast part of SEAD near the Bazooka Range.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
0.4		0		0.4		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	348914	4736064	1/1/1941			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		LOW GRASS AND FEW SHRUBS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1995	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	OB/OD		1941	1995
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

### RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE	CLOSED	III	B	3

### RANGE DESCRIPTION

Small arms deactivation furnace.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED
5	1		4		0
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	348538	4733034	1/1/1961	

### COMMENT

Abundant small arms ammunition scattered on the ground around the furnace. This unit was placed in RCRA interim status in 1984, and a Part B permit application was submitted but did not achieve approval before the base closed. This site is being remediated under IRP with RCRA clean-up standards.

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		BARREN OR LOW GRASS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	OTHER		2000	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	OTHER		1961	2000
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

### RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	TRANSFERRED	V		5

### RANGE DESCRIPTION

Area used to test serviceability of munitions.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
15.1		0		0		15.1	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	349891	4729554	1/1/1963			

### COMMENT

Linked to 40 mm Grenade Range within New York Department of Corrections property. Site has been remediated, awaiting final documentation and approvals.

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		LOW GRASS AND FEW SHRUBS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	OTHER		2001	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	OTHER		1963	1991
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			



## Range and Site Table

RMIS RANGE ID: SEAD-005-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD	TRANSFERRED	V	E	5

### RANGE DESCRIPTION

Small training and maneuver area in northern cantonment area of SEAD.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED	MMR ACRES SUSPECTED	MMR ACRES NOT SUSPECTED
8.2	0	0	8.2

UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	346326	4738271	1/1/1984	

### COMMENT

Property now within Kid's Peace juvenile detention center.

TOPOGRAPHY	VEGETATION	SOIL TYPE
FLAT	BARREN OR LOW GRASS	CLAY/SAND WITH STONE

	START YEAR
CURRENT USE 1 OTHER	2000
CURRENT USE 2 N/A	
CURRENT USE 3 N/A	

	START YEAR	END YEAR
HISTORIC USE 1 TRAINING AREA/MANEUVER AREA	1984	1995
HISTORIC USE 2 N/A		
HISTORIC USE 3 N/A		

**Range and Site Table**

RMIS RANGE ID: SEAD-006-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)	CLOSED	III	B	3

**RANGE DESCRIPTION**

Training and maneuver area on east side of SEAD.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED	MMR ACRES SUSPECTED	MMR ACRES NOT SUSPECTED
319.9	0	319.9	0

UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	348932	4735004	1/1/1984	

**COMMENT**

TOPOGRAPHY	VEGETATION	SOIL TYPE
FLAT	SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE

	START YEAR
CURRENT USE 1 UNDEVELOPED	1995
CURRENT USE 2 N/A	
CURRENT USE 3 N/A	

	START YEAR	END YEAR
HISTORIC USE 1 TRAINING AREA/MANEUVER AREA	1984	1995
HISTORIC USE 2 N/A		
HISTORIC USE 3 N/A		

## Range and Site Table

RMIS RANGE ID: SEAD-007-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)	CLOSED	III	B	3

### RANGE DESCRIPTION

Training and maneuver area in southeast corner of SEAD.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
151		0		151		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	350361	4729580	1/1/1984			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1995	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	TRAINING AREA/MANEUVER AREA		1984	1995
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID: SEAD-008-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)	CLOSED	III	B	3

### RANGE DESCRIPTION

Training and maneuver range across south end of SEAD.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED	MMR ACRES SUSPECTED	MMR ACRES NOT SUSPECTED
906.7	0	906.7	0

UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	348505	4729449	1/1/1984	

COMMENT

TOPOGRAPHY	VEGETATION	SOIL TYPE
FLAT	SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE

	START YEAR
CURRENT USE 1 UNDEVELOPED	1995
CURRENT USE 2 N/A	
CURRENT USE 3 N/A	

	START YEAR	END YEAR
HISTORIC USE 1 TRAINING AREA/MANEUVER AREA	1984	1995
HISTORIC USE 2 N/A		
HISTORIC USE 3 N/A		

## Range and Site Table

RMIS RANGE ID: SEAD-009-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD	TRANSFERRED	III	B	3

### RANGE DESCRIPTION

Portion of LTA-4 transferred to New York Department Of Corrections.

CTT TOTAL ACRES	MMR ACRES IDENTIFIED	MMR ACRES SUSPECTED	MMR ACRES NOT SUSPECTED
172	0	0	172

UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE	RIP RC DATE
18	NAD83	349495	4729292	1/1/1984	

COMMENT

TOPOGRAPHY	VEGETATION	SOIL TYPE
FLAT	SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE

	START YEAR
CURRENT USE 1 UNDEVELOPED	1995
CURRENT USE 2 N/A	
CURRENT USE 3 N/A	

	START YEAR	END YEAR
HISTORIC USE 1 TRAINING AREA/MANEUVER AREA	1984	1995
HISTORIC USE 2 N/A		
HISTORIC USE 3 N/A		

## Range and Site Table

RMIS RANGE ID: SEAD-010-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-5	CLOSED	III	B	3

### RANGE DESCRIPTION

Reaction course at south west end of Sampson Airfield.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
48.4		0		48.4		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	345674	4729801	1/1/1984			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1995	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	TRAINING AREA/MANEUVER AREA		1984	1995
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID: SEAD-011-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-6	CLOSED	III	B	3

### RANGE DESCRIPTION

Training and maneuver area on Sampson Airfield.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
380.3		0		380.3		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	345865	4730431	1/1/1984			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1995	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	TRAINING AREA/MANEUVER AREA		1984	1995
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

**Range and Site Table****RMIS RANGE ID:** SEAD-012-R

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>STATUS</b>	<b>SEVERITY SCORE</b>	<b>PROBABILITY SCORE</b>	<b>RAC SCORE</b>
SENECA DEPOT ACTIVITY	NY213820830	LTA-7	CLOSED	III	B	3

**RANGE DESCRIPTION**

Training and maneuver area on west site of SEAD.

<b>CTT TOTAL ACRES</b>	<b>MMR ACRES IDENTIFIED</b>	<b>MMR ACRES SUSPECTED</b>	<b>MMR ACRES NOT SUSPECTED</b>
183	0	183	0

<b>UTM ZONE</b>	<b>UTM DATUM</b>	<b>UTM X</b>	<b>UTM Y</b>	<b>CONSTRUCTION DATE</b>	<b>RIP RC DATE</b>
18	NAD83	345334	4736335	1/1/1984	

**COMMENT**

<b>TOPOGRAPHY</b>	<b>VEGETATION</b>	<b>SOIL TYPE</b>
FLAT	SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE

	<b>START YEAR</b>
<b>CURRENT USE 1</b> UNDEVELOPED	1995
<b>CURRENT USE 2</b> N/A	
<b>CURRENT USE 3</b> N/A	

	<b>START YEAR</b>	<b>END YEAR</b>
<b>HISTORIC USE 1</b> TRAINING AREA/MANEUVER AREA	1984	1995
<b>HISTORIC USE 2</b> N/A		
<b>HISTORIC USE 3</b> N/A		



## Range and Site Table

RMIS RANGE ID: SEAD-013-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV	CLOSED	III	B	3

### RANGE DESCRIPTION

Training and maneuver area along Kendaia Creek west of SEAD.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
188		0		188		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	343443	4734004	1/1/1984			

### COMMENT

May not have been used. Appears only on one map.

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		1995	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	TRAINING AREA/MANEUVER AREA		1984	1995
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID:

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	CLOSED	I	B	1

### RANGE DESCRIPTION

OB/OD Grounds area adjacent facilities in the northwest corner of Seneca Army Depot.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
364.3		0		364.3		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	345484	4737844	1/1/1941			

### COMMENT

SEAD 23, OB Grounds and SEAD 45, OD Grounds are historically linked. Both have been in use since installation opening for munitions destruction. The OD Grounds were placed on BRAC interim status in 1965 and a 4' by 60' burn pan was added for OB of propellant. A RCRA Part B permit application was applied for, but was never finalized.

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		BARREN OR LOW GRASS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		2000	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	OB/OD		1941	2000
HISTORIC USE 2	RCRA DISPOSAL		1985	2000
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID: SEAD-014-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE	CLOSED	II	B	2

### RANGE DESCRIPTION

Range on west side of SEAD, SW from OB/OD Grounds.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
49.8		49.8		0		0	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	345078	4736413	1/1/1991			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		SHRUBS WITH SOME TREES	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	UNDEVELOPED		2000	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	RIFLE GRENADE/ANTI-TANK ROCKET		1991	2000
HISTORIC USE 2	TRAINING AREA/MANEUVER AREA		1984	2000
HISTORIC USE 3	N/A			

**Range and Site Table**

RMIS RANGE ID: SEAD-015-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE	CLOSED	V	E	5

**RANGE DESCRIPTION**

Rifle range located on west side of Sampson Airfield.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
159.4		0		0		159.4	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	348964	4730370	1/1/1942			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		BARREN OR LOW GRASS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	OTHER	*	2000	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	SMALL ARMS		1942	2000
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			

## Range and Site Table

RMIS RANGE ID: SEAD-016-R

INSTALLATION NAME	FFID	RANGE/SITE NAME	STATUS	SEVERITY SCORE	PROBABILITY SCORE	RAC SCORE
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD 1	TRANSFERRED	V	E	5

### RANGE DESCRIPTION

Area between Sampson Airfield and SEAD main post that is owned by a railroad.

