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# **MUNITIONS AND EXPLOSIVES OF CONCERN HAZARD ASSESSMENT METHODOLOGY**



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## **FOREWORD**

This document describes the munitions and explosives of concern hazard assessment (MEC HA) methodology for assessing potential explosive hazards to human receptors at munitions response sites (MRSs). The MEC HA allows a project team to evaluate the potential explosive hazard associated with an MRS, given current conditions and under various cleanup, land use activities, and land use control alternatives.

The statutory provisions and regulations described in this document contain legally binding requirements. This document is not a regulation itself, nor does it alter or substitute for those provisions and regulations. Thus, it does not impose any legally binding requirements on EPA, States, Tribes, DoD, or other federal agencies, or other members of the regulated community. This document does not confer legal rights or impose legal obligations upon any member of the public.

The methodology presented in this document may not apply to a particular situation based upon site-specific circumstances. Interested parties are free to raise questions about the substance of this document and the appropriateness of the application of the methodology to a particular situation. This document may be revised periodically by the sponsoring organizations without public notice. The Technical Work Group welcomes public input on this document at any time.



Concurrence Memo for the Interim Munitions and Explosives of Concern Hazard Assessment (MEC HA) Methodology

The Technical Working Group for the Munitions and Explosives of Concern Hazard Assessment (MEC HA) Methodology was established to develop a technical framework and application methodology. The group consists of representatives from the Department of Defense, Department of the Interior, State program managers from Association of State and Territorial Solid Waste Management Officials, Tribal Association for Solid Waste and Emergency Response, and the U.S. Environmental Protection Agency.

The document describes the MEC HA Methodology for assessing potential explosive hazards to human receptors at munitions response sites (MRSs). The MEC HA allows a project team to evaluate the potential explosive hazard associated with an MRS, given current conditions and under various cleanup, land use activities, and land use control alternatives. It was developed through a collaborative, consensus approach to promote consistent evaluation of potential explosive hazards at MRSs.

The MEC HA Methodology is now formally available for use by project teams that are evaluating potential explosive hazards at MRSs. Over the next two to three years, the sponsoring organizations will evaluate the effectiveness of the MEC HA based on application at munitions response sites. Based on the evaluations, modifications the MEC HA may be made to enhance the effectiveness of the methodology.

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## ACRONYMS

AFCEE	Air Force Center for Environmental Excellence
ARARs	Applicable or Relevant and Appropriate Requirements
ASR	Archive Search Report
ASTSWMO	Association of State and Territorial Solid Waste Management Officials
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
CTT	Closed, Transferred, and Transferring
CWM	Chemical Warfare Material
DD	Decision Document
DDESB	Department of Defense Explosives Safety Board
DMM	Discarded Military Munitions
DoD	Department of Defense
DOI	Department of the Interior
DQO	Data Quality Objective
DTSC	Department of Toxic Substances Control
EE/CA	Engineering Evaluation/Cost Analysis
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ESP	Explosives Siting Plan
ESQD	Explosive safety quantity-distance
ESS	Explosives Safety Submission
FS	Feasibility Study
FUDS	Formerly Used Defense Sites
HA	Hazard Assessment
HE	High Explosive
HEAT	High Explosive Anti-Tank
HMX	High Melting Explosive; Octahydro-1,3,5,7-tetranitro-triazine
HTRW	Hazardous, Toxic and Radioactive Waste
LUCs	Land Use Controls
MC	Munitions Constituents
MEC	Munitions and Explosives of Concern
MEC HA	Munitions and Explosives of Concern Hazard Assessment
MMRP	Military Munitions Response Program
MRA	Munitions Response Area
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NAVFAC	Naval Facilities Engineering Command
NCDENR	North Carolina Department of Environment and Natural Resources
NCP	National Contingency Plan
NTCRA	Non-Time Critical Removal Action
OB/OD	Open Burning/Open Detonation
PA/SI	Preliminary Assessment/Site Inspection
QA/QC	Quality Assurance/Quality Control

RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RDX	Royal Demolition Explosive; Hexahydro-1,3,5-trinitro-triazine
RFI/CMS	RCRA Facility Investigation/Corrective Measure Study
RI	Remedial Investigation
ROD	Record Of Decision
SPP	Systematic Planning Process
TASWER	Tribal Association for Solid Waste and Emergency Response
TCRA	Time Critical Removal Action
TNT	2,4,6-trinitrotoluene
TPP	Technical Project Planning
TWG HA	Technical Working Group for Hazard Assessment
USACE	United States Army Corps of Engineers
UXO	Unexploded Ordnance
WP	White Phosphorus

## EXECUTIVE SUMMARY

This document describes the munitions and explosives of concern hazard assessment (MEC HA) methodology for assessing potential explosive hazards to human receptors at munitions response sites (MRS). The MEC HA allows a project team to evaluate the potential explosive hazard associated with an MRS, given current or reasonably anticipated future conditions, and under various cleanup, land use activities, and land use control alternatives.

This document was developed by the Technical Working Group for Hazard Assessment, which consists of representatives from the Department of Defense, the U.S. Department of the Interior, State program managers from Association of State and Territorial Solid Waste Management Officials, Tribal Association for Solid Waste and Emergency Response, and the U.S. Environmental Protection Agency. These organizations provided personnel to develop the technical framework for this hazard assessment methodology document.

The MEC HA is designed to provide benefits at the project team level (e.g., individual installation or site). It is intended to reduce costs and streamline the evaluation of explosive hazards by providing project teams with a consistent, accepted methodology. The MEC HA will support consistency and reproducibility of efforts at multiple MRS. Its repeated use by project teams will further reduce costs through familiarity and ease of oversight. The MEC HA will promote mutual understanding of technical issues on the MRS through a collaborative, team-based hazard assessment process. The MEC HA is designed to enhance communication of hazards within a project team, and between project teams and external stakeholders. At the program level, the MEC HA will provide benefits by instilling confidence in decision-making through the use of a standardized hazard assessment approach, and support understanding at the national level of the process that project teams are using to help support decisions.

The MEC HA is intended to fit into military munitions response program (MMRP) activities and the regulatory structure of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It addresses the National Contingency Plan (NCP) direction to conduct site-specific risk assessments for threats to human health and the environment.

*The MEC HA reflects the fundamental difference between assessing chronic environmental contaminant exposure risk and assessing acute MEC explosive hazards. An explosive hazard can result in immediate injury or death. Risks from MEC explosive hazards are evaluated as being either present or not present. If the potential for an encounter with MEC exists, the potential that the encounter may result in death or injury also exists. Consequently, if MEC is known or suspected to be present, a munitions response typically will be required. The munitions response may include further investigation, cleanup of MEC through a removal or remedial action, including land use controls (LUCs), or LUCs alone. Where a cleanup action for MEC has occurred, some level of LUCs will often be required to address the uncertainty that all MEC items have been found and removed from the MRS. These may range from educational programs to restrictions on land use activities.*

The MEC HA addresses human health and safety concerns associated with potential exposure to MEC at MRS. It does not directly address environmental or ecological concerns that might be associated with MEC. It does not address operational ranges. It does not address locations where military munitions are known or suspected to be present underwater, nor does it address chemical warfare materiel (CWM).

The MEC HA is conducted through the systematic planning process that guides environmental investigations. As such, it is designed to be a collaborative process that draws upon the collective understanding and expertise of a project team consisting of lead agency personnel, regulators, and stakeholders.

The MEC HA is structured around three components of potential explosive hazard incidents:

- Severity, which is the potential consequences of the effect (e.g., death, injury) on a human receptor should an MEC item detonate.
- Accessibility, which is the likelihood that a human receptor will be able to come in contact with a MEC item.
- Sensitivity, which is the likelihood that a human receptor will be able to interact with a MEC item such that it will detonate.

Each of these components is assessed in the MEC HA by input factors. Each input factor has two or more categories. Each input factor category is associated with a numeric score that reflects the *relative* contributions of the different input factors to the MEC hazard assessment. *The MEC HA scores should not be interpreted as quantitative measures of explosive hazard.* The sum of the input factor scores falls within one of four defined ranges, called Hazard Levels. Each of the four Hazard Levels reflects attributes that describe groups of MRS and site conditions ranging from the highest to lowest hazards.

The MEC HA allows a project team to assess MRS on the most appropriate scale by dividing an MRS into subunits, if necessary. The MEC HA can be used to score an MRS several times to assess current conditions and the conditions expected after completion of different removal or remedial actions. It can also be used to assess different types of determined or reasonably anticipated future land use activities. The scoring tool is contained in Appendix A as an automated workbook.

The MEC HA can be used at several points in the CERCLA process. It is primarily designed to be used at two points in the CERCLA process. The end of a removal investigation to assess baseline explosive hazards and relative hazard reductions associated with removal alternatives in an Engineering Evaluation/Cost Analysis (EE/CA) report; or at the end of a remedial investigation to assess baseline explosive hazards and relative hazard reductions associated with remedial alternatives in the Remedial Investigation/Feasibility Study (RI/FS) report.

The MEC HA does not answer the question of “How clean is clean?” Several removal or remedial alternatives or combinations of alternatives (e.g., surface or subsurface cleanup combined with land use controls) may be able to meet the protection of human health and the environment criteria. All alternatives are analyzed to determine which combination of alternatives best meets the CERCLA statutory requirements. Site-specific project teams will determine “How clean is clean?” by selecting the alternative to be implemented to meet CERCLA requirements.

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## CHAPTER 1: INTRODUCTION TO THE MEC HA METHODOLOGY

This chapter introduces the Munitions and Explosives of Concern Hazard Assessment (MEC HA). It presents an overview of the background, purpose, use, benefits, and integration of the MEC HA into the evaluation of removal and remedial alternatives under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

### 1.1 Background of the MEC HA

Since the early 1990s, military and civilian land managers and the public have been increasingly concerned about munitions response decisions at locations that are being returned to the public through the Base Realignment and Closure (BRAC) program or other land transfer programs. In addition, ongoing site investigations at munitions response areas (MRA) and munitions response sites (MRS) demonstrate that a number of formerly used defense sites (FUDS) contain munitions and explosives of concern (MEC).

On March 7, 2000, the Department of Defense (DoD) and the U.S. Environmental Protection Agency (EPA) signed the *Interim Final Management Principles for Implementing Response Actions at Closed, Transferred, and Transferring (CTT) Ranges*.<sup>1</sup> The principles included a commitment to implement “a process consistent with CERCLA ... [as the] preferred [regulatory] mechanism.” In 2001, DoD published management guidance for the CERCLA-based Installation Restoration Program that established the Military Munitions Response Program (MMRP).<sup>2</sup> The management guidance required DoD to establish and maintain an inventory of locations (called munitions response sites) other than operational ranges that contain or are suspected to contain MEC and required installations to program and budget for MMRP response actions. In 2002, the National Defense Authorization Act affirmed the MMRP and the need for an inventory, and required DoD to develop an approach for assigning a relative priority to each MRS in its inventory for response actions. This effort resulted in the October 5, 2005 finalization of the Munitions Response Site Prioritization Protocol (Protocol).

#### Important Terms in This Chapter

##### **Munitions and Explosives of Concern (MEC)**

The term, which distinguishes specific categories of military munitions that may pose unique explosive safety risks, may include (1) unexploded ordnance (UXO); (2) discarded military munitions (DMM); (3) or munitions constituents (MC) present in high enough concentrations to pose an explosive hazard.

##### **Hazard Assessment (HA)**

An HA is the evaluation of existing and potential conditions at a munitions response site that can lead to an explosive event when a member of the general public (i.e., a receptor) interacts with the item. The evaluation considers the likelihood and the severity of the event that may occur.

##### **Munitions Response Area (MRA) and Munitions Response Site (MRS)**

An MRA is any area that is known or suspected to contain MEC. An MRS is the specific discrete location within an MRA that is known to require a munitions response (either investigation or removal of munitions items). For example, a former range area may be an MRA, but only that portion of the range (e.g., a target area) for which a response action has been identified would be the MRS.

<sup>1</sup> DoD and EPA. *Management Principles for Implementing Response Actions at Closed, Transferred, and Transferring (CTT) Ranges (Interim Final)*, 7 March 2000.

<sup>2</sup> Department of Defense, *Management Guidance for the Defense Environmental Restoration Program*, ODUSD(I&E), September 2001.



The CERCLA process for responding to releases or potential releases of hazardous substances, pollutants or contaminants which is described in the National Contingency Plan (NCP),<sup>3</sup> includes the development of site-specific risk assessments appropriate to the requirements of the site.<sup>4</sup> The results of the risk assessment are used to help site managers decide whether a response action is required, and to support the risk management decisions that are made through the remedy evaluation, selection, and implementation process. However, the CERCLA methodology for human health environmental contaminant risk assessment was not designed to address explosive safety hazards associated with MEC at an MRS. The differences between the environmental contaminant risk assessment methodology and the MEC HA approach are discussed in more detail in Section 1.6.

In March 2004, EPA invited Federal agencies and State and Tribal organizations to participate in an effort to develop a consensus methodology for the site-specific assessment of explosive hazards associated with MRS. The collaborative group that formed from this effort, the Technical Working Group for Hazard Assessment (TWG HA), included representatives from the DoD, Department of the Interior, State program managers from Association of State and Territorial Solid Waste Management Officials (ASTSWMO), and Tribal Association for Solid Waste and Emergency Response (TASWER),<sup>5</sup> along with EPA. These organizations provided personnel to develop this hazard assessment framework and methodology document. An executive sponsor committee composed of senior-level officials from each of the participating organizations was also established to guide the overall approach.

## 1.2 Purpose of the MEC HA

The purpose of the MEC HA is twofold:

- Support the hazard management decision-making process by analyzing site-specific information to:
  - Assess existing explosives hazards
  - Evaluate hazard reductions associated with removal and remedial alternatives
  - Evaluate hazard reductions associated with land use activity decisions
- Support hazard communication:
  - Between members of the project team and among other stakeholders
  - By organizing MRS information in a consistent manner

The MEC HA addresses the NCP direction for site-specific assessment of risks to human health and the environment. The MEC HA will help a project team understand the hazards associated with a MRS if no action is taken, and to evaluate the hazard reductions associated with removal or remedial alternatives. As with any CERCLA-based cleanup process, several different

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<sup>3</sup> National Oil and Hazardous Substances Contingency Plan (more commonly called the National Contingency Plan, or NCP), 40 CFR 300 et seq.

<sup>4</sup> A preamble discussion in the proposed rule and the final rule itself highlight the focus of a risk assessment that is appropriate to the requirements of the site. 40 CFR 300 (Preamble to NCP, December 21, 1988, page 51425); 40 CFR 430 (b), March 8, 1990, page 8846.

<sup>5</sup> The participation of the TASWER in the TWG HA ended with the development of the technical framework for the MEC HA. In the summer of 2005, TASWER ceased operations and was therefore unable to participate further in development of this guidance document.

alternatives may be protective of human health and the environment. The information collected for the MEC HA as well as the results can provide input into the CERCLA remedy evaluation and selection process.

### **1.3 Scope and Applicability of the MEC HA**

The MEC HA addresses human health and safety concerns associated with potential exposure to MEC at MRS. It does not directly address environmental or ecological concerns that might be associated with MEC, including the risks associated with exposure to munitions constituents (MC) as environmental contaminants. It does not address operational ranges. It does not address locations where military munitions are known or suspected to be present underwater.

The MEC HA assesses the acute hazard presented by the *explosive* component(s) of military munitions. Although military munitions include chemical weapons materiel (CWM), and thus CWM is MEC, the chemical agent component of the CWM presents a greater hazard to human health than the explosive components of CWM. Additionally, the toxic chemical hazard presented by the CWM can be calculated by current commonly acceptable methods. This does not dismiss the potential explosive hazard associated with many CWM but rather reflects the recognition that the greatest risk to human health from CWM is the chemical agent, not the explosive.

The MEC HA does not answer the question of “How clean is clean?” Several alternatives or combinations of alternatives (e.g., surface or subsurface cleanup combined with land use controls) may be able to meet the protection of human health and the environment criteria. All alternatives are analyzed to determine which alternative or combination of alternatives best meets the CERCLA statutory requirements. Site-specific project teams will determine “How clean is clean?” by selecting the alternative(s) to be implemented to meet CERCLA requirements. The MEC HA relies on data produced as a result of the systematic planning process (SPP), but does not assess the quality of that data independent of the data quality objectives (DQOs) established by project teams.

### **1.4 Benefits of the MEC HA**

The MEC HA will provide substantial benefits at the project team level (e.g., individual installation or MRS). The application of a consistent methodology will save resources during the investigation and decision-making processes at MRS. It will foster communication by contributing to a common understanding within a project team of the nature of the hazard present and the options for addressing that hazard.

For project teams, the MEC HA is designed to do the following:

- Maximize use of data gathered during development of the Conceptual Site Model (CSM).
- Reduce costs and streamline the hazard evaluation process at MRS because individual project teams will not have to develop their own process.
- Provide a consistent format and process for multiple MRS. Repeated use of the process by project teams, including regulators, will further reduce costs by supporting familiarity and ease of oversight.
- Promote mutual understanding of technical issues on the MRS through a collaborative, team-based hazard assessment process.

- Focus investigations on key issues that must be addressed to support site-specific decisions.
- Support the systematic planning process and collaborative decision-making at MRS.
- Facilitate site-specific decisions, including evaluation of removal and remedial alternatives.

The MEC HA is intended to provide program-level benefits, including the following:

- Increased confidence in decision-making through use of a standardized hazard assessment.
- Improved understanding at the national level of the processes that project teams are using to support decisions.
- Improved predictability of outcomes — similar MRS, with similar facts, will give similar results.
- More efficient data compilation at the national level through standardized data gathering and analysis.
- Ability to provide program support through a standardized approach to training and guidance.

### 1.5 Role of the Protocol and the MEC HA in the CERCLA Process

The relative priority assigned to response activities is to be based on the overall conditions at each MRS and take into consideration various factors related to safety and environmental hazards. The Protocol is designed to first be applied when sufficient information is available to populate the data elements in any or all of the modules. For the Explosive Hazard Evaluation (EHE) module this information has been collected by DoD at the Site Inspection step.<sup>6</sup>

The MEC HA has several input factors that are similar to those in the Protocol EHE module. The MEC HA includes additional capability to assess the potential effects of removal and remedial alternatives (e.g., surface cleanup, subsurface cleanup, or land use controls) on the potential explosive hazards at an MRS. The MEC HA supports project teams that are making hazard management decisions through the CERCLA response process at individual MRS. Table 1-1 compares purposes and applications of the Protocol and the MEC HA.

**Table 1-1. Comparison Between the Protocol and MEC HA**

Protocol	MEC HA
<ul style="list-style-type: none"> <li>• Description and Purpose:               <ul style="list-style-type: none"> <li>– Is a prioritization tool used to assign each MRS in the inventory a relative priority for response actions?<sup>7</sup></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Description and Purpose:               <ul style="list-style-type: none"> <li>– Is a tool used to compare the effects of clean-ups and/or changes to land use on the explosive hazard of an MRS (or a subunit of an MRS)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Is applied:               <ul style="list-style-type: none"> <li>– To each MRS</li> <li>– Initially at the preliminary assessment phase (unless insufficient data are available).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Is applied:               <ul style="list-style-type: none"> <li>– To each MRS (or a subunit of an MRS)</li> <li>– As part of the evaluation of baseline hazards and removal alternatives in an engineering evaluation/cost analysis (EE/CA)</li> </ul> </li> </ul>

<sup>6</sup> 32 CFR Part 179, § 179.5 Page 58030, as published in, *Federal Register* 70, no. 192 (5 October 2005).

<sup>7</sup> 32 CFR Part 179, § 179.1, Page 58028.

**Table 1-1. Comparison Between the Protocol and MEC HA**

Protocol	MEC HA
	<ul style="list-style-type: none"> <li>- At the conclusion of the remedial investigation process and during the feasibility study for each alternative to be evaluated</li> </ul>
<ul style="list-style-type: none"> <li>• The Protocol is annually reviewed and is reapplied<sup>8</sup>:               <ul style="list-style-type: none"> <li>- Upon completion of a response action</li> <li>- When new information is available to update a previous evaluation at an MRS or a priority that was assigned based on one or two modules</li> <li>- Upon further delineation of an MRA into MRS</li> <li>- To categorize an MRS previously classified as “evaluation pending”</li> <li>-</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Is reapplied:               <ul style="list-style-type: none"> <li>- When new information becomes available</li> <li>- At removal/remedial action completion</li> <li>- At the five-year review</li> </ul> </li> </ul>

The MEC HA supports the CERCLA process for evaluating both removal and remedial actions. In the March 7, 2000 *Management Principles for Implementing Response Actions at Closed, Transferred, and Transferring Ranges*, DoD and EPA expressed the preference for response actions at MRS follow the CERCLA process. When the State has the lead in overseeing a response action, it may be conducted under State Resource Conservation and Recovery Act (RCRA) requirements, under other federally delegated authorities, or under other State authorities. Because the RCRA corrective action program is conducted similarly to the CERCLA program, the integration of a hazard assessment under that process will be similar to the process under CERCLA.

- The MEC HA is primarily designed to be used at two points in the CERCLA process. The end of a removal investigation to assess explosive hazards of current conditions and relative hazard reductions associated with removal alternatives in the EE/CA report; or at the end of a remedial investigation to assess baseline explosive hazards and relative hazard reductions associated with remedial alternatives in the Remedial Investigation/Feasibility Study (RI/FS) report. The MEC HA should be viewed as an iterative and dynamic process. As more information about an MRS is gathered, information can be added and the MRS can be reassessed with the MEC HA to reflect that current understanding.

Figure 1-1 illustrates the following points in the CERCLA process at which the MEC HA can provide input to project team evaluations and decisions:

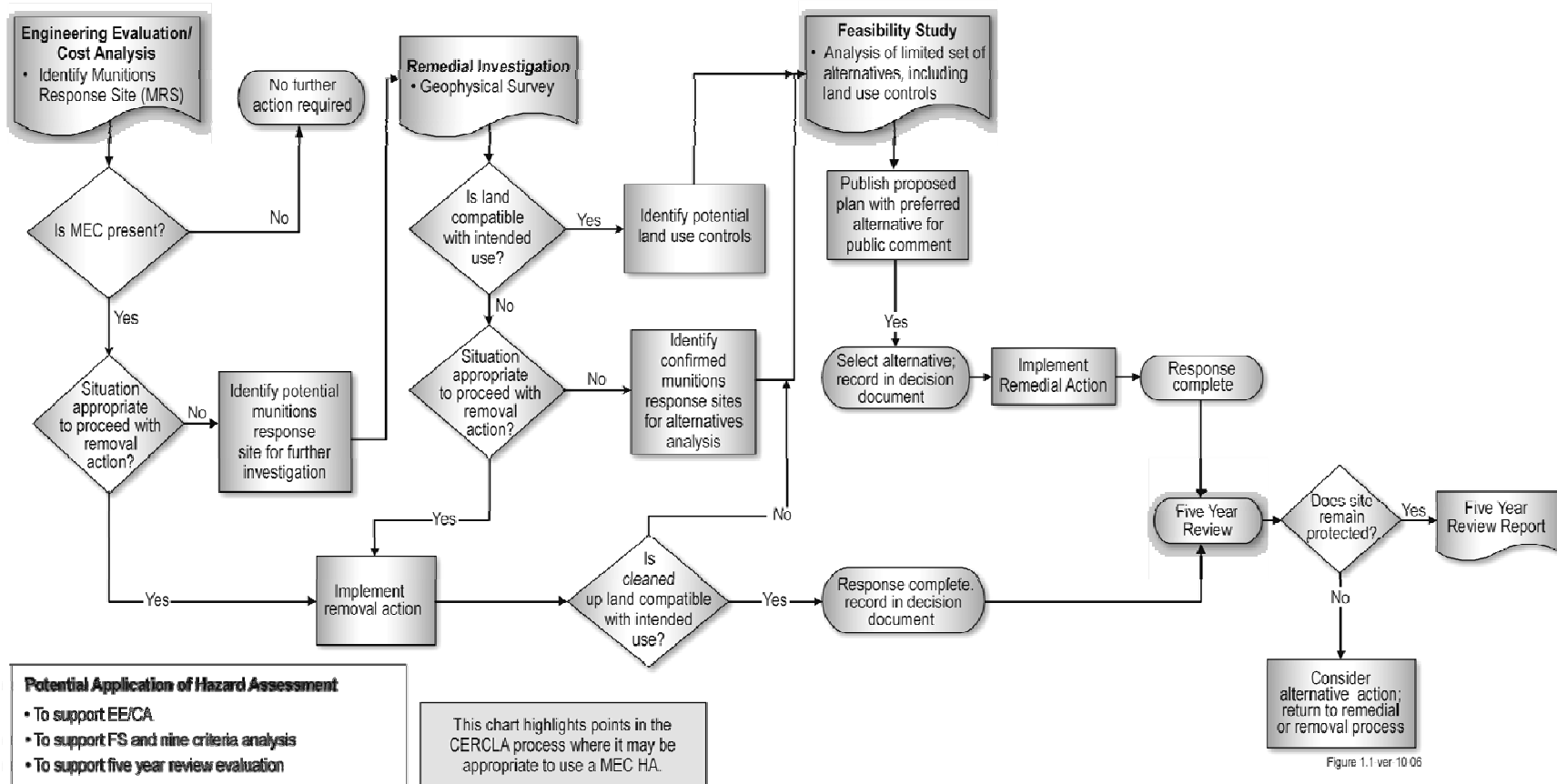
- **EE/CA.** At the conclusion of a removal investigation, the MEC HA supports the assessment of the explosive hazards that would remain if no action were taken. This evaluation of the “no action” alternative will help to identify the site conditions and use activities that should be addressed by removal alternatives considered in the EE/CA, as well as relative reductions in explosive hazards

<sup>8</sup> 32 CFR Part 179, § 179.5, Page 58031.

- **FS.** At the conclusion of a remedial investigation, the MEC HA supports the assessment of the explosive hazards that would remain if no action were taken. This evaluation of the “no action” alternative will help to identify the site conditions and use activities that should be addressed by removal alternatives considered in the RI/FS. The MEC HA also provides an assessment of relative hazard reduction associated with remedial action alternatives (surface and/or subsurface cleanup, land use controls, or combinations of these alternatives) These evaluations are made in the feasibility study of the remedial program through the CERCLA nine-criteria analysis.<sup>9</sup> For the CERCLA remedial action program, the information collected to apply the MEC HA as well as its outputs can provide useful information for several of the nine-criteria, including: the protection of human health and the environment, compliance with applicable or relevant and appropriate requirements (ARARs), long-term effectiveness, short-term effectiveness, implementability, and treatment to reduce mobility, toxicity, or volume of the principal threat at the MRS.
- **Five-Year Review.** The MEC HA allows project teams to evaluate the impact of changes in land use activities, the effectiveness of LUCs, and the protectiveness of the remedy. If conditions have not changed from completion of the remedial action at the time of the Five Year Review, it will not be necessary to rerun the MEC HA as part of the review. If conditions have changed, project teams may rerun the MEC HA to evaluate potential changes to explosive hazards at the MRS.

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<sup>9</sup> The nine-criteria analysis can be found in the National Contingency Plan (40 CFR 300.430(e)(9)).



**Figure 1-1. Application of the MEC Hazard Assessment During the CERCLA Process**

## 1.6 Differences Between MEC Hazard Assessment and Environmental Contaminant Risk Assessment

The MEC HA has been developed to address the NCP direction to assess site-specific risks to human health and the environment. The MEC HA focuses on the explosives safety hazards posed by MEC to human receptors. Risk assessments of environmental contaminant, including those to assess MC, and the MEC HA require similar site information. However, project teams should recognize the fundamental difference between assessing chronic environmental contaminant exposure risk and assessing acute MEC explosive hazards. These differences drive the approaches to the structure of the explosives hazard assessment process.

An encounter with MEC has the potential to result in injury or death. Direct contact (i.e. handling) increases the likelihood that an encounter will result in injury or death. No accepted method exists for establishing the incremental probability for injury or death from an encounter with MEC. If the potential for an encounter with MEC exists, the potential that the encounter will result in death or injury also exists. Consequently, if MEC is known or suspected to be present, some response action will be required to address the MEC.

CERCLA environmental contaminant risk assessments evaluate long-term or chronic exposure to environmental contaminants released to the environment. Estimates are made of potential increases in carcinogenic and non-carcinogenic risks. The levels that are considered to be protective of human health for carcinogens are established using the target risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$ . A carcinogenic risk of  $1 \times 10^{-4}$  equates to one cancer diagnosis beyond what is expected in a population of 10,000 people exposed to a certain environmental contaminant under certain exposure scenarios.

A MEC hazard assessment and an environmental contaminant risk assessment performed at the same MRS may have very different results. Unlike environmental contaminants that can migrate through different media, MEC items are generally stationary and typically require action by a human receptor to complete the explosive hazard pathway. The land use activities that present the highest potential hazard are those that take place outdoors and involve activities in which people can come in contact with MEC items and cause an unintentional detonation. A major cause of potential exposure at MRS is intrusive activities. MEC at an MRS with recreational or agricultural uses involving intrusive activities, such as camping or tilling soil, may provide a complete MEC exposure pathway and a may result in a relatively “high” hazard assessment.

These same activities may be of durations that limit exposure to environmental contaminants and result in a “low” environmental contaminant risk assessment evaluation. Assumptions about durations of exposure for environmental contaminant risk assessments are tied to specific land uses and play a major role in determining which land uses present the greatest risk. Residential land use is generally considered to be the land use with the highest potential risk because it is typically associated with the highest estimates for personal exposure. The land uses with the next highest risks are typically industrial and commercial, then recreational, followed by agricultural and open space. The level of activities that take place where explosives hazards exist may or may not follow this order.

## **1.7 Presence of Critical Infrastructure, Cultural Resources, or Ecological Resources**

The MEC HA assesses the explosive hazard to *human* receptors. Munitions response activities can pose hazards to infrastructure, cultural resources, or ecological resources. Project teams need to evaluate the potential for damage to the resources by specific response activities. This evaluation includes consideration of location-specific and action-specific ARARs during the planning and evaluation of investigations and removal or remedial actions. For removal actions, this analysis should be included in the implementability evaluations. For remedial actions, this should be done as part of the implementability and short-term effectiveness criteria analysis.

The MEC HA addresses the effects of an unintentional detonation and the hazardous fragments it can produce within a given radii. This distance is represented by an explosive safety quantity-distance (ESQD) arc. Project teams must understand that critical infrastructure, and cultural and ecological resources within the ESQD arc are vulnerable unless mitigation measures are employed.

## **1.8 Organization of the MEC HA Methodology Document**

The remainder of this document provides the background and instructions necessary for successfully applying the MEC HA. Chapter 2, Understanding the Hazard Assessment Framework, describes the input factors, categories, scores and weighting, and the Hazard Levels. Chapter 3 discusses the project team roles and responsibilities for undertaking the MEC HA, considerations for identifying areas for assessment, and information sources. Chapter 4 describes the processes for scoring the MEC HA under the specific input factors. Chapter 5 describes the outputs of the MEC HA analysis and provides guidance on the integration of the MEC HA analysis with the CERCLA removal or remedial alternatives evaluation processes.

Four technical appendices are included to provide additional information. Appendix A provides an electronic form of the worksheets as a tool for project teams to use in completing a MEC HA evaluation. Appendix B provides an example of a completed MEC HA worksheet and report. Appendix C presents frequently asked questions and answers to those questions. Appendix D provides a technical report on the development of MEC HA scores, weights, and Hazard Levels.



## CHAPTER 2: UNDERSTANDING THE HAZARD ASSESSMENT FRAMEWORK

This chapter presents an overview of the technical framework of the MEC HA.

### 2.1 Components of Explosive Hazard

The MEC HA framework is organized into three components of explosive hazard, each of which is defined in Table 2-1.

#### Important Terms in This Chapter

##### Cleanup

Removal or remedial actions or previous clearance activities in which MEC items were or will be removed from the surface or subsurface to a specified depth and lateral extent.

##### Conceptual Site Model (CSM)

The CSM is a description of a site and its environment that is based on existing knowledge. It describes sources, pathways, and receptors, and the interactions that link these. It assists the team in planning, data interpretation, and communication.