CTT TOTAL ACRES		MMR ACRES IDENTIFIED		MMR ACRES SUSPECTED		MMR ACRES NOT SUSPECTED	
3.7		0		0		3.7	
UTM ZONE	UTM DATUM	UTM X	UTM Y	CONSTRUCTION DATE		RIP RC DATE	
18	NAD83	346699	4729730	1/1/1942			
COMMENT							

TOPOGRAPHY		VEGETATION	SOIL TYPE	
FLAT		LOW GRASS AND FEW SHRUBS	CLAY/SAND WITH STONE	
			START YEAR	
CURRENT USE 1	OTHER		2001	
CURRENT USE 2	N/A			
CURRENT USE 3	N/A			
			START YEAR	END YEAR
HISTORIC USE 1	SMALL ARMS		1942	2000
HISTORIC USE 2	N/A			
HISTORIC USE 3	N/A			









## Munitions Table

INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT08	GROUND ROCKETS, RIFLE GRENADES, PRACTICE	01/1941			
INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT40	SMALL ARMS (COMPLETE ROUNDS)	01/1943	01/1961		
INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT44	SECONDARY EXPLOSIVES (PETN, CMP ABC, TETRYL, TNT, RDX, HMX, HBX, BK PWDER)				
INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT19	GROUND ROCKETS, RIFLE GRENADES (SMOKE, WP, INCENDIARY)	01/1941	01/1963		
CTT40	SMALL ARMS (COMPLETE ROUNDS)	01/1941	01/1963		

## Munitions Table

INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT11	LARGE CALIBER (37MM AND LARGER), HE	01/1941	01/1950		
INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1941	01/1995		
CTT05	HAND GRENADES, LIVE	01/1941	01/1995		
CTT10	MEDIUM CALIBER (20MM, 25MM, 30MM), HE	01/1941	01/1995		
CTT44	SECONDARY EXPLOSIVES (PETN, CMP ABC, TETRYL, TNT, RDX, HMX, HBX, BK PWDER)	01/1941	01/1995		
INSTALLATION NAME	FFID	RANGE/SITE NAME			
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2			
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED	
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1941	01/1995		
CTT07	GROUND ROCKETS, RIFLE GRENADES, LIVE	01/1941	01/1995		
CTT08	GROUND ROCKETS, RIFLE GRENADES, PRACTICE	01/1941	01/1995		
CTT44	SECONDARY EXPLOSIVES (PETN, CMP ABC, TETRYL, TNT, RDX, HMX, HBX, BK PWDER)	01/1941	01/1995		

CTT16	SMALL ARMS	01/1941	01/1995
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DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT07	GROUND ROCKETS, RIFLE GRENADES, LIVE	01/1941	01/1995	
CTT08	GROUND ROCKETS, RIFLE GRENADES, PRACTICE	01/1941	01/1995	
CTT44	SECONDARY EXPLOSIVES (PETN, CMP ABC, TETRYL, TNT, RDX, HMX, HBX, BK PWDER)	01/1941	01/1995	
CTT16	SMALL ARMS	01/1941	01/1995	
CTT40	SMALL ARMS (COMPLETE ROUNDS)	01/1941	01/1995	

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT40	SMALL ARMS (COMPLETE ROUNDS)	01/1961	01/2000	

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT38	BLASTING CAPS, FUZES, BOOSTERS, OR BURSTERS	01/1963	01/1991	
CTT06	HAND GRENADES, PRACTICE	01/1963	01/1991	

## Munitions Table

INSTALLATION NAME	FFID	RANGE/SITE NAME
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	

INSTALLATION NAME	FFID	RANGE/SITE NAME
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	

INSTALLATION NAME	FFID	RANGE/SITE NAME
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	

INSTALLATION NAME	FFID	RANGE/SITE NAME
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	

## Munitions Table

CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995
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INSTALLATION NAME	FFID	RANGE/SITE NAME
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SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD
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DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	

INSTALLATION NAME	FFID	RANGE/SITE NAME
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SENECA DEPOT ACTIVITY	NY213820830	LTA-5
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DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	

INSTALLATION NAME	FFID	RANGE/SITE NAME
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SENECA DEPOT ACTIVITY	NY213820830	LTA-6
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DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	

## Munitions Table

INSTALLATION NAME	FFID	RANGE/SITE NAME		
SENECA DEPOT ACTIVITY	NY213820830	LTA-7		
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	
INSTALLATION NAME	FFID	RANGE/SITE NAME		
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV		
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1984	01/1995	
CTT06	HAND GRENADES, PRACTICE	01/1984	01/1995	
INSTALLATION NAME	FFID	RANGE/SITE NAME		
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS		
DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT01	BOMBS, HIGH EXPLOSIVE	01/1941	01/2000	
CTT04	DEMOLITION MATERIALS	01/1941	01/2000	
CTT42	FLARES, SIGNALS, SIMULATORS, OR SCREENING SMOKE (OTHER THAN WHITE PHOSP)	01/1941	01/2000	
CTT07	GROUND ROCKETS, RIFLE GRENADES, LIVE	01/1941	01/2000	
CTT08	GROUND ROCKETS, RIFLE GRENADES, PRACTICE	01/1941	01/2000	

## Munitions Table

CTT18	HAND GRENADES (SMOKE, WP, INCENDIARY)	01/1941	01/2000
CTT05	HAND GRENADES, LIVE	01/1941	01/2000
CTT09	LANDMINES, ANTI-PERSONNEL	01/1941	01/2000
CTT28	LANDMINES, ANTI-TANK	01/1941	01/2000
CTT21	LARGE CALIBER (37MM AND LARGER), (SMOKE, WP, INCENDIARY)	01/1941	01/2000
CTT11	LARGE CALIBER (37MM AND LARGER), HE	01/1941	01/2000
CTT10	MEDIUM CALIBER (20MM, 25MM, 30MM), HE	01/1941	01/2000
CTT15	PYROTECHNICS	01/1941	01/2000
CTT44	SECONDARY EXPLOSIVES (PETN, CMP ABC, TETRYL, TNT, RDX, HMX, HBX, BK POWDER)	01/1941	01/2000
CTT16	SMALL ARMS	01/1941	01/2000
CTT40	SMALL ARMS (COMPLETE ROUNDS)	01/1941	01/2000

INSTALLATION NAME	FFID	RANGE/SITE NAME
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE

DODIC	DODIC DESCRIPTION	START DATE	END DATE	MUNITIONS EXPENDED
CTT19	GROUND ROCKETS, RIFLE GRENADES (SMOKE, WP, INCENDIARY)	01/1991	01/2000	
CTT08	GROUND ROCKETS, RIFLE GRENADES, PRACTICE	01/1991	01/2000	

## Munitions Table

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>			
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE			
<b>DODIC</b>	<b>DODIC DESCRIPTION</b>		<b>START DATE</b>	<b>END DATE</b>	<b>MUNITIONS EXPENDED</b>
CTT16	SMALL ARMS		01/1942	01/2000	
<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>			
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD 1			
<b>DODIC</b>	<b>DODIC DESCRIPTION</b>		<b>START DATE</b>	<b>END DATE</b>	<b>MUNITIONS EXPENDED</b>
CTT16	SMALL ARMS		01/1942	01/2000	







## Ownership Table

INSTALLATION NAME	FFID	RANGE/SITE NAME		ALL ARMY OWNED	OWNER	OWNER DESCRIPTION		
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD		N	STATE AGENCY	NEW YORK DEPARTMENT OF CORRECTIONS		
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N
INSTALLATION NAME	FFID	RANGE/SITE NAME		ALL ARMY OWNED	OWNER	OWNER DESCRIPTION		
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE		Y	DOD	N/A		
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N
INSTALLATION NAME	FFID	RANGE/SITE NAME		ALL ARMY OWNED	OWNER	OWNER DESCRIPTION		
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA		Y	DOD	N/A		
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

# Ownership Table

INSTALLATION NAME	FFID	RANGE/SITE NAME		ALL ARMY OWNED	OWNER	OWNER DESCRIPTION		
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE		Y	DOD	N/A		
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N
INSTALLATION NAME	FFID	RANGE/SITE NAME		ALL ARMY OWNED	OWNER	OWNER DESCRIPTION		
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE		Y	DOD	N/A		
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N
INSTALLATION NAME	FFID	RANGE/SITE NAME		ALL ARMY OWNED	OWNER	OWNER DESCRIPTION		
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1		Y	DOD	N/A		
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

## Ownership Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

## Ownership Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	N	STATE AGENCY	NEW YORK DEPARTMENT OF CORRECTIONS

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD	N	STATE AGENCY	NEW YORK DEPARTMENT OF CORRECTIONS

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

# Ownership Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

INSTALLATION NAME	FFID	RANGE/SITE NAME	ALL ARMY OWNED	OWNER	OWNER DESCRIPTION
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD	Y	DOD	N/A

FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION	LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A	N	N

# Ownership Table

INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	LTA-5		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N
INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	LTA-6		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N
INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	LTA-7		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N



# Ownership Table

INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	LTA-IV		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N
INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	OPEN BURN/OPEN DETONATION GROUNDS		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N
INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	RIFLE GRENADE RANGE		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N

# **Ownership Table**

INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	SAMPSON RIFLE RANGE		Y		DOD	N/A	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N
INSTALLATION NAME		FFID	RANGE/SITE NAME		ALL ARMY OWNED		OWNER	OWNER DESCRIPTION	
SENECA DEPOT ACTIVITY		NY213820830	SAMPSON RIFLE RANGE XD 1		N		STATE AGENCY	NEW YORK DEPARTMENT OF CORRECTIONS	
FEDERAL LEASE	STATE LEASE	LOCAL LEASE	TRIBAL LEASE	PRIVATE LEASE	OTHER LEASE	OTHER LEASE DESCRIPTION		LEASE TERMINATED	REVOCATION OF LAND
N	N	N	N	N	N	N/A		N	N





## Land Use Restriction Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	ACCESS CONTROL	FENCES	NPA

**DESCRIPTION:** FENCE AROUND AREA BEING REMEDIATED

SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	ACCESS CONTROL	LOCKED GATES	NPA
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**DESCRIPTION:** FENCE AROUND AREA BEING REMEDIATED

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE

## Land Use Restriction Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS AT SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS AT SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	ACCESS CONTROL	FENCES	NPA
DESCRIPTION: FENCE/GATE PREVENT ENTRY TO REMEDIATION AREA					
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	ACCESS CONTROL	LOCKED GATES	NPA
DESCRIPTION: FENCE/GATE PREVENT ENTRY TO REMEDIATION AREA					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS

## Land Use Restriction Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD	ACCESS CONTROL	OTHER	RPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-5	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS

## Land Use Restriction Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-6	ACCESS CONTROL	SIGNS	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-7	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV	ACCESS CONTROL	OTHER	NPA
DESCRIPTION: NO CONTROLS ON SITE					
INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	ACCESS CONTROL	FENCES	NPA
DESCRIPTION: FENCE, LOCKED GATE, SIGNS, PERMISSION REQUIRED TO ENTER					
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	ACCESS CONTROL	LOCKED GATES	NPA
DESCRIPTION: FENCE, LOCKED GATE, SIGNS, PERMISSION REQUIRED TO ENTER					
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	ACCESS CONTROL	SIGNS	NPA
DESCRIPTION: FENCE, LOCKED GATE, SIGNS, PERMISSION REQUIRED TO ENTER					



## Land Use Restriction Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	LAND USE RESTRICTION	ADMINISTRATIVE ORDER	NPA

**DESCRIPTION:** FENCE, LOCKED GATE, SIGNS, PERMISSION REQUIRED TO ENTER

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE

INSTALLATION NAME	FFID	RANGE/SITE NAME	RESTRICTION TYPE	RESTRICTION	PUBLIC ACCESS
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD 1	ACCESS CONTROL	OTHER	NPA

**DESCRIPTION:** NO CONTROLS ON SITE







## Range Demographics Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	TYPE	NAME	STATE	COUNTRY
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-5	COUNTY	SENECA	NY	UNITED STATES

# **Range Demographics Table**

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
SENECA DEPOT ACTIVITY	NY213820830	LTA-6	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-7	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE	COUNTY	SENECA	NY	UNITED STATES
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD 1	COUNTY	SENECA	NY	UNITED STATES







# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	SEAD-001-R	SEAD-001-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	Y	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE	SEAD-002-R	SEAD-002-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	Y	N	N	N	N	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	SEAD-003-R	SEAD-003-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	Y	N	N	N	N	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	SEAD-004-R	SEAD-004-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	Y	Y	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Medium

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD	SEAD-005-R	SEAD-005-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	High

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)	SEAD-006-R	SEAD-006-R-01	N

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)	SEAD-007-R	SEAD-007-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)	SEAD-008-R	SEAD-008-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD	SEAD-009-R	SEAD-009-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-5	SEAD-010-R	SEAD-010-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low



# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-6	SEAD-011-R	SEAD-011-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-7	SEAD-012-R	SEAD-012-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV	SEAD-013-R	SEAD-013-R-01	Y

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	N	N	N	Y	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	Low

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS			

## RMIS SITE USEAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS			

## RMIS SITE USAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
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DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
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INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE	SEAD-014-R	SEAD-014-R-01	Y

## RMIS SITE USAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
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N	N	N	N	N	N	Y	N	N	
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DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	High

# RMIS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE	SEAD-015-R	SEAD-015-R-01	Y

## RMIS SITE USAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
N	N	N	Y	N	N	N	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	High

INSTALLATION NAME	FFID	RANGE/SITE NAME	RMIS RANGE ID	RMIS SITE ID	ON RANGE FLAG
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD I	SEAD-016-R	SEAD-016-R-01	Y

## RMIS SITE USAGE:

BUFFER AREA	DISPOSAL	OBOD	SMALL ARMS RANGE	SKEET RANGE	TESTING	TRAINING	WASTE MILITARY MUNITIONS	OTHER	OTHER DESCRIPTION
Y	N	N	N	N	N	N	N	N	

DRINKING WATER	GROUNDWATER DEPTH (FT)	CONSTITUENT FLAG	UXO DENSITY
ACTUAL	10	N	High





## DSERTS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	SEAD-118	SEAD-001-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	Y	MR	RAO	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE	SEAD-16	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAC	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA	SEAD-24	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAC	N	

## DSERTS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE	SEAD-46	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAC	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE		SEAD-002-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1	SEAD-57	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RD	N	



## DSERTS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	SEAD-118	SEAD-003-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	Y	MR	RAC	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	SEAD-118	SEAD-004-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	Y	MR	RAC	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE	SEAD-17	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAC	N	

## DSERTS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	SEAD-44	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAO	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD		SEAD-005-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)		SEAD-006-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON

## DSERTS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)		SEAD-007-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
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INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)		SEAD-008-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
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INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD		SEAD-009-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
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# **DSERTS Information Table**

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>DSERTS SITE ID</b>	<b>RMIS SITE ID</b>
SENECA DEPOT ACTIVITY	NY213820830	LTA-5		SEAD-010-R-01

<b>DSERTS CTC INCLUDES UXO-DMM</b>	<b>DSERTS SITE ID HAS BRAC UXO FLAG</b>	<b>DERP ELIGIBILITY</b>	<b>DSERTS PHASE</b>	<b>RESPONSE COMPLETE FLAG</b>	<b>REASON</b>
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<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>DSERTS SITE ID</b>	<b>RMIS SITE ID</b>
SENECA DEPOT ACTIVITY	NY213820830	LTA-6		SEAD-011-R-01

<b>DSERTS CTC INCLUDES UXO-DMM</b>	<b>DSERTS SITE ID HAS BRAC UXO FLAG</b>	<b>DERP ELIGIBILITY</b>	<b>DSERTS PHASE</b>	<b>RESPONSE COMPLETE FLAG</b>	<b>REASON</b>
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<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>DSERTS SITE ID</b>	<b>RMIS SITE ID</b>
SENECA DEPOT ACTIVITY	NY213820830	LTA-7		SEAD-012-R-01

<b>DSERTS CTC INCLUDES UXO-DMM</b>	<b>DSERTS SITE ID HAS BRAC UXO FLAG</b>	<b>DERP ELIGIBILITY</b>	<b>DSERTS PHASE</b>	<b>RESPONSE COMPLETE FLAG</b>	<b>REASON</b>
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## DSERTS Information Table

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV		SEAD-013-R-01

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
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INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	SEAD-45	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAC	N	

INSTALLATION NAME	FFID	RANGE/SITE NAME	DSERTS SITE ID	RMIS SITE ID
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	SEAD-23	

DSERTS CTC INCLUDES UXO-DMM	DSERTS SITE ID HAS BRAC UXO FLAG	DERP ELIGIBILITY	DSERTS PHASE	RESPONSE COMPLETE FLAG	REASON
Y	N	IR	RAC	N	

# **DSERTS Information Table**

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>DSERTS SITE ID</b>	<b>RMIS SITE ID</b>
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE	SEAD-118	SEAD-014-R-01

<b>DSERTS CTC INCLUDES UXO-DMM</b>	<b>DSERTS SITE ID HAS BRAC UXO FLAG</b>	<b>DERP ELIGIBILITY</b>	<b>DSERTS PHASE</b>	<b>RESPONSE COMPLETE FLAG</b>	<b>REASON</b>
Y	Y	MR	RAC	N	

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>DSERTS SITE ID</b>	<b>RMIS SITE ID</b>
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE		SEAD-015-R-01

<b>DSERTS CTC INCLUDES UXO-DMM</b>	<b>DSERTS SITE ID HAS BRAC UXO FLAG</b>	<b>DERP ELIGIBILITY</b>	<b>DSERTS PHASE</b>	<b>RESPONSE COMPLETE FLAG</b>	<b>REASON</b>

<b>INSTALLATION NAME</b>	<b>FFID</b>	<b>RANGE/SITE NAME</b>	<b>DSERTS SITE ID</b>	<b>RMIS SITE ID</b>
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD 1		SEAD-016-R-01

<b>DSERTS CTC INCLUDES UXO-DMM</b>	<b>DSERTS SITE ID HAS BRAC UXO FLAG</b>	<b>DERP ELIGIBILITY</b>	<b>DSERTS PHASE</b>	<b>RESPONSE COMPLETE FLAG</b>	<b>REASON</b>







## G. RISK ASSESSMENT CODE (RAC) ANALYSIS

As part of the CTT Inventory, the data collection team performed an assessment of explosives safety risk using the RAC process. The RAC process uses a worksheet that consists of a series of questions regarding the range or site. As the worksheet is completed, it defines a relative value for the severity and probability of explosives safety associated with the range or site. The worksheet then combines the severity and probability values to arrive at an overall score (RAC score). The RAC score is an estimate of the relative explosives risk, which is reported as a number between 1 and 5. The following is a description of the RAC scores.