**Table 2-1. Components of Explosive Hazard in MEC HA**

Component of Explosive Hazard	Definition
Severity	The potential consequences of the effect (e.g. injury or death) on a human receptor should a MEC item detonate.
Accessibility	The likelihood that a human receptor will be able to come in contact with a MEC item.
Sensitivity	The likelihood that a MEC item will detonate if a human receptor interacts with it.

Organization of the MEC HA into three components reflects the nature of explosive hazard and information contained in the CSM.

### 2.2 Elements of the MEC HA

The MEC HA technical framework consists of three elements: input factors, structure, and output. Each of these terms is defined in Table 2-2 and discussed in detail in this chapter.

**Table 2-2. Framework Elements of the MEC HA**

Framework Element	Definition
Input factors	A series of factors that describe the characteristics of an MRS in terms of the components of the explosive hazard.
Structure	The methods used to assign weights, scores, and combine the input factors to assess the MRS explosive hazard.
Output	The description of the explosive Hazard Level of the MRS.

#### 2.2.1 MEC HA Input Factors

This section introduces the input factors that are used in the MEC HA. Input factors describe the conditions at an MRS that determine the severity, accessibility, and sensitivity components of explosive hazard.

### 2.2.1.1 Severity

The severity component is described by two input factors related to the potential consequences to a human receptor should a MEC item detonate:

- Energetic Material Type
- Location of Additional Human Receptors

The first factor describes the hazard inherent in the MEC items known or suspected to be at the MRS. The second factor addresses the possibility that should a MEC item detonate it could affect one or more secondary human receptors in addition to the initiating human receptor.

### 2.2.1.2 Accessibility

The accessibility component is described by the following input factors related to the likelihood that a human receptor will be able to come in contact with an MEC item.

- Site Accessibility
- Potential Contact Hours
- Amount of MEC
- Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth
- Migration Potential

### 2.2.1.3 Sensitivity

The sensitivity component is described by the following input factors related to the likelihood that an MEC item will detonate if a human receptor interacts with it.

- MEC Classification
- MEC Size

## 2.2.2 MEC HA Structure

The MEC HA framework uses a numeric structure to assign weights, scores, and then combine scores to describe the hazards associated with MEC at an MRS. The sum of the numeric scores determines the Hazard Level. The three characteristics of the MEC HA numeric structure of weights, scores, and combination are described in Table 2-3.

**Table 2-3. Numeric Structure Characteristics of the MEC HA**

Characteristic	Description
Weights	The weight assigned to an input factor represents the percentage of the maximum score for that input factor when compared with the sum of the maximum scores of all input factors. The different weights for the explosive hazard components are calculated in a similar manner.
Scores	Numeric scores are assigned to each of the input factor categories. The difference in scores reflects greater or lesser relative contributions to the explosive hazards at an MRS.
Combination	Scores are summed to produce a final numeric score that determines which of four Hazard Levels reflects the conditions described by the input factor categories.

These characteristics and their relationship to the other characteristics are described in more detail in the following sections.

### 2.2.2.1 Weights

Weighting of input factors ensures that the MEC HA is sensitive enough to distinguish between different removal and remedial action alternatives and land use decisions. Weighting balances the input factors that *do not* change and those that *do* change in response to a cleanup, as well as the input factors that change to describe differences in land use activities. Weighting also reflects the NCP preference for active cleanups. This preference is reflected in the scoring by assigning a higher relative weight to cleanup actions than is given to changes in land use and land use activities. In addition, the scoring reflects the CERCLA statutory preference for treatment of the principal threat at a site. Table 2-4 presents the maximum scores and corresponding weights assigned to each input factor.

**CERCLA Statutory Preference for Active Cleanup**

The implementation regulation for CERCLA, the National Contingency Plan, states: “The use of institutional controls shall not substitute for active response measures (e.g., treatment and/or containment...) as the sole remedy unless such active measures are determined not to be practicable.” 40 CFR 300.430(a)(iii)(D)

**Table 2-4. Input Factor Maximum Scores and Resulting Weights**

Explosive Hazard Component	Input Factor	Maximum Scores	Weights
Severity	Energetic Material Type	100	10%
	Location of Additional Human Receptors	30	3%
<i>Component total</i>		<b>130</b>	<b>13%</b>
Accessibility	Site Accessibility	80	8%
	Total Contact Hours	120	12%
	Amount of MEC	180	18%
	Minimum MEC Depth/Maximum Intrusive Depth	240	24%
	Migration Potential	30	3%
<i>Component total</i>		<b>650</b>	<b>65%</b>
Sensitivity	MEC Classification	180	18%
	MEC Size	40	4%
<i>Component total</i>		<b>220</b>	<b>22%</b>
<b>Total Score</b>		<b>1,000</b>	<b>100%</b>

Appendix D contains an in depth discussion and analysis of the development of the scores, weights, and Hazard Levels for the MEC HA methodology.

### 2.2.2.2 Scores

Table 2-5 contains the MEC HA scores. The maximum possible total score is 1000 and the minimum possible total score is 125. The scores are organized into rows for each input factor category, and columns that reflect site conditions or cleanup status.

The input factor categories are intended to describe site-specific conditions. MEC HA users select the category for each input factor that best represents the site conditions being evaluated. These categories may change as different land use activities are assessed, or as cleanup actions are assessed. The input factor category determines the row from which the score is selected.

There are three different columns to assess different removal or remedial alternatives. The “Baseline Condition” column is selected for any set of site conditions that do not include a cleanup alternative. This will typically be the current conditions at the MRS, which may include a historical cleanup, but can also be applied to evaluate changes to land use activities, including those associated with the application of LUCs as a remedial action. The “Surface Cleanup” column is selected when evaluating a removal or remedial alternative involving surface clean-up of MEC. If the alternative under evaluation involves subsurface clean-up, then scores are selected from the “Subsurface Clean-up” column. Scoring is discussed in more detail in Chapter 4.

**Table 2-5. Scores for Input Factor Categories**

Input Factor	Input Factor Category	Score		
		Baseline Condition	Surface Cleanup	Subsurface Cleanup
Energetic Material Type	High Explosives and Low Explosive Fillers in Fragmenting Rounds	100	100	100
	White Phosphorus	70	70	70
	Pyrotechnic	60	60	60
	Propellant	50	50	50
	Spotting Charge	40	40	40
	Incendiary	30	30	30
Location of Additional Human Receptors	Inside the MRS or inside the ESQD arc surrounding the MRS	30	30	30
	Outside of the ESQD arc	0	0	0
Site Accessibility	Full Accessibility	80	80	80
	Moderate Accessibility	55	55	55
	Limited Accessibility	15	15	15
	Very Limited Accessibility	5	5	5
Potential Contact Hours	Many Hours	120	90	30
	Some Hours	70	50	20
	Few Hours	40	20	10
	Very Few Hours	15	10	5
Amount of MEC	Target Area	180	120	30
	Open Burning/Open Detonation (OB/OD) Area	180	110	30
	Function Test Range	165	90	25
	Burial Pit	140	140	10
	Maneuver Areas	115	15	5
	Firing Points	75	10	5
	Safety Buffer Areas	30	10	5
	Storage	25	10	5
	Explosive-Related Industrial Facility	20	10	5

**Table 2-5. Scores for Input Factor Categories**

Input Factor	Input Factor Category	Score		
		Baseline Condition	Surface Cleanup	Subsurface Cleanup
<b>Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth</b>	<b>Baseline Condition:</b> MEC located surface and subsurface; <b>After Cleanup:</b> Intrusive depth overlaps with subsurface MEC	240	150	95
	<b>Baseline Condition:</b> MEC located surface and subsurface; <b>After Cleanup:</b> Intrusive depth does not overlap with subsurface MEC	240	50	25
	<b>Baseline Condition:</b> MEC located only subsurface; <b>Baseline Condition or After Cleanup:</b> Intrusive depth overlaps with minimum MEC depth	150	N/A*	95
	<b>Baseline Condition:</b> MEC located only subsurface; <b>Baseline Condition or After Cleanup:</b> Intrusive depth does not overlap with minimum MEC depth	50	N/A*	25
<b>Migration Potential</b>	Possible	30	30	10
	Unlikely	10	10	10
<b>MEC Classification</b>	Sensitive UXO	180	180	180
	UXO	110	110	110
	Fuzed Sensitive DMM	105	105	105
	Fuzed DMM	55	55	55
	Unfuzed DMM	45	45	45
	Bulk Explosives	45	45	45
<b>MEC Size</b>	Small	40	40	40
	Large	0	0	0

\*N/A – Not Applicable: Surface cleanups for MEC would not be appropriate for site conditions where MEC is all in the subsurface.

### 2.2.3 Outputs from the MEC HA Scoring

Each scenario assessed by the MEC HA produces a score that is associated with one of four Hazard Levels. These Hazard Levels reflect the interaction between the current or future human activities in an MRS, and the types, amounts, and conditions of MEC items within the MRS.

- Table 2-6 contains the Hazard Level ranges. The ranges for each of the Hazard Levels are based on the results of a large number of sensitivity runs designed to ensure that the appropriate site conditions are associated with each Hazard Level. A summary of the sensitivity runs are contained in Appendix D.

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**Table 2-6. Hazard Level Scoring Ranges**

<b>Hazard Level</b>	<b>Maximum MEC HA Score</b>	<b>Minimum MEC HA Score</b>
1	1,000	840
2	835	725
3	720	530
4	525	125

## CHAPTER 3: SCOPING THE HAZARD ASSESSMENT

This chapter describes how to conduct a MEC HA. The MEC HA consists of four steps: planning, compiling, implementing, and documenting. This chapter provides general information to consider when identifying the area or areas for assessment. This chapter begins by outlining the role of the project team in conducting the MEC HA

### 3.1 Project Team

- A project team includes the group of organizations and disciplines within those organizations responsible for planning and executing response actions. The make-up of a project team varies, but it often includes the lead agency Project Manager, regulatory authorities (e.g., U.S. EPA and/or the State or Tribal agency), land owner/manager, technical experts and support staff associated with the lead agency and the regulatory authorities, and supporting contractors and consultants. Table 3-1 shows the likely project team members for different types of MRS.

**Table 3-1. Potential Project Team Members for Common Types of MRS**

• Type of MRS(a)	• Potential Project Team Members
• National Priorities List	<ul style="list-style-type: none"> <li>• DoD personnel or other agency personnel</li> <li>• Installation environmental manager</li> <li>• Service organization personnel, such as Air Force Center for Environmental Excellence (AFCEE), U.S. Army Corps of Engineers (USACE), or Naval Facilities Engineering Command (NAVFAC)</li> <li>• DoD Explosives Safety Activities</li> <li>• Federal land management agency</li> <li>• State or Tribal regulatory agency</li> <li>• U.S. EPA</li> </ul>
• Formerly Used Defense Site	<ul style="list-style-type: none"> <li>• DoD FUDS manager (USACE), DoD Safety Components</li> <li>• Federal land management agency (if involved)</li> <li>• State or Tribal regulatory agency</li> <li>• U.S. EPA (if involved)</li> <li>• Private landowners or owners representatives</li> <li>• Local government representatives</li> </ul>



**Table 3-1. Potential Project Team Members for Common Types of MRS**

• Type of MRS(a)	• Potential Project Team Members
• Base Realignment and Closure	<ul style="list-style-type: none"> <li>• DoD</li> <li>• Closing base environmental manager</li> <li>• Service BRAC program offices</li> <li>• DoD Explosives Safety Activities</li> <li>• Federal land management agency</li> <li>• State or Tribal regulatory agency</li> <li>• Federal landowning agency (if involved)</li> <li>• U.S. EPA</li> <li>• Local land reuse authority</li> </ul>
• Non-NPL	<ul style="list-style-type: none"> <li>• DoD personnel or other agency personnel</li> <li>• Installation environmental manager</li> <li>• Service organization personnel (e.g., AFCEE, USACE, NAVFAC)</li> <li>• DoD Explosives Safety Activities</li> <li>• Federal land management agency</li> <li>• State or Tribal regulatory agency</li> <li>• U.S. EPA (if involved)</li> </ul>

(a) Much of this discussion is focused on DoD sites. MEC may exist on facilities or sites owned or managed by other Federal agencies (e.g., Department of Agriculture, Department of the Interior) or private entities. This methodology is appropriate to those sites, and the nature of the project team membership will reflect that ownership or management.

- **Lead Agency.** Personnel from the lead agency typically will compile the data necessary to conduct the assessment, assemble the data into the data collection forms, and conduct the scoring. It is most likely that these individuals will analyze the munitions-related data and provide the information necessary to conduct various calculations.
- **Regulatory Agency.** Personnel from the regulatory agencies help to determine whether the quantity and quality of data is sufficient to make required hazard management decisions.
- **Others.** Current and prospective land owners and land users will ensure that the MEC HA accurately reflects the current and determined or reasonably anticipated future land use activities.

## 3.2 Outreach

Public participation is required throughout the CERCLA process.<sup>10</sup> Specific CERCLA requirements ensure that the public has the opportunity to review key documents leading to the identification of removal or remedial alternatives. Community acceptance is one of the CERCLA nine criteria used in the evaluation and selection of a remedial alternative. Finally, all documents that support the site evaluation and decision process must be part of the administrative record for CERCLA response actions and must be available to the public.<sup>11</sup>

The project team should keep all stakeholders informed of the MEC HA deliberations and results. Restoration Advisory Boards, local government officials, and other parties should be provided opportunities to learn about the overall hazard assessment process. In addition, they should be offered information about the assumptions used in data evaluation and given an opportunity to discuss their concerns and issues concerning the hazard assessment process. Stakeholders should be provided the opportunity to learn about the cleanup alternatives that are evaluated by the MEC HA and addressed in the CERCLA removal and remedial evaluations.

## 3.3 Overview of the MEC HA

Figure 3-1 provides an overview of the MEC HA implementation. Each step is described in more detail in the following sections.

### 3.3.1 Planning the MEC HA

The MEC HA is an element in the SPP. The SPP is based on collaborative decision-making. The project team should represent all the appropriate organizations (e.g., the lead and support agencies, stakeholders, etc.) and needs the right mix of disciplines. These disciplines should include project managers, explosive safety experts, MEC cleanup specialists, geophysicists, environmental engineers, planning specialists, quality assurance managers, and community involvement coordinators.

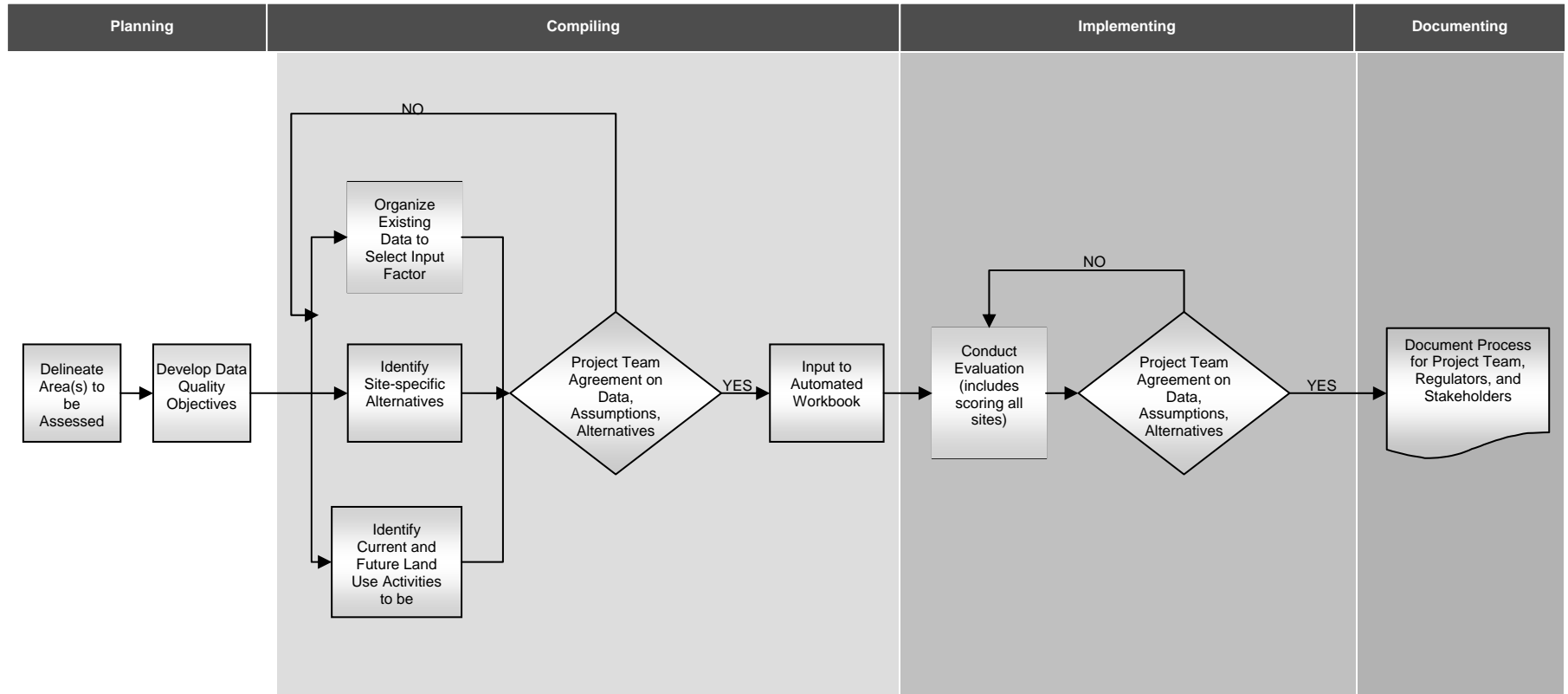
#### **Systematic Planning Process (SPP)**

SPP is a systematic, objective approach to planning and executing an environmental investigation. An SPP uses a collaborative team-based approach to planning an environmental investigation. The U.S. EPA Data Quality Objectives process and the U.S. Army Corps of Engineer Technical Project Planning (TPP) process are examples of SPP.