RAC 1	High Explosives Safety Risk - Highest priority for further action.
RAC 2	Serious Explosives Safety Risk - Priority for further action.
RAC 3	Moderate Explosives Safety Risk - Recommend further action.
RAC 4	Low Explosives Safety Risk - Recommend further action.
RAC 5	Negligible Explosives Safety Risk - No explosive related action necessary.

The area, probability value, severity value, and overall RAC score for each of the CTT range, UXO, and DMM sites in the inventory are provided in Table G-1. RAC scores are not appropriate for sites containing only MC. The completed RAC worksheets for each range and UXO-DMM site in the CTT inventory are also included in this section.

**Table G-1: Risk Assessment Code Analysis Results**

Installation	Range or Site Name	Acres	Severity*	Probability**	RAC Score
SEAD	40mm Grenade Range XD	21.8	V	E	5
SEAD	Abandoned Deactivation Furnace	5.0	III	B	3
SEAD	Abandoned Powder Burn Area	1.2	NA	NA	NA
SEAD	Bazooka Range	32.5	II	B	2
SEAD	Demolition Range	40.1	II	B	2
SEAD	EOD Range 1	193.6	I	B	1
SEAD	EOD Range 2	5.3	II	C	3
SEAD	EOD Range 3	0.4	II	B	2
SEAD	Existing Deactivation Furnace	5.0	III	B	3
SEAD	Function Test Range XD	15.1	V	E	5
SEAD	LTA-1 XD	8.2	V	E	5
SEAD	LTA-2 (III)	319.9	III	B	3
SEAD	LTA-3 (II)	151.0	III	B	3
SEAD	LTA-4 (I)	906.7	III	B	3
SEAD	LTA-4 XD	172.0	III	B	3

Installation	Range or Site Name	Acres	Severity*	Probability**	RAC Score
SEAD	LTA-5	48.4	III	B	3
SEAD	LTA-6	380.3	III	B	3
SEAD	LTA-7	183.0	III	B	3
SEAD	LTA-IV	188.0	III	B	3
SEAD	Open Burn/Open Detonation Grounds	364.3	I	B	1
SEAD	Rifle Grenade Range	49.8	II	B	2
SEAD	Sampson Rifle Range	159.4	V	E	5
SEAD	Sampson Rifle Range XD1	3.7	V	E	5

\* Severity – 5 possible classifications from I (catastrophic) to V (none).

\*\* Probability – 5 possible classifications from A (frequent) to E (improbable).

\*\*\*According to the RAC worksheet instructions, if the severity value is V, the probability value does not need to be calculated and a RAC value of 5 should be assigned to the range.

**RISK ASSESSMENT CODE WORKSHEETS**  
**40mm Grenade Range XD**

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## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>40 mm Grenade Range XD</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Transferred</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>5</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	
Small arms, expended	0
Practice ordnance (w/o spotting charges)	0
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>0</b>

What evidence do you have regarding conventional UXO?

Site has been scraped to a depth of 1 ft. and soil sifted to remove UXO, and then all remaining geophysical anomalies to a depth of 4 ft. were excavated and destroyed. No UXO remains.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding pyrotechnics?**

No evidence.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

No evidence.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

No evidence.

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

No evidence.

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 0 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
<b>**NONE</b>	<b>V</b>	<b>0</b>

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding the location of UXO and OE?**

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<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>0</b>

**What are the nearest inhabited structures/buildings?**

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<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>0</b>

**Narrative:**

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<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>0</b>

**Describe the types of buildings:**

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<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance:</b>	<b>VALUE</b>
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>0</b>

**Describe the site accessibility:**

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<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 0  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

Risk is based on excavation and removal of UXO. No munitions remain.



**RISK ASSESSMENT CODE WORKSHEETS**  
**Abandoned Deactivation Furnace**

1945-1946  
1945-1946

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Abandoned Deactivation Furnace</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
Conventional ordnance and ammunition (largest single value)	<u>1</u>

What evidence do you have regarding conventional UXO?

ASR noted that ammunition and casing was abundant around SEAD-17.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	4
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding pyrotechnics?

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<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
<b>High explosives (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding bulk explosives?

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<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	6
<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

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<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 1 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

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- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

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- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

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<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	<u>5</u>
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	<u>0</u>
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

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<b>E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance:</b>	<b>VALUE</b>
No barrier nor security system	<u>5</u>
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	<u>0</u>
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

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<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	<u>0</u>
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

- RAC 1 High Risk – Highest priority for further action.
- RAC 2 Serious Risk – Priority for further action.
- RAC 3 Moderate Risk – Recommend further action.
- RAC 4 Low Risk – Recommend further action.
- RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

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**RISK ASSESSMENT CODE WORKSHEETS**  
**Abandoned Powder Burn Area**

100-100000-100  
100-100000-100

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Abandoned Powder Burn Area</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A.	Conventional ordnance and ammunition:	VALUE
	Medium/large caliber (20mm and larger)	10
	Bombs, explosive	10
	Grenades, hand or rifle, explosive	10
	Landmine, explosive	10
	Rockets, guided missile, explosive	10
	Detonators, blasting caps, fuzes, boosters, bursters	6
	Bombs, practice (w/spotting charges)	6
	Grenades, practice (w/spotting charges)	4
	Landmine, practice (w/spotting charges)	4
	Small arms, complete round (.22 cal -.50 cal)	1
	Small arms, expended	0
	Practice ordnance (w/o spotting charges)	<u>0</u>
	Conventional ordnance and ammunition (largest single value)	0

**What evidence do you have regarding conventional UXO?**

No UXO-DMM or OE was observed by the ASR team.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	4
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding pyrotechnics?**

No UXO-DMM or OE was observed by the ASR team.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding hulk explosives?**

Area was apparently used for OB of propellants.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	6
<b>Propellants</b>	<b>6</b>

**What evidence do you have regarding bulk propellants?**

Site name indicates that it was used for OB of propellants. No other information is available.

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

No evidence of CWM was observed at the site, and no documents exist to suggest that CWM was present at this location.

**TOTAL HAZARD SEVERITY VALUE (Sum of values A through E):** 6 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

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- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

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- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |
- Narrative:**

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<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	<u>5</u>
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	<u>0</u>
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

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<b>E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance:</b>	<b>VALUE</b>
No barrier nor security system	<u>5</u>
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	<u>0</u>
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

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<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	<u>0</u>
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

This site appears on several installation maps and can be seen on 1950–1960 air photos. No evidence of burns were visible at the time the ASR team visited the site.



**RISK ASSESSMENT CODE WORKSHEETS**  
**Bazooka Range**

RECEIVED  
JAN 10 1964

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Bazooka Range</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>2</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	<u>10</u>
Landmine, explosive	10
Rockets, guided missile, explosive	<u>10</u>
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
Conventional ordnance and ammunition (largest single value)	10

What evidence do you have regarding conventional UXO?

3.5 in. rocket, MK-2 grenades, and expended small arms ammunition found by EE/CA.

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<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

EE/CA found live flares.

\_\_\_\_\_

\_\_\_\_\_

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 14 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Ten UXO items found during EE/CA, including 3.5 in. rocket, flares, rifle grenades. Items were found on surface and shallow subsurface.

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

Houses and commercial buildings of town of Romulus.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

High number of buildings: town of Romulus, SEAD structures.

<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

Schools, residences, commercial.

<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	<b>5</b>
	No barrier nor security system	
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

No range fence. Installation is fenced, gated, guarded.

<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

Risk is based on discovery of UXO by EE/CA.



**RISK ASSESSMENT CODE WORKSHEETS**  
**Demolition Range**

THE UNIVERSITY OF CHICAGO  
LIBRARY

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	Demolition Range	Rater's Name	C. Wieland
Site Location	Seneca Army Depot	Phone Number	(865) 483-9870
Range Classification	Closed	Organization	URS Group, Inc.
Date Completed	July 2002	Score	2

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<input checked="" type="checkbox"/> 1
Small arms, expended	0
Practice ordnance (w/o spotting charges)	0
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

ASR states that small arms ammunitions was destroyed at this site.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

What evidence do you have regarding pyrotechnics?