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<sup>10</sup> Superfund Amendments and Reauthorization Act of 1986, PL 99-499, Section 117.

<sup>11</sup> 40 CFR 300.800 et seq.



**Figure 3-1. Overview of Hazard Assessment Process**

The two critical planning tasks for the project team are to clearly identify the areas that are to be assessed, and develop the DQOs for the information that will be used to conduct the MEC HA.

### **3.3.2 Identifying the Area to be Assessed**

This section describes the process of identifying the MRS or a subset of the MRS on which the MEC HA will be conducted.

The area being assessed by the MEC HA is referred to as a MRS. MRS is defined as a discrete location that is known to require a munitions response. The boundaries of the MRS may have been defined for a variety of reasons, including investigation efficiencies, funding, or programmatic (e.g., contracting) reasons. Within an MRS, subunits may differ widely with respect to the explosive hazards they pose because of the different past munitions uses, as well as different land use activities within the MRS. Attachment 3A to this chapter provides an example of delineating areas for assessment.

The following are specific considerations for delineating the area to be assessed by the MEC HA:

- Boundaries must be clear.
- Boundaries should outline an area of a single past munitions-related activity, such as a target area or an area where open burning/open detonation (OB/OD) occurred.
- Boundaries should separate areas in which different types of munitions were used, if possible.
- Boundaries should delineate areas of similar land use activities (for both current and determined or reasonably anticipated future land uses).

It may be beneficial to subdivide an MRS into subunits for the purposes of conducting the MEC HA where there are variations in current land use activities, determined or reasonably anticipated future land use activities, or in site access. For example, if a range safety fan of a large MRS has multiple current or future land use activities within its borders, it may be most efficient to subdivide that MRS into smaller areas, analyzing each unit on the basis of its specific land use.

Accurate maps provide the best portrayal of the area to be assessed. Maps should contain information such as the past munitions use, boundaries of that use, and any features or buildings where people may congregate (e.g., athletic fields, picnic areas, cultural resources, or inhabited buildings). Physical features that can affect the accessibility of the MRS such as streams or hills should be clearly marked, as should manmade features such as fences or other barriers. Ground cover, such as heavy undergrowth or marshy areas that could affect accessibility or movement through the area, should also be indicated. The map should be geo-referenced using appropriate global positioning equipment that have the level of precision and accuracy (e.g., plus or minus  $x$  meters) agreed to by the project team.

### **3.3.3 Compiling Information**

The team must gather the information required for the input factors. The information will be derived from a variety of sources. Much of the information may already have been gathered during the preparation of the CSM and in previous site investigations.

A MEC HA requires information concerning the following:

- Prior military munitions use
- Past military activities
- Past munitions response activities (e.g., time critical removal actions, surface removals) or explosives or munitions emergency responses performed by explosive ordnance disposal (EOD) personnel
- Current site conditions (e.g., land use activities, access)
- Determined or reasonably anticipated future land use (e.g., future land use activities, response alternatives)

After gathering all the necessary information, the project team will select the appropriate category from each input factor. Depending on the available information, the team may need to make assumptions about certain characteristics of the MRS. The decisions associated with the information should reflect a team consensus and be clearly documented in the MEC HA worksheets.

Most of the information needed to conduct MEC HA will be available from site-specific documents developed during CERCLA response activities, and will not need to be collected specifically for the MEC HA. Table 3-2 describes the types of information that are required for the MEC HA, and identifies likely sources of that information.

**Table 3-2. Required Types of Data and Likely Sources**

Type of Information	Input Factors/Purpose of Data	Sources of Data
Site description and boundaries	<ul style="list-style-type: none"> <li>• Define area to be assessed</li> </ul>	<ul style="list-style-type: none"> <li>• Historical research reports such as Archive Search Report</li> <li>• Aerial photography and interpretation reports</li> <li>• Past action reports from removal actions or clearances</li> <li>• Preliminary Assessment/Site Investigation (PA/SI) reports</li> <li>• EE/CA reports</li> <li>• RI/FS reports</li> <li>• RCRA Facility Investigation/Corrective Measure Study (RFI/CMS) reports</li> <li>• CSM from investigations</li> <li>• Base master plans (active bases)</li> <li>• Reuse plans (BRAC facilities)</li> <li>• Community land use plans</li> </ul>

**Table 3-2. Required Types of Data and Likely Sources**

Type of Information	Input Factors/Purpose of Data	Sources of Data
Site physical conditions	<ul style="list-style-type: none"> <li>• Site accessibility</li> <li>• Migration potential</li> </ul>	<ul style="list-style-type: none"> <li>• PA/SI reports</li> <li>• EE/CA reports</li> <li>• RI/FS reports</li> <li>• RFI/CMS reports</li> <li>• CSM from investigations (e.g., PA/SI, EE/CA, RI/FS)</li> <li>• Environmental Condition of Property or Environmental Baseline Survey reports (BRAC)</li> <li>• Current and historical aerial photography</li> <li>• Base master plans (active bases)</li> <li>• Reuse plans (BRAC facilities)</li> <li>• Community land use plans (including zoning)</li> <li>• U.S. Geological Survey topographic maps</li> </ul>
Past munitions-related activities	<ul style="list-style-type: none"> <li>• Energetic Material Type</li> <li>• Location of Additional Human Receptors</li> <li>• Amount of MEC</li> <li>• Minimum MEC Depth Relative to the Maximum Intrusive Depth</li> <li>• Migration Potential</li> <li>• MEC Classification</li> <li>• MEC Size</li> </ul>	<ul style="list-style-type: none"> <li>• Historical research reports such as Archive Search Reports</li> <li>• Unit histories, EOD response reports</li> <li>• Aerial photography and interpretation reports</li> <li>• Explosives Safety Submission (ESS) or Explosives Siting Plan (ESP)</li> <li>• PA/SI reports</li> <li>• EE/CA reports</li> <li>• RI/FS reports</li> <li>• RFI/CMS reports</li> <li>• CSM from investigations</li> <li>• Past removal after-action reports</li> <li>• Site interviews</li> </ul>
Current, Determined, and Reasonably Anticipated Future Land Use Activities	<ul style="list-style-type: none"> <li>• Location of Additional Human Receptors</li> <li>• Site Accessibility</li> <li>• Potential Contact Hours</li> <li>• Minimum MEC Depth Relative to the Maximum Intrusive Depth</li> </ul>	<ul style="list-style-type: none"> <li>• Base master plans (active bases)</li> <li>• Reuse plans (BRAC facilities)</li> <li>• Community land use plans (e.g., county zoning data, census data, and physical observations)</li> <li>• Land ownership maps from local tax records</li> <li>• ESS or ESP</li> <li>• PA/SI reports</li> <li>• EE/CA reports</li> <li>• RI/FS reports</li> <li>• RFI/CMS reports</li> <li>• CSM from investigations (e.g., PA/SI, EE/CA, RI/FS)</li> <li>• Information obtained from Federal, local, or regional land-holding agencies on outdoor recreation use (quantity and type)</li> </ul>

**Table 3-2. Required Types of Data and Likely Sources**

Type of Information	Input Factors/Purpose of Data	Sources of Data
Removal or remedial alternatives	<ul style="list-style-type: none"> <li>• Energetic Material Type</li> <li>• Location of Additional Human Receptors</li> <li>• Site Accessibility</li> <li>• Potential Contact Hours</li> <li>• Amount of MEC</li> <li>• Minimum MEC Depth Relative to the Maximum Intrusive Depth</li> <li>• MEC Classification</li> </ul>	<ul style="list-style-type: none"> <li>• Information obtained from Tribal governments</li> <li>• CSM from investigations</li> <li>• Past removal action reports and associated documentation</li> <li>• ESS or ESP</li> <li>• PA/SI reports</li> <li>• EE/CA reports</li> <li>• RI/FS reports</li> <li>• RFI/CMS reports</li> </ul>

Two widely available documents that provide sources of information useful in supporting data gathering are *Munitions Response Historical Records Review* published by the Interstate Technology and Regulatory Council’s UXO Team (November 2003) and *EPA Handbook on the Management of Munitions Response Actions* (May 2005, Interim Final). These documents can be downloaded from [http://www.itrcweb.org/gd\\_UXO.asp](http://www.itrcweb.org/gd_UXO.asp) and <http://www.epa.gov/fedfac/documents/munitions.htm>, respectively.

### 3.3.4 Implementing

Once the MRS data have been gathered, the team can then score the MRS. The team enters data into an automated workbook which then arranges the data into scoring sheets for each set of MRS conditions. The worksheets calculate separate scores for each scenario identified by the project team. The team can compare the relative hazard of different scenarios and compare various cleanup actions or land use activity changes on the hazard level. The electronic worksheets are located in Appendix A.

### 3.3.5 Documenting

The project team must document the MEC HA for the administrative record. The documentation may be part of a larger document (e.g., RI/FS report) or it may be a stand-alone document. The automated workbook will produce a series of report tables documenting the inputs and outputs. The project team must add further information to these tables, including the sources of information and the rationales for any assumptions.

The MEC HA worksheets contain fields to document the basis for the information used in the MEC HA. These fields must be filled in for all information and should describe the following:

- The specific data that are the basis of the category selection (e.g., the mark or model of the munitions that is used to determine Energetic Material Type)
- Sources of information (e.g., PA/SI, EE/CA, RI/FS, reuse plans, etc.)
- Qualitative descriptions of the uncertainty associated with the information
- Descriptions of assumptions made in the absence of hard information or in the presence of uncertainty

### 3.4 Data Quality Issues

Data quality impacts all aspects of the MEC HA. Concerns about data quality will vary depending on the phase of the investigation and the sources of information. Table 3-3 briefly describes data quality issues associated with different sources of information.

**Table 3-3. Data Quality of Different Information Sources**

Source of Data	Data Quality Issues
Archive Search Report or other historical research	<ul style="list-style-type: none"> <li>• Completeness of historical research information; gaps in time and types of information available</li> <li>• Accuracy of information about past clearances</li> </ul>
Investigation results (EE/CA, RI)	<ul style="list-style-type: none"> <li>• Completeness of investigation</li> <li>• Depth to which sensors could detect the items of concern</li> <li>• Quality assurance/quality control (QA/QC) associated with the investigation</li> <li>• Match between area investigated and MRS (or portion of MRS) to be evaluated through MEC HA process</li> <li>• Sufficiency of information to bound the area to be evaluated by the MEC HA</li> </ul>
Removal or remedial action reports	<ul style="list-style-type: none"> <li>• Detection technology used and the quality control (geophysical prove out) processes used.</li> <li>• For subsurface clean-ups, process and criteria used in identifying anomalies that were dug and those that were not</li> </ul>

It is important to keep in mind that some level of uncertainty exists with any environmental investigation. Realistic but conservative assumptions can reduce uncertainty. For example, it may be appropriate to assume MEC is still present on the surface at an MRS where there was a historic surface clearance with little documentation. A thorough discussion about the nature of any uncertainty and its effect on the selection of MEC HA input factor categories will be an important part of the collaborative decision making process.



### **Attachment 3A. Examples of Dividing an MRS for a MEC HA Evaluation**

The following example shows how MRSs may be divided into subunits, depending on their past munitions use and current, determined or reasonably anticipated future land use activities.

Figure 3A-1 shows the MRA as containing three MRSs, before they are subdivided:

- MRS-1 – An indirect fire range, including the firing point, range safety fan, target area, and an OB/OD area
- MRS-2 – A buffer area around the range safety fan
- MRS-3 – A former maneuver area

Figure 3A-2 shows the same MRA once it has been subdivided. MRS-1 has been divided into four subunits, labeled MRS 1(a) through MRS 1(d), based on past military munitions activities. The firing point, range safety fan, target area, and OB/OD area are each treated as separate assessment areas. This is because each area is expected to have different amounts and conditions of munitions, and therefore have different MEC HA Hazard Levels. MRS-2 is assessed in its entirety, because the past military uses, the current use, and the future use are all uniform throughout the MRS. MRS-3 is a former maneuver area that had one past military use and one current use. It is separated into two hazard assessment areas labeled MRS 3(a) and MRS 3 (b) because it has different reasonably anticipated future land use activities.

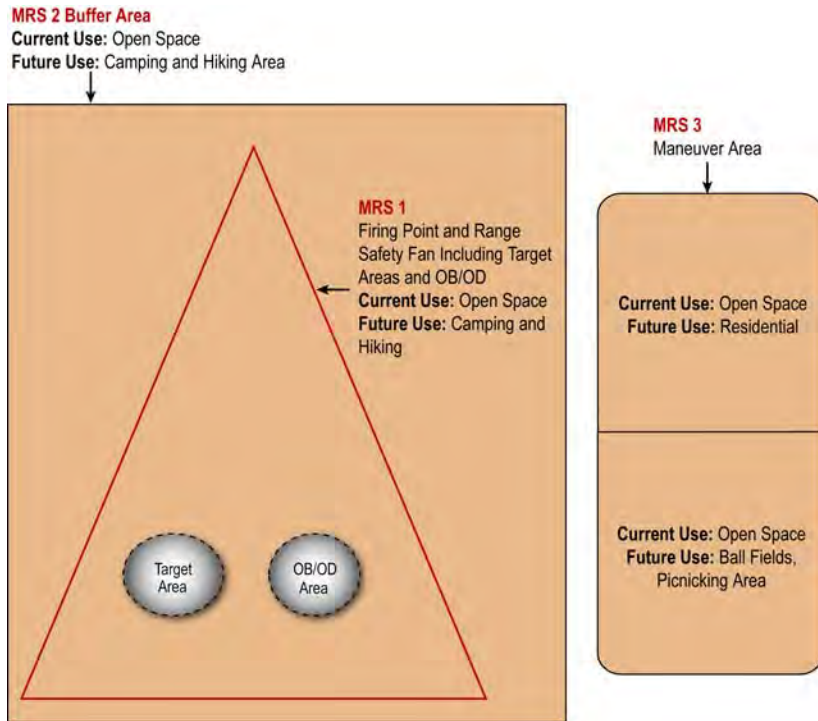


Figure 3A-1. Munitions Response Area Containing Three MRS

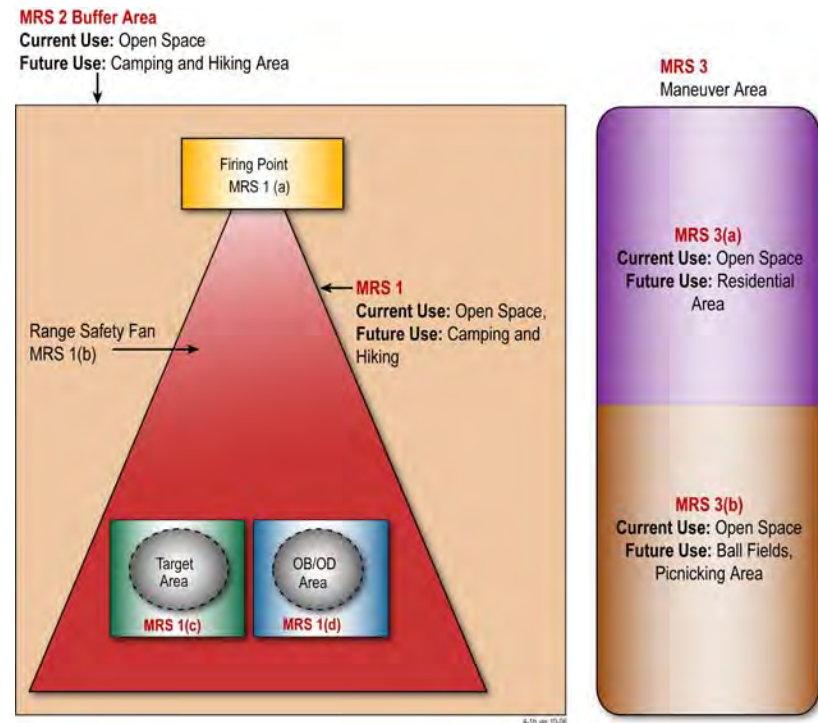


Figure 3A-2. MRS Subdivided for Assessment Purposes

## CHAPTER 4: INPUT FACTORS AND SCORING

This chapter describes the selection and scoring of input factor categories. The input factor categories are used to describe site-specific conditions. Project teams select the category for each of the nine input factors that best represents the site conditions being evaluated. These categories may change as different land use activities are assessed. Sections 4.1 through 4.9 describe how to select the appropriate input factor category for scoring current, determined, or reasonably anticipated future land uses, and different removal or remedial alternatives.