ASR states that flare remnants litter area.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	<u>8</u>
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>8</b>

What evidence do you have regarding bulk explosives?

Based on ASR. Demolition charges were used to detonate munitions.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 13 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

One 75 mm shell that had been blown with shaped charge found at site. Site is poorly documented.

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>3</b> |

**What are the nearest inhabited structures/buildings?**

Houses and farms on west side of installation.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

High number of buildings: Juvenile Detention Center, state park, private structures,  
SEAD structures.

<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State park facilities, residences, Kid's Peace.

<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

Demolition Range has no separate fence. Installation is fenced, gated, guarded.

<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>



Describe the site dynamics:

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 23  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

**Demolition Range was documented in the ASR and an EE/CA.**

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**RISK ASSESSMENT CODE WORKSHEETS  
EOD Range 1**

100-100000

100-100000

100-100000

100-100000

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>EOD Range 1</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>1</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

**TYPE OF ORDNANCE:** (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	<u>10</u>
Bombs, explosive	10
Grenades, hand or rifle, explosive	<u>10</u>
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	<u>6</u>
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>10</b>

**What evidence do you have regarding conventional UXO?**

Findings of EE/CA investigation – UXO discovered on surface.

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<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

EE/CA and ASR noted flares/flare remnants in area.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	<u>8</u>
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>8</b>

**What evidence do you have regarding bulk explosives?**

Based on ASR. Demolition charges were used to detonate munitions.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 22 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Munitions remnants found on-surface.

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>3</b> |

**What are the nearest inhabited structures/buildings?**

Houses and farms on west side of installation.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

High number of buildings: Juvenile Detonation Center, state park, private structures, SEAD structures.

<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State park facilities, residences.

<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**

**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 23  
(maximum of 30)



Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

**This demolition area was documented in the ASR.**



**RISK ASSESSMENT CODE WORKSHEETS**  
**EOD Range 2**

15, 2010  
15, 2010

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	EOD Range 2	Rater's Name	C. Wieland
Site Location	Seneca Army Depot	Phone Number	(865) 483-9870
Range Classification	Closed	Organization	URS Group, Inc.
Date Completed	July 2002	Score	3

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	<u>10</u>
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	0
Practice ordnance (w/o spotting charges)	0
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>10</b>

**What evidence do you have regarding conventional UXO?**

EE/CA investigation found UXO on surface. EE/CA unable to complete geophysical survey due to heavy brush cover.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	4
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding pyrotechnics?**

EE/CA and ASR noted flares/flare remnants in area.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Teteryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
<b>High explosives (select the single largest value)</b>	<b>8</b>

**What evidence do you have regarding bulk explosives?**

Based on ASR. Demolition charges were used to detonate munitions.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	6
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE (Sum of values A through E):** 18 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

One UXO found on surface during EE/CA; numerous geophysical anomalies noted.

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>3</b> |

**What are the nearest inhabited structures/buildings?**

Houses and commercial buildings of town of Romulus.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

High number of buildings: town of Romulus, SEAD structures.

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

Schools, residences, commercial.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

No range fence. Installation is fenced, gated, guarded.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 20  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY</u> <u>LEVEL</u>	<u>FREQUENT</u> <u>A</u>	<u>PROBABLE</u> <u>B</u>	<u>OCCASIONAL</u> <u>C</u>	<u>REMOTE</u> <u>D</u>	<u>IMPROBABLE</u> <u>E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

- RAC 1 High Risk – Highest priority for further action.
- RAC 2 Serious Risk – Priority for further action.
- RAC 3 Moderate Risk – Recommend further action.
- RAC 4 Low Risk – Recommend further action.
- RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

Risk is based on discovery of UXO by EE/CA and statements in ASR that ordnance may have been disposed of in Duck Pond.



**RISK ASSESSMENT CODE WORKSHEETS  
EOD Range 3**

17-00000

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>EOD Range 3</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>2</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	<u>4</u>
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	0
Practice ordnance (w/o spotting charges)	0
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>4</b>

**What evidence do you have regarding conventional UXO?**

Findings of EE/CA investigation – no UXO discovered.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

EE/CA and ASR noted flare remnants in area, but found no UXO

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	<u>8</u>
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>8</b>

**What evidence do you have regarding bulk explosives?**

Based on ASR. Demolition charges were used to detonate munitions.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 16 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Munitions remnants found on-surface

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>4</b> |

**What are the nearest inhabited structures/buildings?**

Houses commercial buildings of town of Romulus.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

**High number of buildings: town of Romulus, SEAD structures.**

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<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>5</b>
	<b>Describe the types of buildings:</b>	
	<b>Schools, residences, commercial.</b>	

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<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>5</b>
	<b>Describe the site accessibility:</b>	

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<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>



Describe the site dynamics:

**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 24  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u> <u>LEVEL</u>	<u>FREQUENT</u> <u>A</u>	<u>PROBABLE</u> <u>B</u>	<u>OCCASIONAL</u> <u>C</u>	<u>REMOTE</u> <u>D</u>	<u>IMPROBABLE</u> <u>E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

This demolition area was documented in the ASR. Flare, practice grenade, and fuze remnants were found in the area, but the EE/CA investigation found no UXO, but recommended munitions clearance.



**RISK ASSESSMENT CODE WORKSHEETS**  
**Existing Deactivation Furnace**

THE UNIVERSITY OF CHICAGO  
LIBRARY

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

<b>Site Name</b>	<u>Existing Deactivation Furnace</u>	<b>Rater's Name</b>	<u>C. Wieland</u>
<b>Site Location</b>	<u>Seneca Army Depot</u>	<b>Phone Number</b>	<u>(865) 483-9870</u>
<b>Range Classification</b>	<u>Closed</u>	<b>Organization</b>	<u>URS Group, Inc.</u>
<b>Date Completed</b>	<u>July 2002</u>	<b>Score</b>	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

ASR noted that ammunition and casing was abundant around SEAD-17.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	4
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding pyrotechnics?

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<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
<b>High explosives (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding bulk explosives?

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<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	6
<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

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<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 1 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

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- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

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- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |
- Narrative:**

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<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>
<b>Describe the types of buildings:</b>	

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<b>E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance:</b>	<b>VALUE</b>
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>5</b>
<b>Describe the site accessibility:</b>	

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<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>
<b>Describe the site dynamics:</b>	

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

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**RISK ASSESSMENT CODE WORKSHEETS**  
**Function Test Range XD**

THE UNIVERSITY OF CHICAGO  
LIBRARY

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Function Test Range XD</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Transferred</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>5</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	
Small arms, expended	0
Practice ordnance (w/o spotting charges)	0
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>0</b>

**What evidence do you have regarding conventional UXO?**

Site has been scraped to a depth of 1 ft. and soil sifted to remove UXO, and then all  
remaining geophysical anomalies to a depth of 4 ft. were excavated and destroyed. No  
UXO remains.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	4
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding pyrotechnics?

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<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Teteryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
<b>High explosives (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding bulk explosives?

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<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	6
<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

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<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 0 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
<b>**NONE</b>	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding the location of UXO and OE?**

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<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>0</b>

**What are the nearest inhabited structures/buildings?**

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<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>0</b>

**Narrative:**

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<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>0</b>
	<b>Describe the types of buildings:</b>	

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<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>0</b>
	<b>Describe the site accessibility:</b>	

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<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>
	<b>Describe the site dynamics:</b>	

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 0  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.  
RAC 2 Serious Risk – Priority for further action.  
RAC 3 Moderate Risk – Recommend further action.  
RAC 4 Low Risk – Recommend further action.  
RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

Risk is based on excavation and removal of UXO. No munitions remain.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-1 XD**

THE UNIVERSITY OF CHICAGO

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-1 XD</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Transferred</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>5</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	<input checked="" type="checkbox"/> 0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>0</b>

**What evidence do you have regarding conventional UXO?**

Because of proximity to northern cantonment, LTA-1 was probably not used for firing.  
exercises.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding pyrotechnics?

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<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding bulk explosives?

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<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

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<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 0 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
<b>**NONE</b>	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding the location of UXO and OE?**

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<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>0</b>

**What are the nearest inhabited structures/buildings?**

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<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>0</b>
<b>Narrative:</b>	

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<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>0</b>
	<b>Describe the types of buildings:</b>	

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<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>0</b>

**Describe the site accessibility:**

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<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 0  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY</u> <u>LEVEL</u>	<u>FREQUENT</u> <u>A</u>	<u>PROBABLE</u> <u>B</u>	<u>OCCASIONAL</u> <u>C</u>	<u>REMOTE</u> <u>D</u>	<u>IMPROBABLE</u> <u>E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

- RAC 1 High Risk – Highest priority for further action.
- RAC 2 Serious Risk – Priority for further action.
- RAC 3 Moderate Risk – Recommend further action.
- RAC 4 Low Risk – Recommend further action.
- RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

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**RISK ASSESSMENT CODE WORKSHEETS  
LTA-2 (III)**

THE UNIVERSITY OF CHICAGO

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-2 (III)</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

Blank ammunition noted in several LTAs at SEAD.

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<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>5</b>

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

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<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>5</b>

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

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<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>5</b>
<b>Narrative:</b>	

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<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	<input type="text" value="5"/>
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	<input type="text" value="3"/>
Detention, correctional	2
No buildings	<u>0</u>
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	<input type="text" value="5"/>
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	<u>0</u>
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on benches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	<input type="text" value="0"/>
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-3 (II)**

100-100000-100

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-3 (II)</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
Conventional ordnance and ammunition (largest single value)	1

**What evidence do you have regarding conventional UXO?**

Blank ammunition noted in several LTAs at SEAD.

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<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

- RAC 1 High Risk – Highest priority for further action.
- RAC 2 Serious Risk – Priority for further action.
- RAC 3 Moderate Risk – Recommend further action.
- RAC 4 Low Risk – Recommend further action.
- RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-4 (I)**

RECEIVED - 1000 MON PUES

# THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-4 (I)</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

## BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A.	Conventional ordnance and ammunition:	VALUE
	Medium/large caliber (20mm and larger)	10
	Bombs, explosive	10
	Grenades, hand or rifle, explosive	10
	Landmine, explosive	10
	Rockets, guided missile, explosive	10
	Detonators, blasting caps, fuzes, boosters, bursters	6
	Bombs, practice (w/spotting charges)	6
	Grenades, practice (w/spotting charges)	4
	Landmine, practice (w/spotting charges)	4
	Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
	Small arms, expended	0
	Practice ordnance (w/o spotting charges)	0
	<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

Blank ammunition noted in several LTAs at SEAD.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

What evidence do you have regarding pyrotechnics?

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Teteryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding bulk explosives?

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |
- Narrative:**

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	<input type="checkbox"/> 5
Industrial, warehouse, etc.	<input type="checkbox"/> 4
Agricultural, forestry, etc.	<input type="checkbox"/> 3
Detention, correctional	<input type="checkbox"/> 2
No buildings	<input type="checkbox"/> 0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	<input type="checkbox"/> 5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	<input type="checkbox"/> 4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	<input type="checkbox"/> 3
Security guard, but no barrier	<input type="checkbox"/> 2
Isolated site	<input type="checkbox"/> 1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	<input type="checkbox"/> 0
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	<input type="checkbox"/> 5
None anticipated	<input type="checkbox"/> 0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-4 XD**

12/1/73  
12/1/73

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-4 XD</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Transferred</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

Blank ammunition noted in several LTAs at SEAD.

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<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |
- Narrative:** \_\_\_\_\_

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	<input type="text" value="5"/>
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	<input type="text" value="3"/>
Detention, correctional	2
No buildings	<u>0</u>
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	<input type="text" value="5"/>
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	<u>0</u>
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	<input type="text" value="0"/>
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.  
RAC 2 Serious Risk – Priority for further action.  
RAC 3 Moderate Risk – Recommend further action.  
RAC 4 Low Risk – Recommend further action.  
RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-5**

CONFIDENTIAL - SECURITY INFORMATION

# THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-5</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

## BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A.	Conventional ordnance and ammunition:	VALUE
	Medium/large caliber (20mm and larger)	10
	Bombs, explosive	10
	Grenades, hand or rifle, explosive	10
	Landmine, explosive	10
	Rockets, guided missile, explosive	10
	Detonators, blasting caps, fuzes, boosters, bursters	6
	Bombs, practice (w/spotting charges)	6
	Grenades, practice (w/spotting charges)	4
	Landmine, practice (w/spotting charges)	4
	Small arms, complete round (.22 cal -.50 cal)	<input checked="" type="checkbox"/> 1
	Small arms, expended	0
	Practice ordnance (w/o spotting charges)	0
	<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

What evidence do you have regarding conventional UXO?

Blank ammunition noted in several LTAs at SEAD.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes known to be used at LTA-5 (Reaction Course).

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>5</b>

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>5</b>

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>5</b>
<b>Narrative:</b>	

<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-6**

THEY SAID THEY WERE

THEY SAID THEY WERE

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	LTA-6	Rater's Name	C. Wieland
Site Location	Seneca Army Depot	Phone Number	(865) 483-9870
Range Classification	Closed	Organization	URS Group, Inc.
Date Completed	July 2002	Score	3

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A.	Conventional ordnance and ammunition:	VALUE
	Medium/large caliber (20mm and larger)	10
	Bombs, explosive	10
	Grenades, hand or rifle, explosive	10
	Landmine, explosive	10
	Rockets, guided missile, explosive	10
	Detonators, blasting caps, fuzes, boosters, bursters	6
	Bombs, practice (w/spotting charges)	6
	Grenades, practice (w/spotting charges)	4
	Landmine, practice (w/spotting charges)	4
	Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
	Small arms, expended	0
	Practice ordnance (w/o spotting charges)	<u>0</u>
	<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

Blank ammunition noted in several LTAs at SEAD.

\_\_\_\_\_

\_\_\_\_\_

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Teteryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>5</b>

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>5</b>

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>5</b>
<b>Narrative:</b>	

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-7**

PLEASE PRINT NAME AND ADDRESS

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-7</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

**TYPE OF ORDNANCE:** (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
Conventional ordnance and ammunition (largest single value)	1

What evidence do you have regarding conventional UXO?

Blank ammunition noted in several LTAs at SEAD. LTA-7 may contain kick-outs from  
EOD Range 1 and Demolition Range, since safety (QD) zone covers much of the area

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Teteryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>5</b>

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>5</b>

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>5</b>

**Narrative:**

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.  
 RAC 2 Serious Risk – Priority for further action.  
 RAC 3 Moderate Risk – Recommend further action.  
 RAC 4 Low Risk – Recommend further action.  
 RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS  
LTA-IV**

U.S. DEPARTMENT OF AGRICULTURE  
BUREAU OF PLANT INDUSTRY  
WASHINGTON, D.C.

PLANT INDUSTRY  
BUREAU OF PLANT INDUSTRY  
WASHINGTON, D.C.

PLANT INDUSTRY  
BUREAU OF PLANT INDUSTRY  
WASHINGTON, D.C.

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>LTA-IV</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>3</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>1</b>

**What evidence do you have regarding conventional UXO?**

Blank ammunition noted in several LTAs at SEAD. No information was available on  
LTA-IV, so use analogy to other LTAs

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>4</b>

**What evidence do you have regarding pyrotechnics?**

Flares, smokes commonly used during mock combat training exercises.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 5 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
Location (select the single largest value)	5

**What evidence do you have regarding the location of UXO and OE?**

Blank ammunition and flare carcasses found on surface in some LTAs

<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
Distance (select the single largest value)	5

**What are the nearest inhabited structures/buildings?**

LTA is along SEAD's boundary.

<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
Number of buildings (select the single largest value)	5

**Narrative:**

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

State facilities, residences, farms, and commercial properties.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

LTA is not separately fenced. SEAD has fence, locked gates, and guards.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

LTAs have not been closely inspected, but ASR notes presence of blank ammunition and flare carcasses on ground in some LTAs. This fits with common Army practice.



**RISK ASSESSMENT CODE WORKSHEETS**  
**Open Burn/Open Detonation Grounds**

1965-1966  
1967-1968

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>OB/OD Grounds</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>1</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	0
Practice ordnance (w/o spotting charges)	0
Conventional ordnance and ammunition (largest single value)	10

**What evidence do you have regarding conventional UXO?**

Detonation of munitions (i.e., bombs) was conducted on this range. Remnants and UXO of small to large caliber munitions and grenades have been found at the site.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	<u>10</u>
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	<u>4</u>
<b>Pyrotechnics (select the single largest value)</b>	<b>10</b>

**What evidence do you have regarding pyrotechnics?**

Items found on-site, including flares and live 105mm shell containing WP.

<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	<u>10</u>
Demolition charges	<u>10</u>
Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	<u>8</u>
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	<u>3</u>
<b>High explosives (select the single largest value)</b>	<b>10</b>

**What evidence do you have regarding bulk explosives?**

Interview information in ASR.

<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	<u>6</u>
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	<u>5</u>
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

**TOTAL HAZARD SEVERITY VALUE (Sum of values A through E):** 20 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

DESCRIPTION	CATEGORY	HAZARD SEVERITY VALUE
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0
* Apply Hazard Severity Category to Table 3		
**If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.		

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

UXO found on surface and geophysical anomalies detected at depth.

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

Located 0.5 mile away from the highway.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

There are numerous houses/farmhouses within this 2-mile radius. There is also a juvenile corrections facility to the northeast of this range.

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	<u>5</u>
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	<u>2</u>
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

Farmhouses

<b>E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance:</b>	<b>VALUE</b>
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	<u>3</u>
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	<u>0</u>
<b>Accessibility (select the single largest value)</b>	<b>3</b>

**Describe the site accessibility:**

The OB/OD Grounds is fenced and gated. Installation is fenced, gated, guarded.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	<u>0</u>
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>



Describe the site dynamics:

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 23  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

Numerous UXO HE items found during EE/CA investigation.