Tables in the nine sections also provide scores for the input factors. The input factor categories determine the rows which contain the applicable scores. The tables have three columns of scores to assess different removal or remedial cleanup action alternatives. The “Baseline Condition” column is selected for any set of site conditions that do not include a clean-up alternative. This will typically be the current conditions at the MRS, which can reflect a historical cleanup, but can also be used to evaluate changes to land use activities, including those associated with the application of LUCs as a remedial action. The “Surface Cleanup” column is selected when evaluating a removal or remedial alternative involving surface clean-up. If the alternative under evaluation involves subsurface clean-up, then scores are selected from the “Subsurface Cleanup” column.

The MEC HA addresses the residual uncertainty of surface and subsurface cleanup. Current methods for detecting, discriminating, and removing MEC cannot ensure that all MEC are removed during a cleanup.<sup>12</sup> Detection of MEC is a function of size, depth, and orientation of the object. In general, small MEC is more difficult to detect at depth than larger MEC. The MEC HA scores address this residual uncertainty by not reducing scores in several of the input factor categories in the “Surface Cleanup” and “Subsurface Cleanup” columns.

Project teams must determine the type and amount of QA/QC measures to ensure that the cleanup actions are being carried out in accordance with the site-specific requirements.

The final sections of this chapter discuss general issues to consider when scoring the MEC HA, and present a table that summarizes all the input factor scores.

### 4.1 Energetic Material Type

The type of energetic material is the primary determinant of the severity of the explosive hazard. The six categories for the Energetic Material Type input factor are in Table 4-1. The project team must use the type with the highest score that is known or suspected to be present. Energetic material types are grouped by both their characteristics and inherent explosive hazard. Categories associated with greater relative explosive hazards are listed first.

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<sup>12</sup> The exception is to this would be where all soil is removed beyond the maximum depth for the MEC, or down to bedrock. Under these conditions, there should be little or no uncertainty that all MEC have been removed.

**Table 4-1. Input Factor Categories: Energetic Material Type**

Category	Category Description	Required Information
High explosives and low explosive filler in fragmenting rounds	High explosive (HE) fillers, including bulk explosives and cased munitions filled with compounds such as TNT, tetryl, RDX, and HMX. Fragmenting rounds filled with low explosive fillers (generally black powder) are also included in this category.	<ul style="list-style-type: none"> <li>• Mark or model of munition (cased munitions)</li> <li>• Type of filler (cased munition)</li> <li>• Type of explosive (bulk explosives)</li> </ul>
White phosphorus	A bursting smoke filler that burns rapidly when exposed to oxygen. Skin contact can cause burns.	
Pyrotechnic	Used to send signals, illuminate areas of interest, simulate other weapons during training, and as ignition elements for certain weapons. Pyrotechnics produce heat but less gas than explosives or propellants.	
Propellant	Compositions used to propel projectiles and rockets and to generate gases for powering auxiliary devices.	
Spotting charge	Low explosive or pyrotechnic fillers designed to produce a flash and smoke when detonated, providing observers or spotters a visual reference of munitions impact.	
Incendiary	Any flammable material that is used as filler in munitions intended to destroy a target by fire.	

**Energetic Material Type Categories: Rationale for Hazard Order**

Categories are listed in decreasing order of the severity of anticipated hazards, as follows:

- High explosives are characterized by a very rapid rate of decomposition and detonation. They produce fragments that move out from the detonation at a rapid rate. Low explosive fragmenting rounds combust at a slower rate. They are combined with high explosives for the purpose of the MEC HA categories when contained in cased munitions that fragment when they detonate. Although high explosive rounds detonate more rapidly, both are likely to throw fragments that may present a hazard to people.
- White phosphorus (WP) is ranked next in hazard. It is very dangerous to come into contact with and ignites when exposed to air. Munitions containing WP also contain a high-explosive burster that is designed to split the case and throw WP over the surrounding area.
- Pyrotechnics are designed to produce smoke and an audible signal during training. In general, they are not fragment-producing munitions. Certain pyrotechnic devices, such as grenade simulators, contain photoflash powder.
- Propellants contain low explosives to propel projectiles, rockets, etc. Propellants are more likely to burn than to explode, and they are ranked as less hazardous than WP because they do not typically produce fragments. They are normally consumed as they propel the projectile or rocket to the target.
- Spotting charges are generally low explosives or smoke-producing compounds and are designed to produce smoke, not fragmentation. They are often a fraction of the net explosive weight of the live round. Although spotting charges are generally ranked as low hazards, spotting charges that contain high explosives are scored in the high explosive category.
- Incendiaries are designed to burn structures, materials, or areas. They are typically filled with burning agents such as thickened fuels and metallic filings.

#### 4.1.1 Scores for Energetic Material Type Categories

Table 4-2 shows the scores assigned for each category within the Energetic Material Type input factor. The score for this input factor does not change with cleanup to address residual uncertainty.

**Table 4-2. Scores for Energetic Material Type Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Energetic Material Type	High explosives and low explosive filler in fragmenting rounds	100	100	100
	White phosphorus	70	70	70
	Pyrotechnic	60	60	60
	Propellant	50	50	50
	Spotting charge	40	40	40
	Incendiary	30	30	30

#### 4.1.2 Category Changes for Energetic Material Type

The only time the category chosen for Energetic Material Type will change is when new information indicates that the selected category is incorrect.

#### 4.2 Location of Additional Human Receptors

It is possible that additional human receptors, beyond the individual who causes an item to detonate, may be exposed to overpressure and/or fragmentation hazards from the detonation of MEC. This factor requires the project team to identify if places where people might congregate are located either within the MRS or within the ESQD arc. To address uncertainties about the MEC locations, a conservative approach is to extend the ESQD arc from the edge of the MRS. Two sources for the ESDQ arc are the Explosives Siting Plan or the Explosives Safety Submission. Table 4-3 contains the two categories for the Location of Additional Human Receptors input factor.

**Places People Might Congregate**

The following are examples of places where people might congregate:

- Athletic fields
- Picnic areas
- Campgrounds
- Cultural resource or sacred areas
- Fishing or hunting camps
- Inhabited buildings

**Table 4-3. Input Factor Categories: Location of Additional Human Receptors**

Category	Category Description	Required Information
Inside the MRS or inside the ESQD arc surrounding the MRS	Places where people might congregate are located within the MRS or within the ESQD arc established for the MRS.	<ul style="list-style-type: none"> <li>• Boundary of the MRS (area to be assessed) or hazard assessment area</li> <li>• Specific location of features or facilities that attract people to locations potentially on or near MRS boundaries</li> <li>• The ESQD arc from either the ESS or the ESP</li> </ul>
Outside of the ESQD arc	There are no places where people might congregate within the MRS or within the ESQD arc.	

A project team selects the appropriate category for this input factor as follows:

- If people congregate at places within the MRS, then the category for this input factor is “Inside of the MRS or inside the ESQD arc surrounding the MRS.”
- If people congregate at places outside of the MRS boundaries, but within the ESQD arc then the category for this input factor will be “Inside the MRS or inside the ESQD arc surrounding the MRS”.
- If people are not within the MRS and not within the ESQD arc, then the category for this input factor is “Outside of the ESQD arc.”

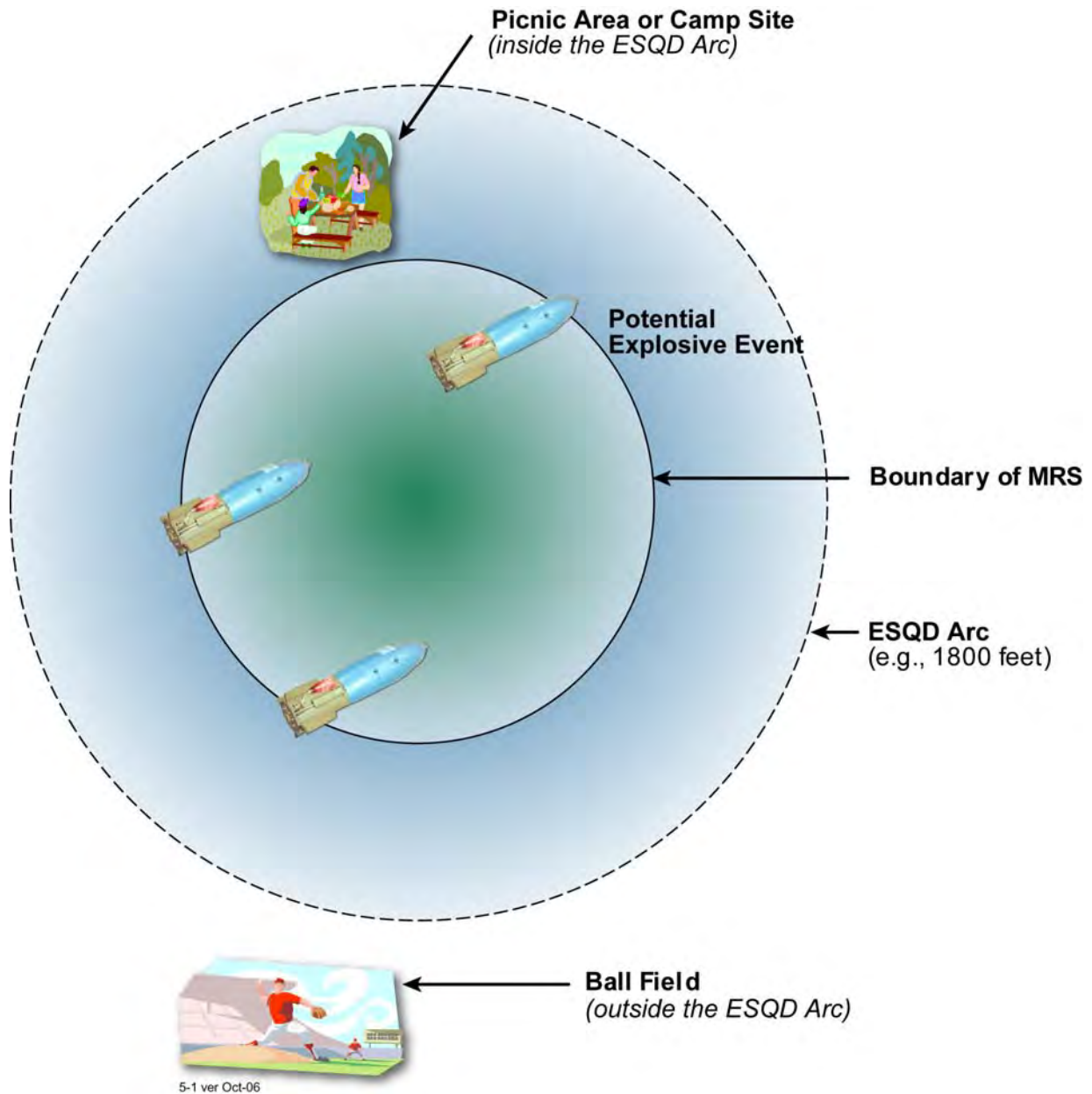
Figure 4-1 illustrates how the distance of potential receptors from the boundary of the MRS could be determined.

#### 4.2.1 Scores for Location of Additional Human Receptors Categories

Scores for these categories are provided in Table 4-4. The scores for these categories do not change with cleanup because clean-up does not impact the presence or absence of places where people might congregate.

**Table 4-4. Scores for Location of Additional Human Receptors Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Location of Additional Human Receptors	Inside the MRS or inside the ESQD arc surrounding the MRS	30	30	30
	Outside of the ESQD arc	0	0	0



**Figure 4-1. Location of Additional Human Receptors**

#### **4.2.2 Category Changes for Location of Additional Human Receptors**

The category for this input factor should change if planned changes to land use add or remove a feature or facility where people will congregate. If there is currently such a feature or facility in the MRS or within the ESQD arc, and removal of the facility or feature is planned, then the input factor for this category should be changed from “Inside the MRS or inside the ESQD arc surrounding the MRS” to “Outside of the ESQD arc” when applying the MEC HA to the planned land use. If there is no feature or facility to attract people in the MRS boundary or within the ESQD arc, but future plans include the addition of such a feature, then the input factor category

should be changed from “Outside the ESQD arc” to “Inside the MRS or inside the ESQD arc surrounding the MRS” when assessing the planned land use.

### 4.3 Site Accessibility

The Site Accessibility input factor describes the ease with which people can access an MRS. This differs from the Potential Contact Hours input factor, which describes the total number of hours associated with MRS users’ participation in planned activities on the MRS. Table 4-5 contains the four categories for the Site Accessibility input factor.

**Table 4-5. Input Factor Categories: Site Accessibility**

Category	Category Description	Required Information
Full accessibility	A site with no barriers to entry, including sites with signage but no fencing.	<ul style="list-style-type: none"> <li>• Boundary of MRS</li> <li>• Location and type of fencing</li> <li>• Terrain and topography within and surrounding MRS</li> <li>• Location of transportation routes or access points to MRS</li> <li>• Location of any guarded areas</li> </ul>
Moderate accessibility	A site with some barriers to entry, such as barbed wire fencing or rough terrain.	
Limited accessibility	A site with significant barriers to entry, such as unguarded chain-link fences or requirements for special transportation (e.g., boats or all-terrain vehicles) to reach the site.	
Very limited accessibility	A site with guarded chain-link fences, or terrain that requires special skills and equipment (e.g., mountain climbing) to access.	

These categories give the project team guidelines for determining the appropriate level of accessibility to the MRS. The category descriptions do not include LUCs. A project team can choose to run multiple iterations of the MEC HA with different Site Accessibility categories to reflect the effects of LUCs. This will help determine the impact of accessibility changes on the overall hazard assessment.

#### 4.3.1 Scores for Site Accessibility Categories

Table 4-6 shows the scores for each of these categories. The scores do not change with cleanup, since cleanup does not affect site accessibility.