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**RISK ASSESSMENT CODE WORKSHEETS**  
**Rifle Grenade Range**



## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Rifle Grenade Range</u>	Rater's Name	<u>C. Wieland</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>2</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	<u>10</u>
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	<u>1</u>
Small arms, expended	0
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>10</b>

**What evidence do you have regarding conventional UXO?**

Live 35mm subcaliber rounds and blank small arms ammunition found during EE/CA.

<b>B.</b>	<b>Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
	Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
	Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
	Flares, signals, simulators, screening smokes (other than WP)	4
	<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding pyrotechnics?

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<b>C.</b>	<b>Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
	Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
	Demolition charges	10
	Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
	Military dynamite	6
	Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
	<b>High explosives (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding bulk explosives?

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<b>D.</b>	<b>Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
	Solid or liquid propellants	6
	<b>Propellants</b>	<b>0</b>

What evidence do you have regarding bulk propellants?

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<b>E.</b>	<b>Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
	Toxic chemical agents (choking, nerve, blood, blister)	25
	War Gas Identification Sets	20
	Radiological	15
	Riot Control Agents (vomiting, tear)	5
	<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

What evidence do you have regarding chemical or radiological?

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 10 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

- A. Locations of UXO and OE hazards:** **VALUE**
- |   |          |
|---|----------|
| On the surface  | 5        |
| Within tanks, pipes, vessels, or other confined areas | 4        |
| Inside walls, ceilings, or other building/structure   | 3        |
| Subsurface  | 2        |
| <b>Location (select the single largest value)</b>     | <b>5</b> |

**What evidence do you have regarding the location of UXO and OE?**

Over 100 UXO found on surface by EE/CA.

- B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):** **VALUE**
- |   |          |
|---|----------|
| Less than 1,250 feet                              | 5        |
| 1,250 feet to 0.5 mile                            | 4        |
| 0.5 mile to 1.0 mile                              | 3        |
| 1.0 mile to 2.0 Miles                             | 2        |
| Over 2 miles                                      | 1        |
| <b>Distance (select the single largest value)</b> | <b>5</b> |

**What are the nearest inhabited structures/buildings?**

Houses and commercial buildings of town of Romulus.

- C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:** **VALUE**
- |  |          |
|--|----------|
| 26 and over  | 5        |
| 16 to 25   | 4        |
| 11 to 15   | 3        |
| 6 to 10  | 2        |
| 1 to 5   | 1        |
| 0  | 0        |
| <b>Number of buildings (select the single largest value)</b> | <b>5</b> |

**Narrative:**

High number of buildings: town of Romulus, SEAD structures.

<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>5</b>

**Describe the types of buildings:**

Schools, residences, commercial.

<b>E. Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
<b>Use the following guidance:</b>	
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>5</b>

**Describe the site accessibility:**

No range fence. Installation is fenced, gated, guarded.

<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**



**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 25  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2**  
**HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3**  
**RISK ASSESSMENT**

<u>PROBABILITY</u>	<u>FREQUENT</u>	<u>PROBABLE</u>	<u>OCCASIONAL</u>	<u>REMOTE</u>	<u>IMPROBABLE</u>
<u>LEVEL</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
SEVERITY					
CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

Risk is based on discovery of UXO by EE/CA.



**RISK ASSESSMENT CODE WORKSHEETS**  
**Sampson Rifle Range**



## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Sampson Rifle Range</u>	Rater's Name	<u>Jusbyn Lockard</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Closed</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>5</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	<input checked="" type="checkbox"/>
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>0</b>

**What evidence do you have regarding conventional UXO?**

ASR inspectors did not find any unexpended ammunition at this site.

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<b>B.</b>	<b>Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
	Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
	Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
	Flares, signals, simulators, screening smokes (other than WP)	4
	<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding pyrotechnics?**

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<b>C.</b>	<b>Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
	Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
	Demolition charges	10
	Secondary explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
	Military dynamite	6
	Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
	<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

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<b>D.</b>	<b>Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
	Solid or liquid propellants	6
	<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

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<b>E.</b>	<b>Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
	Toxic chemical agents (choking, nerve, blood, blister)	25
	War Gas Identification Sets	20
	Radiological	15
	Riot Control Agents (vomiting, tear)	5
	<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 0 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
<b>**NONE</b>	V	0

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A. Locations of UXO and OE hazards:</b>	<b>VALUE</b>
On the surface	5
Within tanks, pipes, vessels, or other confined areas	4
Inside walls, ceilings, or other building/structure	3
Subsurface	2
<b>Location (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding the location of UXO and OE?**

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<b>B. Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 Miles	2
Over 2 miles	1
<b>Distance (select the single largest value)</b>	<b>0</b>

**What are the nearest inhabited structures/buildings?**

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<b>C. Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
<b>Number of buildings (select the single largest value)</b>	<b>0</b>
<b>Narrative:</b>	

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<b>D.</b>	<b>Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
	Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
	Industrial, warehouse, etc.	4
	Agricultural, forestry, etc.	3
	Detention, correctional	2
	No buildings	0
	<b>Types of buildings (select the single largest value)</b>	<b>0</b>
	<b>Describe the types of buildings:</b>	

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<b>E.</b>	<b>Accessibility to site refers to access by humans to ordnance and explosives.</b>	<b>VALUE</b>
	<b>Use the following guidance:</b>	
	No barrier nor security system	5
	Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
	A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
	Security guard, but no barrier	2
	Isolated site	1
	A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
	<b>Accessibility (select the single largest value)</b>	<b>0</b>
	<b>Describe the site accessibility:</b>	

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<b>F.</b>	<b>Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
	Expected	5
	None anticipated	0
	<b>Site Dynamics (select the single largest value)</b>	<b>0</b>
	<b>Describe the site dynamics:</b>	

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 0  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

- RAC 1 High Risk – Highest priority for further action.
- RAC 2 Serious Risk – Priority for further action.
- RAC 3 Moderate Risk – Recommend further action.
- RAC 4 Low Risk – Recommend further action.
- RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

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**RISK ASSESSMENT CODE WORKSHEETS**  
**Sampson Rifle Range XD1**

THE UNIVERSITY OF CHICAGO  
LIBRARY

## THE RISK ASSESSMENT CODE FOR ORDNANCE AND EXPLOSIVES SITES

Site Name	<u>Sampson Rifle Range XD1</u>	Rater's Name	<u>Jusbyn Lockard</u>
Site Location	<u>Seneca Army Depot</u>	Phone Number	<u>(865) 483-9870</u>
Range Classification	<u>Transferred</u>	Organization	<u>URS Group, Inc.</u>
Date Completed	<u>July 2002</u>	Score	<u>5</u>

### BACKGROUND:

These risk assessment procedures were developed by the U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Team (CEHNC-OE) to prioritize the response action(s) at formerly used defense sites. The procedures were developed in accordance with MIL-STD 882C and AR 385-10.

The Department of Defense (DoD) is adopting the procedures, as an interim DoD-wide standard, to provide a set of uniform procedures for assessing explosives safety risks at Defense Environmental Restoration Program sites.

Risk Assessment Code (RAC) scores developed using these procedures will be used by DoD for risk assessment at sites suspected to contain unexploded ordnance (UXO) or other explosive safety hazards.

The risk assessment should be based on the best available information resulting from record searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved base on the *potential* explosives safety hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability.

## PROCEDURES

**PART I. HAZARD SEVERITY.** Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of UXO.

### TYPE OF ORDNANCE: (Circle all that apply)

A. Conventional ordnance and ammunition:	VALUE
Medium/large caliber (20mm and larger)	10
Bombs, explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal -.50 cal)	1
Small arms, expended	<input checked="" type="checkbox"/>
Practice ordnance (w/o spotting charges)	<u>0</u>
<b>Conventional ordnance and ammunition (largest single value)</b>	<b>0</b>

**What evidence do you have regarding conventional UXO?**

ASR inspectors did not find any unexpended ammunition at this site.

<b>B. Pyrotechnics (for munitions not described above):</b>	<b>VALUE</b>
Munition (containers) containing white phosphorus (WP) or other pyrophoric material (i.e., spontaneously flammable)	10
Munition containing a flame or incendiary material (i.e., Napalm, Triethylaluminum metal incendiaries)	6
Flares, signals, simulators, screening smokes (other than WP)	4
<b>Pyrotechnics (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding pyrotechnics?**

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<b>C. Bulk High Explosives (not an integral part of conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Primary or initiating explosives (lead styphnate, lead azide, nitroglycerin, mercury azide, mercury fulminate, tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C, Teteryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military dynamite	6
Less sensitive explosives (ammonium nitrate, Explosive D, etc.)	3
<b>High explosives (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding bulk explosives?**

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<b>D. Bulk propellants (not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized):</b>	<b>VALUE</b>
Solid or liquid propellants	6
<b>Propellants</b>	<b>0</b>

**What evidence do you have regarding bulk propellants?**

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<b>E. Chemical Warfare Materiel (CWM) and Radiological Weapons:</b>	<b>VALUE</b>
Toxic chemical agents (choking, nerve, blood, blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (vomiting, tear)	5
<b>Chemical and Radiological (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding chemical or radiological?**

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**TOTAL HAZARD SEVERITY VALUE** (Sum of values A through E): 0 (maximum of 61)

Apply this value to Table 1 to determine Hazard Severity Category

**TABLE 1:  
HAZARD SEVERITY\***

<u>DESCRIPTION</u>	<u>CATEGORY</u>	<u>HAZARD SEVERITY VALUE</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
<b>**NONE</b>	<b>V</b>	<b>0</b>

\* Apply Hazard Severity Category to Table 3

\*\*If hazard severity value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

**PART II. HAZARD PROBABILITY.** The probability that a hazard has been, or will be, created due to the presence and other rated factors of UXO or explosive materials on a BRAC site.