**Table 4-6. Scores for Site Accessibility Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Site Accessibility	Full accessibility	80	80	80
	Moderate accessibility	55	55	55
	Limited accessibility	15	15	15
	Very limited accessibility	5	5	5



### 4.3.2 Category Changes for Site Accessibility

If planned future land use controls for the MRS will change accessibility characteristics, then the Site Accessibility input factor category may change as well. Possible changes to accessibility characteristics include the following:

- Change in engineering controls, such as installation or removal of fencing
- The removal of heavy vegetation that impedes access to the MRS
- The construction of a road to the area containing the MRS where one does not currently exist

### 4.4 Potential Contact Hours

This factor captures the effect of human receptors intentionally performing activities at an MRS when they might come into contact with MEC. This contact may either deliberately or accidentally initiate an explosive incident.

Both the number of receptors and the amount of time each receptor spends in the MRS contribute to the likelihood of a receptor encountering MEC.

Potential contact hours are calculated on a site-specific annual total basis. These include outdoor activities. Where MEC is on the surface, any outdoor activity could lead to an interaction. Where MEC is located only in the subsurface, an interaction can only result from intrusive activities (e.g., digging a fire pit or latrine, maintaining a trail or fence, or planting a tree).

The project team must estimate both the number of users per year and the number of hours that each user engages in activities that may result in encounters with MEC. Once all of the activities have been identified, the receptor-hours per year for each activity is calculated. The sum of these receptor-hours determines the total receptor-hours per year.

**The Potential Contact Hours factor is calculated as follows:**

$$(\text{number of users/year}) \times (\text{number of hours/use}) = \text{receptor hours/year}$$

The categories for this input factor are ranges of receptor-hours per year. These ranges are based on order of magnitude differences between the categories, as shown in Table 4-7.

**Table 4-7. Input Factor Categories: Potential Contact Hours**

Category	Category Description	Required Information
Many hours	≥ 1,000,000 receptor-hours/year	<ul style="list-style-type: none"> <li>• Types of land use activities that will occur on the MRS</li> <li>• Average amount of time a person spends on each activity</li> <li>• Number of people who participate annually in each activity</li> </ul>
Some hours	100,000 to 999,999 receptor-hours/year	
Few hours	10,000 to 99,999 receptor-hours/year	
Very few hours	< 10,000 receptor-hours/year	

**The number of users per year can be estimated various ways, for example:**

$$\text{number of users/year} = (\text{number of hikers/week}) \times (\text{number of weeks park is open/year})$$

$$\text{number of users/year} = (\text{number of residents who garden}) \times (\text{number times gardening/week}) \times (\text{number of weeks in gardening season/year})$$

**4.4.1 Scores for Potential Contact Hours Categories**

Table 4-8 shows the scores for each of the Potential Contact Hours categories. Cleanup lowers the scores. This decrease reflects the reduced likelihood that human receptors will come into contact with MEC after cleanup is performed.

**Table 4-8. Scores for Potential Contact Hours Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Potential Contact Hours	Many hours	120	90	30
	Some hours	70	50	20
	Few hours	40	20	10
	Very few hours	15	10	5

**4.4.2 Category Changes for Potential Contact Hours**

Changes in assumptions about the use of LUCs and changes in land use activities can bring about changes in the category for this input factor. The application of engineering controls, such as fencing or barriers, or the use of institutional controls, such as restricting the permissible land use, may reduce the potential contact hours at an MRS. Changes in future land use activities could increase or decrease potential contact hours. For example, a decision to change an area from an open space with no hiking trails to an area with hiking trails, picnic areas, and athletic fields can dramatically increase usage.

**4.5 Amount of MEC**

This input factor captures the relative quantity of MEC that may remain from past munitions-related activities. The greater the quantity of MEC items, the greater the likelihood that MEC may be encountered. For example, more MEC is likely to be present at a former target area than at a former function test range. Therefore, the target area is given a higher relative score. Table 4-9 contains the categories for the Amount of MEC input factor.

**Table 4-9. Input Factor Categories: Amount of MEC**

Category	Category Description	Required Information
Target area	Areas at which munitions fire was directed.	<ul style="list-style-type: none"> <li>• Nature of the original munitions activities or sources of MEC (e.g., target area, OB/OD area)</li> <li>• Boundary of MRS</li> </ul>
OB/OD areas	Sites where munitions were disposed of by OB/OD methods. This category refers to the core activity area of an OB/OD area (see “Safety buffer areas” category for information on safety fans and kick-out areas).	
Function Test Range	Areas where the serviceability of stored munitions or weapons systems are tested. Testing may include components, partial functioning or complete functioning of stockpile or developmental items. Also includes ranges used for research and development and surveillance.	
Burial pit	The location of a burial of large quantities of MEC items.	
Maneuver areas	Areas used for conducting military exercises in a simulated conflict area or war zone.	
Firing points	The location from which a projectile, grenade, ground signal, rocket, guided missile, or other device is to be ignited, propelled, or released.	
Safety buffer areas (range safety fans and OB/OD kick-out areas)	Areas outside of target areas, test ranges, or OB/OD areas that were designed to act as a safety zone to contain munitions that do not hit targets or to contain kick-outs from OB/OD areas.	
Storage	Any facility used for the storage of military munitions, such as earth-covered magazines, above-ground magazines, and open-air storage areas.	
Explosives-related industrial facility	Former munitions manufacturing or demilitarization sites and TNT production plants.	

**4.5.1 Scores for Amount of MEC Categories**

Table 4-10 shows the scores for the categories of the Amount of MEC input factor. The scores for each category become lower with the increased level of cleanup at an MRS. The reduction in scores reflects both the reduction in the amount of MEC and the lower likelihood that human receptors will come into contact with MEC after cleanup.

**Table 4-10. Scores for Amount of MEC Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Amount of MEC	Target area	180	120	30
	OB/OD area	180	110	30
	Function Test Range	165	90	25
	Burial pit	140	140	10
	Maneuver areas	115	15	5
	Firing points	75	10	5
	Safety buffer areas	30	10	5
	Storage	25	10	5
	Explosives-related industrial facility	20	10	5

**4.5.2 Category Changes for Amount of MEC**

The categories chosen for Amount of MEC will not change unless additional information indicates that the selected category is incorrect.

**4.6 Minimum MEC Depth Relative to the Maximum Intrusive Depth**

This factor is used to indicate whether MEC items are at depths that can be reached by expected human receptor activity. Table 4-11 contains the categories for this input factor.

**Table 4-11. Input Factor Categories: Minimum MEC Depth Relative to the Maximum Intrusive Depth**

Category	Category Description	Required Information
<b>Baseline Condition:</b> MEC located surface and subsurface <b>After Cleanup:</b> Intrusive depth overlaps with subsurface MEC	The area contains munitions that are entirely or partially exposed above the ground surface as well as entirely beneath the ground surface, and the known or suspected minimum depth of the subsurface MEC is less than the expected depth of intrusive activity. See Figure 4-2.	<ul style="list-style-type: none"> <li>• Specific land use activities within the MRS now or in the future</li> <li>• Maximum intrusive depths associated with each of the activities</li> <li>• Past munitions-related activities that occurred in the MRS</li> <li>• Minimum depth at which MEC is expected to be found (e.g., surface, x feet below ground surface), as a result of that activity</li> <li>• Minimum depth at which MEC is expected to be found for each remediation alternative</li> </ul>
<b>Baseline Condition:</b> MEC located surface and subsurface <b>After Cleanup:</b> Intrusive depth does not overlap with subsurface MEC	The area contains munitions that are entirely or partially exposed above the ground surface as well as entirely beneath the ground surface, and the known or suspected minimum depth of the subsurface MEC is greater than the expected depth of intrusive activity. See Figure 4-2.	
<b>Baseline Condition:</b> MEC located only subsurface <b>Baseline Condition or After Cleanup:</b> Intrusive depth overlaps with minimum MEC depth	The area contains munitions that are entirely beneath the ground surface. The known or suspected minimum depth of the subsurface MEC is less than the expected depth of intrusive activity. See Figure 4-2.	

**Table 4-11. Input Factor Categories: Minimum MEC Depth Relative to the Maximum Intrusive Depth**

Category	Category Description	Required Information
<b>Baseline Condition:</b> MEC located only subsurface <b>Baseline Condition or After Cleanup:</b> Intrusive depth <i>does not overlap</i> with minimum MEC depth	The area contains munitions that are entirely beneath the ground surface. The known or suspected minimum depth of the subsurface MEC is greater than the expected depth of intrusive activity. See Figure 4-2.	

Assuming a minimum MEC depth is necessary to determine whether or not it overlaps with the maximum intrusive depth, the results of site-specific geophysical investigations and digging of target anomalies will be the best source of information on the depths of MEC. It will be reasonable to assume that MEC is located both surface and subsurface for the Baseline Conditions in many types of MRS. If the project team agrees that a past surface clearance has been effective, then it may select one of the two categories with MEC located only in the subsurface for the Baseline Conditions.

**Past Surface Clearances**

Many sites, especially World War II era FUDS, were surface cleared before they were released from DoD control. Information adequate to determine the extent and effectiveness of these clearances might not be available.

Project teams may have information to support assumptions about whether Baseline Conditions should have MEC located both surface and subsurface, or MEC located only in the subsurface.

The input factor categories are illustrated in Figure 4-2.

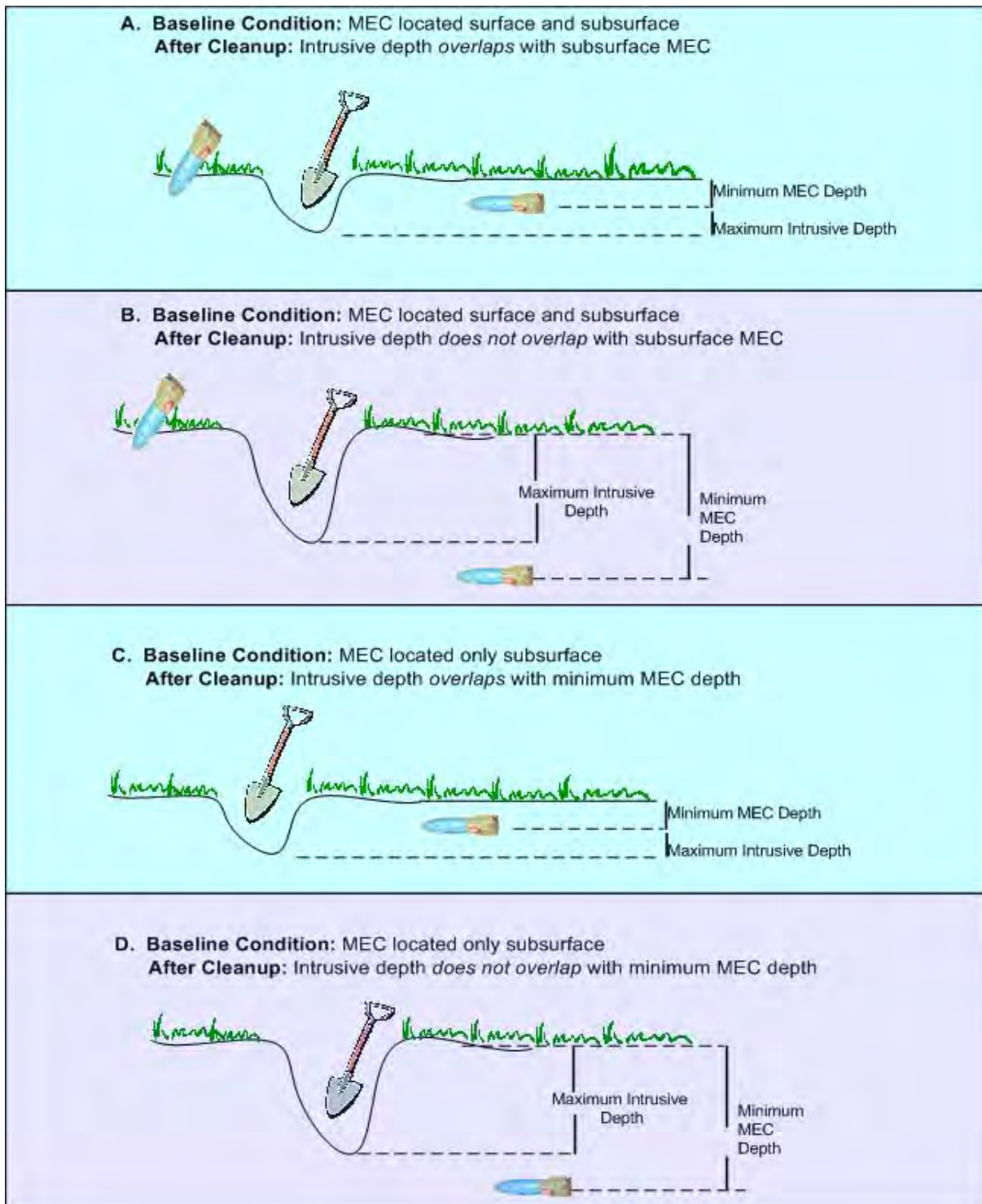


Figure 4-2. Minimum MEC Depth Relative to the Maximum Depth of Receptor Activities

#### 4.6.1 Scores for Minimum MEC Depth Relative to the Maximum Intrusive Depth Categories

Table 4-12 shows the scores for each of these categories.

**Table 4-12. Scores for Minimum MEC Depth Relative to the Maximum Intrusive Depth Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Minimum MEC Depth Relative to the Maximum Intrusive Depth	<b>Baseline Condition:</b> MEC located surface and subsurface <b>After Cleanup:</b> Intrusive depth <i>overlaps</i> with subsurface MEC	240	150	95
	<b>Baseline Condition:</b> MEC located surface and subsurface <b>After Cleanup:</b> Intrusive depth <i>does not overlap</i> with subsurface MEC	240	50	25
	<b>Baseline Condition:</b> MEC located only subsurface <b>Baseline Condition or After Cleanup:</b> Intrusive depth <i>overlaps</i> with minimum MEC depth	150	N/A*	95
	<b>Baseline Condition:</b> MEC located only subsurface <b>Baseline Condition or After Cleanup:</b> Intrusive depth <i>does not overlap</i> with minimum MEC depth	50	N/A*	25

\*N/A – Not Applicable: Surface cleanups for MEC would not be appropriate for site conditions where MEC is all in the subsurface.

#### 4.6.2 Category Changes for Minimum MEC Depth Relative to the Maximum Intrusive Depth

This category will change when the relationship between the minimum MEC depth and the maximum intrusive depth changes. The minimum MEC depth will only change when a subsurface cleanup is evaluated. Generally, subsurface cleanups to depths that exceed the maximum intrusive depth will be among evaluated alternatives. The MEC HA can also score alternatives where the minimum MEC depth after cleanup remains above the maximum intrusive depth to help evaluate subsurface cleanup alternatives with determined or reasonably anticipated future land uses that are more intrusive than the current land use.

The maximum intrusive depth may change with land use activity changes. Examples of scenarios that may change the maximum intrusive depth include the following:

- Allowing camping in an area where it was previously prohibited.

- Converting open space to cattle grazing, requiring the installation of fencing and water stations.
- Developing an undeveloped area, which may involve extensive grading and excavations for the construction of building foundations.

#### 4.7 Migration Potential

This factor addresses the likelihood that MEC items can be moved by natural processes (e.g., erosion or frost heave). The movement or exposure of MEC items by natural processes can increase the likelihood that receptors will encounter the items.

The categories for this factor are shown in Table 4-13. This input factor category will rarely change over time.

**Table 4-13. Input Factor Categories: Migration Potential**

Category	Category Description	Required Information
Possible	Historical or physical evidence indicates that it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items or to move surface or subsurface MEC items.	<ul style="list-style-type: none"> <li>• Climatic and geologic conditions</li> <li>• Types of land cover associated with MRS (vegetative conditions)</li> <li>• Boundary of MRS area</li> <li>• Location of frost line and potential for frost heave</li> </ul>
Unlikely	Historical or physical evidence indicates that natural physical forces in the area (e.g., frost heave, erosion) are unlikely to expose subsurface MEC items or to move surface or subsurface MEC items.	<ul style="list-style-type: none"> <li>• Rainfall patterns and amounts</li> <li>• Direction of overland flow</li> <li>• Location of areas of erosion activity within MRS</li> <li>• Location or areas of tidal influence within MRS</li> </ul>

##### 4.7.1 Scores for Migration Potential

Table 4-14 shows the scoring values for these categories. If subsurface cleanup of MEC occurs, MEC is less likely to be exposed.

**Table 4-14. Scores for Migration Potential Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
Migration Potential	Possible	30	30	10
	Unlikely	10	10	10

##### 4.7.2 Category Changes for Migration Potential

The project team can decide to change this input factor category if specific measures are taken to control migration, or if new information about site dynamics indicates greater chance for migration than the project team assumed originally.

#### 4.8 MEC Classification

This input factor describes how easily an initiating receptor might detonate MEC. By definition, UXO are military munitions that: have been primed, fuzed, 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 whether by malfunction, design, or any other cause. The failure of military munitions to function as designed presents the greatest hazard. Although all UXO are dangerous and subject to detonation, some of the UXO have fuzes that are more susceptible to functioning and thus are more hazardous and likely to function by casual or intentional contact. These MEC have been designated “Sensitive UXO.”

There are a number of fuzed DMM that may more easily arm and function. These limited DMM are given the category “Fuzed Sensitive DMM.” Other fuzed DMM less likely to arm are in the “Fuzed DMM” category to reflect the hazard difference between the two categories of fuzed DMM.

Table 4-15 contains the categories for this input factor. The categories are listed in order from those posing the highest explosive hazard to those posing the lowest.

**Table 4-15. Input Factor Categories: MEC Classification**

Category	Category Description	Required Information
Sensitive UXO	UXO items with fuzes that are more likely to function with any movement (e.g., all-way-acting fuzes) or potential environmental conditions (e.g., piezoelectric fuzes).	<ul style="list-style-type: none"> <li>• Nature of munitions-related activities that took place on the MRS</li> <li>• Types of munitions (mark or model)</li> <li>• Presence and type of fuzing</li> <li>• State of fuzing (armed or unarmed)</li> </ul>
UXO	All other UXO items.	
Fuzed Sensitive DMM	DMM with a fuzing mechanism present, but not armed (put into a state of readiness) for use. Sensitive DMM fuzes can be armed and functioned through human activity (e.g., hand grenades).	
Fuzed DMM	DMM with a fuzing mechanism present, but not armed (not put into a state of readiness) for use. Fuzes on DMM in this category require high inertial energy (e.g., g-forces or rapid rotation) to be armed. This category also contains unarmed fuzes not installed in munitions.	
Unfuzed DMM	DMM without fuzing mechanisms. This category also includes boosters, bursters, and blasting caps.	
Bulk explosives	Explosive material that is not contained in cased munitions or is present in soils or sediment.	

UXO items are always more hazardous than DMM. Where uncertainty exists about the condition of MEC, conservative assumptions should be made and documented. For example, if there is uncertainty about type of fuzes in DMM, then the conservative assumption would be the input factor category Fuzed Sensitive DMM.

The flowchart in Figure 4-3 provides a decision process that can be used to determine the category for MEC Classification for cased munitions. A text summary of the decision process is also provided.

**UXO:** Unless there is evidence to the contrary, the Project Teams should assume UXO is present in target areas, and may also be present in safety buffer zones. UXO may also be present in QA function test ranges. UXO may also be present in OB/OD areas when:

- The OB/OD area is located adjacent to a range, indicating that it was sited to serve as a UXO disposal area.
- Historical evidence indicates that an explosive ordnance disposal team used the OB/OD area to dispose of UXO.
- UXO has been found in the OB/OD area.

If these circumstances do not apply, then it is probably more reasonable to assume that the OB/OD area only contains DMM. DMM in OB/OD areas have “experienced abnormal environments”<sup>13</sup> (i.e., have been subjected to attempted demilitarization by OB/OD) and should be *scored as UXO* until assessed and determined to be DMM by technically qualified personnel.

If the MEC is UXO, the project team must determine whether the UXO is special case. When the following types of MEC are present, the project team should select the “Sensitive UXO” category for this input factor:

- |   |  |
|---|--|
| • All submunitions  | • High explosive anti-tank (HEAT) rounds |
| • Rifle propelled 40mm projectiles (often called 40mm grenades) | • Hand grenades                          |
| • All munitions with white phosphorus filler                    | • All mortar rounds (a)                  |

(a) Mortars are included in this category due to the ability to remove the safety from the fuze. Mortars are fin stabilized, which means they do not spin in flight as do most projectiles. The spin action is used to arm the fuze in many projectiles. In addition, the M524 fuze developed in the Vietnam era is very sensitive, and can readily trigger a denotation.

**DMM:** MRS where a project team can assume that the MEC items are DMM include the following:

- |  |              |
|--|--------------|
| • OB/OD Areas where a DMM has been found | • Burial pit |
| • Maneuver areas                         | • Storage    |
| • Firing points                          |              |

The DMM can be either fuzed or unfuzed. If fuzed, then the fuze category for the DMM should be determined. The “Fuzed Sensitive DMM” category includes the following:

- |   |                     |
|---|---------------------|
| • All submunitions  | • HEAT rounds       |
| • Rifle propelled 40mm projectiles (often called 40mm grenades) | • Hand grenades     |
| • All munitions with white phosphorus filler                    | • All mortar rounds |

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<sup>13</sup> Minutes of the 327<sup>th</sup> Meeting of the Department of Defense Explosives Safety Board, 14 December 2004.

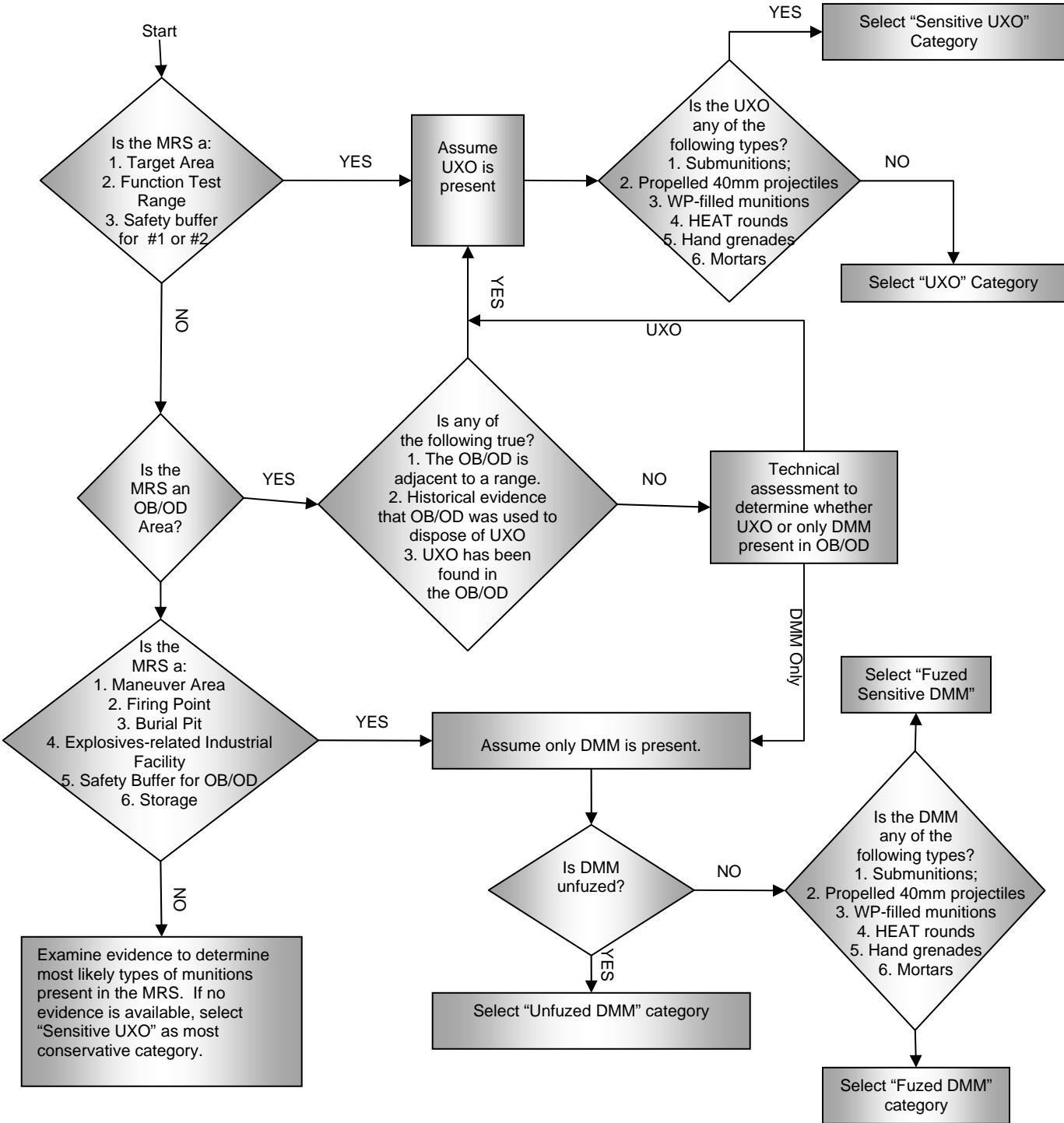


Figure 4-3. Selecting the MEC Classification Category for Cased Munitions

#### 4.8.1 Scores for MEC Classification Categories

Table 4-16 shows the scores for each of these categories.

**Table 4-16. Scores for MEC Classification Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
MEC Classification	Sensitive UXO	180	180	180
	UXO	110	110	110
	Fuzed Sensitive DMM	105	105	105
	Fuzed DMM	55	55	55
	Unfuzed DMM	45	45	45
	Bulk explosives	45	45	45

#### 4.8.2 Category Changes for MEC Classification

The categories chosen for MEC Classification will not change unless additional information indicates that the selected category is incorrect.

#### 4.9 MEC Size

This factor indicates the ease with which MEC can be moved by a receptor. A receptor is more likely to pick up or interact with a small item. For example, an individual is more likely to pick up or accidentally kick a grenade than a large bomb.

“Small” and “Large” are the categories used to describe this input factor. Large MEC is equal to or greater than 90 pounds (e.g., a 155mm projectile). It is unlikely that receptors could move MEC weighing over 90 pounds without special equipment. Table 4-17 contains the categories for this input factor.

**Table 4-17. Input Factor Categories: MEC Size**

Input Factor Category	Category Description	Required Information
Small	MEC items that weigh less than 90 pounds; small enough for a receptor to be able to move and initiate a detonation.	<ul style="list-style-type: none"> <li>Mark or model of munitions used at MRS</li> <li>Outer diameter of munitions</li> </ul>
Large	MEC items that weigh 90 pounds or more; too large to move without equipment.	

#### 4.9.1 Scores for MEC Size Categories

Table 4-18 shows the scores for MEC Size. The scores for these categories do not change with clean-up.

**Table 4-18. Scores for MEC Size Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup

**Table 4-18. Scores for MEC Size Categories**

Input Factor	Category or Value	Score		
		Baseline Condition	Surface MEC Cleanup	Subsurface MEC Cleanup
MEC Size	Small	40	40	40
	Large	0	0	0

#### 4.9.2 Category Changes for MEC Size

The category chosen for MEC Size will not change unless additional information indicates that the other category should be selected (i.e., discovery of a new type of munitions at the site indicates that the category should be changed from “Large” to “Small”).

#### 4.10 Scoring Considerations

Project teams may find it useful to score the MRS several times to reflect different site conditions. This includes different land use activities, conditions after cleanup, land use controls, or combinations of these scenarios.

Information on current, determined, or reasonably anticipated future land use activities is used for the selection of categories for four input factors:

- Location of Additional Human Receptors
- Site Accessibility
- Potential Contact Hours
- Minimum MEC Depth Relative to the Maximum Intrusive Depth

Outdoor activities create the greatest potential exposure to MEC. Each land use type (e.g., residential, industrial or commercial, recreational, and open space) may have associated outdoor activities. Residential users may garden or build an addition onto their home. Construction, agriculture, and mining are by their nature intrusive; examples include upgrading or replacement of buried infrastructure and seasonal plantings or landscape upgrades.

Project teams will need to agree on the determined or reasonably anticipated future land use activities. The CERCLA process requires the evaluation of “reasonably anticipated” future land use. EPA land use guidance emphasizes that project teams evaluate reasonable assumptions that are sufficiently conservative to be protective into the future.<sup>14</sup>

In order to fully evaluate current and future land use activities, the project team will need to obtain the following information for every MRS that is assessed:

- Location of places where people may congregate, either within the boundaries of the MRS or in proximity (within the ESQD arc) of the boundaries of the MRS.
- Specific separate land use activities (e.g., plowing, gardening, construction) that might bring receptors into contact with MEC. When MEC is located in the subsurface, this will include only intrusive activities.
- Intrusive depth of all activities.
- Number of people engaging in each activity per year.

<sup>14</sup> U.S. EPA, *Land Use in the CERCLA Remedy Selection Process*, OSWER Directive No. 9355.7-04, May 25, 1995.

- Duration of each activity.

Sources of information on future land use scenarios include, but are not limited to, zoning maps, local government master plans, local reuse authorities for BRAC sites, base master plans (for active bases), historical land use trends, parcel ownership maps from local government, and public park authorities.

The information evaluated for the MEC HA, as well as the outputs can be used to support the evaluation of removal or remedial actions that are protective of human health and the environment. The project team using the CERCLA removal or remedial process will often identify two types of removal or remedial alternatives:

- Cleanup of MEC items from the surface and subsurface. The major variation will be the depth and area covered by the cleanup.
- Identification of LUCs that manage potential exposure to any remaining MEC.

Removal and remedial alternatives can range from removal of MEC items combined with use of LUCs, to use of LUCs alone. The NCP remedy preference is that institutional controls not be the sole remedy unless treatment is impracticable.

Removal or remedial alternatives can affect various input factor categories. The project team must clearly describe these alternatives to ensure that changes in selections of input factor categories reflect reasonable assumptions.

#### 4.11 Summary of MEC HA Scores

Table 4-19 summarizes all of the scoring tables presented in this chapter. Scores for the categories are in multiples of five, with a maximum possible score of 1000 and a minimum possible score of 125. The numeric scores reflect the relative contributions of the different input factors to MEC hazard. The MEC HA scores should not be interpreted as quantitative measures of explosive hazard.

**Table 4-19. Complete MEC HA Scoring Table**

Input Factor	Input Factor Category	Score		
		Baseline Condition	Surface Cleanup	Subsurface Cleanup
Energetic Material Type	High Explosives and Low Explosive Filler in Fragmenting Rounds	100	100	100
	White Phosphorus	70	70	70
	Pyrotechnic	60	60	60
	Propellant	50	50	50
	Spotting Charge	40	40	40
	Incendiary	30	30	30

**Land Use Controls (LUCs)**

LUCs include a wide range of restrictions or controls that arise from the need to protect human health and the environment and that limit the use of or exposure to any portion of a property. They include both *engineering* and *institutional* controls.

*Engineering controls* are physical barriers, such as fences, walls, or site security such as guards that restrict access to a site.

*Institutional controls* are legal or other non-engineered controls on access. Examples include zoning, permitting, deed notifications, deed restrictions, sign-posting requirements, and restrictive easements or covenants.

**Table 4-19. Complete MEC HA Scoring Table**

Input Factor	Input Factor Category	Score		
		Baseline Condition	Surface Cleanup	Subsurface Cleanup
Location of Additional Human Receptors	Inside MRS or inside the ESQD arc surrounding the MRS	30	30	30
	Outside of the ESQD arc	0	0	0
Site Accessibility	Full Accessibility	80	80	80
	Moderate Accessibility	55	55	55
	Limited Accessibility	15	15	15
	Very Limited Accessibility	5	5	5
Potential Contact Hours	Many Hours	120	90	30
	Some Hours	70	50	20
	Few Hours	40	20	10
	Very Few Hours	15	10	5
Amount of MEC	Target Area	180	120	30
	OB/OD Area	180	110	30
	Function Test Range	165	90	25
	Burial Pit	140	140	10
	Maneuver Areas	115	15	5
	Firing Points	75	10	5
	Safety Buffer Areas	30	10	5
	Storage	25	10	5
Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth	<b>Baseline Condition:</b> MEC located surface and subsurface; <b>After Cleanup:</b> Intrusive depth overlaps with subsurface MEC	240	150	95
	<b>Baseline Condition:</b> MEC located surface and subsurface; <b>After Cleanup:</b> Intrusive depth does not overlap with subsurface MEC	240	50	25
	<b>Baseline Condition:</b> MEC located only subsurface; <b>Baseline Condition or After Cleanup:</b> Intrusive depth overlaps with minimum MEC depth	150	N/A*	95
	<b>Baseline Condition:</b> MEC located only subsurface; <b>Baseline Condition or After Cleanup:</b> Intrusive depth does not overlap with minimum MEC depth	50	N/A*	25
Migration Potential	Possible	30	30	10
	Unlikely	10	10	10

**Table 4-19. Complete MEC HA Scoring Table**

Input Factor	Input Factor Category	Score		
		Baseline Condition	Surface Cleanup	Subsurface Cleanup
MEC Classification	Sensitive UXO	180	180	180
	UXO	110	110	110
	Fuzed Sensitive DMM	105	105	105
	Fuzed DMM	55	55	55
	Unfuzed DMM	45	45	45
	Bulk Explosives	45	45	45
MEC Size	Small	40	40	40
	Large	0	0	0

\*N/A – Not Applicable: Surface cleanup for MEC would not be appropriate for site conditions where MEC is all in the subsurface.