**AREA, EXTENT, ACCESSIBILITY OF UXO AND OE HAZARDS (Circle all that apply)**

<b>A.</b>	<b>Locations of UXO and OE hazards:</b>	<b>VALUE</b>
	On the surface	5
	Within tanks, pipes, vessels, or other confined areas	4
	Inside walls, ceilings, or other building/structure	3
	Subsurface	2
	<b>Location (select the single largest value)</b>	<b>0</b>

**What evidence do you have regarding the location of UXO and OE?**

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<b>B.</b>	<b>Distance to nearest inhabited location/structure likely to be at risk from the UXO or OE hazard (road, park, playground, building, etc.):</b>	<b>VALUE</b>
	Less than 1,250 feet	5
	1,250 feet to 0.5 mile	4
	0.5 mile to 1.0 mile	3
	1.0 mile to 2.0 Miles	2
	Over 2 miles	1
	<b>Distance (select the single largest value)</b>	<b>0</b>

**What are the nearest inhabited structures/buildings?**

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<b>C.</b>	<b>Number(s) of building(s) within a 2-mile radius measured from the UXO or OE hazard area, not the installation boundary:</b>	<b>VALUE</b>
	26 and over	5
	16 to 25	4
	11 to 15	3
	6 to 10	2
	1 to 5	1
	0	0
	<b>Number of buildings (select the single largest value)</b>	<b>0</b>

**Narrative:**

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<b>D. Types of Buildings (within a 2 mile radius):</b>	<b>VALUE</b>
Educational, child care, residential, hospitals hotels, commercial, shopping centers	5
Industrial, warehouse, etc.	4
Agricultural, forestry, etc.	3
Detention, correctional	2
No buildings	0
<b>Types of buildings (select the single largest value)</b>	<b>0</b>
<b>Describe the types of buildings:</b>	

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<b>E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance:</b>	<b>VALUE</b>
No barrier nor security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff) that completely surrounds the area; and, a means to control entry at all times through the gates or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area).	0
<b>Accessibility (select the single largest value)</b>	<b>0</b>

**Describe the site accessibility:**

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<b>F. Site Dynamics. This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams and increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.</b>	<b>VALUE</b>
Expected	5
None anticipated	0
<b>Site Dynamics (select the single largest value)</b>	<b>0</b>

**Describe the site dynamics:**

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**TOTAL HAZARD PROBABILITY VALUE** (sum of largest values for A through F): 0  
(maximum of 30)

Apply this value to Hazard Probability Table 2 to determine the Hazard Probability Level.

**TABLE 2  
HAZARD PROBABILITY**

<u>DESCRIPTION</u>	<u>LEVEL</u>	<u>HAZARD PROBABILITY VALUE</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

\*Apply Hazard Probability Level to Table 3.

**PART III. RISK ASSESSMENT.** The risk assessment value for this site is determined using the following table. Enter the results of the Hazard Probability and Hazard Severity values.

**TABLE 3  
RISK ASSESSMENT**

<u>PROBABILITY LEVEL</u>	<u>FREQUENT A</u>	<u>PROBABLE B</u>	<u>OCCASIONAL C</u>	<u>REMOTE D</u>	<u>IMPROBABLE E</u>
SEVERITY CATEGORY:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

**RISK ASSESSMENT CODE (RAC):**

RAC 1 High Risk – Highest priority for further action.

RAC 2 Serious Risk – Priority for further action.

RAC 3 Moderate Risk – Recommend further action.

RAC 4 Low Risk – Recommend further action.

RAC 5 Negligible Risk – No explosive related action necessary.

**PART IV. NARRATIVE.** Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that were made.

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## **H. DIGITAL FILES**

A compact disc that contains the CTT inventory electronic geographic information system (GIS) and map files will be included in this section of the final report. The ARID files will be provided to AEC for uploading with submittal of the final report.









## I. DOCUMENT LOG

### Reports

Parsons Engineering Science, Inc. Canton, MA. *Engineering Evaluation/Cost Analysis Seneca Army Depot Romulus, NY.* May 2001

Thomas F. Grasek. *Army Advance Range Survey* 2001.

USACE, Rock Island District. *Ordnance and Explosives Archives Search Report for Seneca Army Depot Activity, Romulus, New York.* Volumes 1 and 2, Revised Final, March 1999.

### Maps

USACE. *Ranges at S.E.A.D, Seneca Army Depot, Romulus, New York,* May 29, 1987.

Office of the Post Engineer, Seneca Army Depot. *Detail Site Plan showing, surface danger zone at small arms firing range and riot gun familiarization firing range.* DWG. No. 25-73. August 3, 1973.

U.S. Fish and Wildlife Services. Hadley, MA, for Seneca Army Depot. *Wetlands using the Cowardin System.* UTM NAD 27, Zone 18. March 2000.

Office of the Facilities Engineer, Seneca Army Depot. *SEAD Grid Map, Helicopter landing zones.* November 23, 1988.

STV/Lyon Associates, Inc. Baltimore, Maryland. *Land Use Plan.* October 1990.

Office of the Facilities Engineer, Seneca Army Depot. *Site Safety Plan: Small Arms Range,* DWG. NO. 45-84. August 29, 1984.

Aerial Photograph depicting the southwestern portion of the base. No date or name associated with this photograph.

USACE. *Sewer and Drainage Systems.* June 30, 1943.

Department of the Air Force, Washington D.C. *Special Facilities Recreation and Training Sampson Air Force Base.* February 27, 1955

Office of the Post Engineer, Seneca Army Depot. *Surface Danger Zone at Small Arms Firing Range.* DWG. NO.-25-73. August 3, 1973.

Department of the Air Force, Washington D.C. *Recreation and training, Sampson Air Force Base*. Master Planning Directive: Simpson AFB 53-1. February 27, 1955.

STV/Lyon Associates, Inc. Baltimore, Maryland. *Reservation Map*. DWG NO 4468-01-62. March 1988.

Lyon Associates, Inc. *Military Training Areas*. Jan 6, 1989.

Karslen, Michael D. Licensed Land Surveyor. *Area Reserved for U.S. Army Enclave Ore Pile Warehouse Area Seneca Army Depot*

Karslen, Michael D. Site #4: *Surveyed for U.S. Army Enclave Ore Pile Igloo Area, Seneca Army Depot*.

Karslen, Michael D. Site #2 *Area Reserved for U.S. Army Enclave Ore Pile Warehouse Area Seneca Army Depot*.

Karslen, Michael D. Site #1 *Area Reserved for U.S. Army Enclave Hazardous Materials Warehouses Building # 356 & Building # 357, Seneca Army Depot*. February 14, 2001.





## **J. NOTES**

The stewardship table is included in this section. The table shows the natural and cultural resources present at the range or UXO-DMM-MC site.

The acreage of the installation was reported differently by different sources. Tables provided by AEC reported 10,594 acres; however, the reservation map from the 1988 Master Plan indicates that the total acreage for SEAD is 10,587 acres.

The ASR reported the installation as encompassing 10,622.8 acres, and that figure was used in this report.



## Stewardship Table

Natural and Cultural Resources:

INSTALLATION	FFID	RANGE NAME	SPECIAL STATUS SPECIES	CULTURAL RESOURCES
SENECA DEPOT ACTIVITY	NY213820830	40 MM GRENADE RANGE XD	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED DEACTIVATION FURNACE	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	ABANDONED POWDER BURN AREA	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	BAZOOKA RANGE	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	DEMOLITION RANGE	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 1	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 2	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	E.O.D RANGE 3	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	EXISTING DEACTIVATION FURNACE	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	FUNCTION TEST RANGE XD	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-1 XD	None known	None known

## Stewardship Table

### Natural and Cultural Resources:

INSTALLATION	FFID	RANGE NAME	SPECIAL STATUS SPECIES	CULTURAL RESOURCES
SENECA DEPOT ACTIVITY	NY213820830	LTA-2 (III)	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-3 (II)	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 (I)	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-4 XD	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-5	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-6	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-7	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	LTA-IV	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	OPEN BURN/OPEN DETONATION GROUNDS	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	RIFLE GRENADE RANGE	None known	None known
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE	None known	None known



## Stewardship Table

### Natural and Cultural Resources:

INSTALLATION	FFID	RANGE NAME	SPECIAL STATUS SPECIES	CULTURAL RESOURCES
SENECA DEPOT ACTIVITY	NY213820830	SAMPSON RIFLE RANGE XD 1	None known	None known