**4.12 Relationships between Protocol EHE Data Elements and MEC HA Input Factors**

The following table illustrates the relationships between the Data Elements for the EHE module of the Protocol and the Input Factors for the MEC HA. Many of the same site characteristics are addressed by both tools, since both were created to assess explosive hazards in MRS. The differences between the EHE Data Elements and the MEC HA Input Factors are due to the different purposes of the two tools, and different assumptions regarding the type and amount of information available when the tools are applied.

**Table 4-20. Relationship between Protocol EHE Data Elements and the MEC HA Input Factors**

Protocol EHE Data Element	Related MEC HA Input Factors	Remarks
Munitions Type	Energetic Material Type MEC Classification	EHE Data Element classifications combine the two MEC HA Input Factors
Source of Hazard	Amount of MEC	
Information on Location of Munitions	Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth Migration Potential	EHE Data Element classifications address both the MEC depth (surface or subsurface) and the stability of the MRS
Ease of Access	Site Accessibility	
Status of Property	No related MEC HA Input Factor	
Population Density	Potential Contact Hours	
Population Near Hazard	Location of Additional Human Receptors Potential Contact Hours	



<b>Protocol EHE Data Element</b>	<b>Related MEC HA Input Factors</b>	<b>Remarks</b>
Types of Activities/ Structures	Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth Potential Contact Hours	
Ecological and /or Cultural Resources	No related MEC HA Input Factor	MEC HA guidance recommends that presence of ecological or cultural resources be addressed during CERCLA nine criteria analysis
No related EHE Data Element	MEC Size	

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## CHAPTER 5: OUTPUT OF THE MEC HA: HAZARD LEVELS

This chapter discusses both the scores that are associated with each Hazard Level and the meaning of the different levels. The chapter also describes the use of the MEC HA in the CERCLA removal and remedial processes.

Each MRS may have several MEC HA scores, depending on the number of removal or remedial alternatives and current, determined, or reasonably anticipated future land uses. Different assumptions about land use activities, cleanup options, or LUCs can be considered in combination or can be considered separately. A typical MEC HA conducted after a thorough investigation (removal or remedial) should evaluate the following alternatives.

- No action
- LUCs alone
- Surface cleanup with or without LUCs, under current, determined or reasonably anticipated future land uses
- Surface and subsurface cleanup both with and without LUCs, under current, determined, or reasonably anticipated future land uses

When the MEC HA scoring is complete, each alternative response or reuse evaluated for an MRS will have a score that falls into one of four Hazard Levels.

### 5.1 Scoring and Hazard Levels

The Hazard Levels and associated scores represent groupings of sites with common or similar attributes with respect to conditions that constitute the explosive hazards. As noted elsewhere in this guidance, the scores have meaning only with respect to one another. The score ranges for the Hazard Levels are based on sensitivity runs that are documented in Appendix D. Table 5-1 presents the four MEC HA Hazard Levels and score ranges.

**Table 5-1. Hazard Level Scores**

Hazard Level	Maximum MEC HA Score	Minimum MEC HA Score
1	1000	840
2	835	725
3	720	530
4	525	125

#### Important Terms in This Chapter

##### CERCLA Nine Criteria

The factors evaluated during a CERCLA feasibility study to evaluate remedial action alternatives.

##### Hazard Levels

One of four groups or ranges of numbers that is the result of the scoring process of the MEC HA. Each Hazard Level category describes the relative explosive hazard of a munitions response site.

##### Removal Action

A response action under CERCLA that addresses immediate threats to human health and the environment.

##### Remedial Action

A response action under CERCLA that is intended to be a permanent remedy. Remedial actions can be taken instead of or in addition to a removal action.

### 5.1.1 Hazard Level 1

This Hazard Level identifies MRS with the *highest* potential explosive hazard conditions. Typical characteristics of Hazard Level 1 MRS conditions include the following:

- High-explosive-filled UXO, usually “Sensitive UXO” on the surface
- A former target area or OB/OD area
- An MRS with full or moderate accessibility
- Has the presence of additional human receptors inside the MRS or ESQD
- May include subsurface MEC with intrusive activities to the depth of subsurface MEC
- An MRS that has not undergone a cleanup

An example Hazard Level 1 scenario is described below. Additional MRS characteristics and combinations can be found in Appendix D.

#### Hazard Level 1 Scenario

An example of a Hazard Level 1 scenario is an MRS that:

- Is a former OB/OD Area for MEC including fuzed 60mm HE mortars.
- Has a history of 60mm mortars found on the surface.
- Historical response actions have been limited to removal of single items. Has not undergone a thorough cleanup
- Is fully accessible to people who will engage in intrusive activities such as gardening or landscape maintenance.

### 5.1.2 Hazard Level 2

This Hazard Level identifies MRS with *high* potential explosive hazard conditions. Typical characteristics of a Hazard Level 2 MRS include the following:

- Former target area, OB/OD area, function test range, or maneuver area
- UXO, or Fuzed Sensitive DMM on the surface, or intrusive activities that overlap with minimum depths of UXO or Fuzed Sensitive DMM located only subsurface
- Has full or moderate accessibility to people who will engage in intrusive activities

An example Hazard Level 2 scenario is described below. Additional MRS characteristics and combinations can be found in Appendix D.

#### Hazard Level 2 Scenario

An example of a Hazard Level 2 scenario is an MRS that:

- Is a former Target Area with UXO present, Large Size (e.g., 155mm artillery).
- Has a history of UXO found on the surface.
- Has not been cleaned up.
- Has been fenced with barbed-wire, but is otherwise accessible to recreational users.

### 5.1.3 Hazard Level 3

This Hazard level identifies MRS with moderate potential explosive hazard conditions. Typical characteristics of a Hazard Level 3 MRS include the following:

- DMM on the surface, or intrusive activities that overlap with minimum depths of DMM located only subsurface
- Former target area, OB/OD area, function test range, or maneuver area that has undergone a surface cleanup
- An MRS with moderate or limited accessibility, and a low number of contact hours

Two example Hazard Level 3 scenarios are described below. Additional MRS characteristics and combinations can be found in Appendix D.

#### **Hazard Level 3 Scenario 1**

- The MRS is a former range fan. The target area is addressed under a separate hazard assessment.
- 60mm HE mortars were found in the target area
- The target area and range fan have undergone a surface cleanup
- The MRS is fully accessible by a large number of people who will conduct non-intrusive activities such as hiking.

#### **Hazard Level 3 Scenario 2**

- The MRS is golf course built over a 100 pound bombing range. The bombing range was cleared and then covered with several feet of soil before grading for a golf course. There is no intrusive use that exceeds the depth of the soil cover
- There is full accessibility for recreational surface activities

#### **5.1.4 Hazard Level 4**

This Hazard Level identifies MRS with low potential explosive hazard conditions. The presence of MEC at an MRS means that an explosive hazard may exist. Therefore, MEC may still pose a hazard at a Hazard Level 4 MRS. Typical characteristics of an MRS in Hazard Level 4 include the following:

- A MEC cleanup was performed or MEC is only located subsurface, below the depth of receptor intrusive activities
- Energetic Material Type is propellant, spotting charge, or incendiary
- Accessibility is Limited or Very Limited, and contact hours are few or very few. This may be the result of LUCs.

An example Hazard Level 4 scenario is described below. Additional MRS characteristics and combinations can be found in Appendix D.

#### **Hazard Level 4 Scenario**

An example of a Hazard Level 4 scenario is an MRS that:

- A former target area for pyrotechnic munitions that were located both surface and subsurface
- Has had both a surface and subsurface cleanup
- Intrusive activities do not extend below the depth of removed subsurface items
- Has LUCs requiring permits for any intrusive activities

## 5.2 MEC HA in the CERCLA Remedy Evaluation and Selection Process

The evaluation of removal and remedial action alternatives is required under CERCLA. The primary differences between CERCLA removal and remedial programs are the urgency of a response and the objectives considered for the MRS. Removals must contribute to the effectiveness of the long-term actions of the remedial program. This section explains how the MEC HA input factors and Hazard Levels provide site-specific information that can be used to support alternative analysis and decisions for removal or remedial actions.

### Distinctions Between Removal and Remedial Actions

“Removals are distinct from remedial actions in that they may mitigate or stabilize the threat rather than comprehensively address all threats at a site.”

Preamble, National Contingency Plan, *Federal Register* vol. 55, p. 8695 (March 1990)

### 5.2.1 CERCLA Removal Process

CERCLA provides for three types of removal actions: emergency removals, time-critical removal actions (TCRA), and non-time-critical removal actions (NTCRA). Emergency removal actions and TCRA are generally taken to abate immediate threats to human health and the environment. All removal actions are required to contribute to the performance and protectiveness of future remedial actions.

For NTCRA site investigations are performed and the evaluation of removal alternatives is documented in an EE/CA report. An action memorandum documents the removal action decision(s). The removal alternatives must be protective of human health and the environment but will often be the first or an interim step in the cleanup process. Additional response actions may be necessary through the remedial program. Table 5-2 describes the CERCLA selection criteria for evaluating removal alternatives.<sup>15</sup>

**Table 5-2. CERCLA Removal Action Alternative Selection Criteria**

Removal Criteria	Purpose
Effectiveness	<ul style="list-style-type: none"> <li>• Establish protectiveness of remedy to human health and the environment.</li> <li>• Evaluate short-term effectiveness issues such as effect on the community and worker protection.</li> <li>• Ensure compliance with ARARs to the extent practicable and consistent with the urgency of the situation.</li> </ul>
Implementability	<ul style="list-style-type: none"> <li>• Consider technical feasibility and availability of resources to support the alternative.</li> <li>• Consider administrative feasibility (including required LUCs).</li> </ul>
Cost	<ul style="list-style-type: none"> <li>• Compare costs of alternatives, including capital costs, operation and maintenance costs, and present worth cost.</li> </ul>

The information from the MEC HA input factors and outputs can be used to support the analysis of removal alternatives in the EE/CA. The EE/CA examines three broad criteria: Effectiveness, Implementability, and Cost. For the Effectiveness Criterion, the MEC HA input factors of Energetic Material Type, Location of Additional Human Receptors, Site Accessibility, Amount of MEC, and MEC Classification can provide information to support evaluation of short-term effectiveness, and compliance with ARARs. This can be accomplished by evaluating information

<sup>15</sup> U.S. EPA, *Conducting Non-Time-Critical Removal Actions Under CERCLA*, EPA/540/F-94/009, December 1993.

regarding worker protection and/or community protection associated with the ESQD arc. In addition the identification of cultural or ecological resources and critical infrastructure may assist in the evaluation of location-specific or action-specific ARARs. For the Implementability Criterion, the MEC HA input factors of Energetic Material Type, Location of Additional Human Receptors, Site Accessibility, Amount of MEC, MEC Classification, and MEC Size support evaluation of the removal alternatives in the EE/CA report. Cost data is neither collected nor evaluated in the MEC HA.

### 5.2.2 CERCLA Remedial Process

Under the CERCLA remedial process, site investigations are undertaken and the evaluation of remedial action alternatives is documented in an RI/FS.<sup>16</sup> The selection of remedial actions is documented in a Record of Decision (ROD)/Decision Document (DD). Each alternative is evaluated using the CERCLA nine-criteria to select the alternative that best meets the statutory requirements. The statute requires that the selected remedy be protective of human health and the environment; comply with ARARs; utilize treatment to reduce the toxicity, mobility, or volume of contamination to the maximum extent practicable; and be cost-effective.

#### Treatment Under CERCLA

Section 121 of CERCLA establishes a strong preference for remedies that reduce the toxicity, mobility, or volume at the site and achieve “cleanup to the maximum extent practicable.” One objective of the nine criteria evaluation process is to identify remedies that meet those goals.

For MRSs where the treatment options are generally limited to a narrow range of destruction alternatives (blow-in-place, consolidated shot, or containerized versions of these), the destruction of the MEC should be considered as constituting cleanup that reduces the amount or volume of MEC.

The CERCLA nine-criteria for analysis of remedial action alternatives are divided into **threshold criteria** that must be met. These include Protection of Human Health and the Environment, and Compliance with ARARs. **Balancing criteria** form the primary basis to compare and contrast remedial action alternatives. These include Long-term Effectiveness, Short-term Effectiveness, Reduction of Toxicity, Mobility, or Volume through Treatment, and Cost. **Modifying criteria** are also evaluated to reflect State and community acceptance and input on the analysis of alternatives. Table 5-3 provides a summary of the CERCLA nine criteria and how information from the MEC HA Input Factors and Hazard Levels can be used to support the nine criteria analysis.

This information MEC HA can be used to support these analyses and remedy selection. However, the MEC HA *is not* the decision tool for remedy selection.

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<sup>16</sup> U.S. EPA, *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, Interim Final, OSWER Directive 9355.3-01, October 1988.

**Table 5-3. CERCLA Nine-criteria and MEC HA Inputs and Outputs: Considerations for Evaluation of Remedial Alternatives**

CERCLA Nine-criteria	Description from EPA Guidance	Associated MEC HA Input Factors and Hazard Levels
Protection of Human Health and the Environment	<p>Draws on assessments conducted under other evaluation criteria, especially long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs.</p> <p>The RI/FS should describe in the context of this criterion how alternatives achieve adequate protection and should describe how site risks posed through each pathway being addressed by the FS are eliminated, reduced, or controlled through treatment, engineering, or institutional controls. This evaluation also allows for consideration of whether an alternative poses any unacceptable short-term or cross-media impacts.</p>	<p>All of the input factors contain information related to protection of human health. Changes to site conditions brought about by activity changes, treatment, or LUCs are reflected in changes input factor categories and Hazard Levels.</p>
Compliance With ARARs	<p>This evaluation criterion is used to determine whether the alternative will meet all of its Federal and State ARARs (as defined in CERCLA 121) that have been identified in previous stages of the RI/FS process. The analysis should identify which are applicable, relevant and appropriate, or “to be considered,” and describe how the alternative meets these requirements. If an ARAR cannot be met, the basis for justifying one of the six ARAR waiver requirements should be discussed. Three types of ARARs are defined: environmental contaminant-specific (related to cleanup levels); action-specific (related to conduct of cleanup actions); and location-specific (related to protection of specific locations).</p>	<p>The MEC HA guidance instructs project teams to assess the presence of critical infrastructure, cultural and ecological resources. These can include location-specific and action-specific ARAR considerations.</p>



**Table 5-3. CERCLA Nine-criteria and MEC HA Inputs and Outputs: Considerations for Evaluation of Remedial Alternatives**

CERCLA Nine-criteria	Description from EPA Guidance	Associated MEC HA Input Factors and Hazard Levels
Long-Term Effectiveness	<p>Magnitude of Residual Risk. This addresses the residual risk remaining from untreated wastes, or treatment residuals at the conclusion of remedial actions.</p>	<p>The MEC HA scores for the input factors of Energetic Material Type, MEC Category and MEC Size are not affected through cleanup actions. This reflects the uncertainty that all MEC can be found and removed. If any MEC remain, the attributes associated with these input factors are not changed.</p> <p>The Site Accessibility, Potential Contact Hours, Amount of MEC and Minimum MEC Depth Relative to the Maximum Intrusive Depth input factor scores will change with various response actions to reflect changes in Hazard Levels.</p>
	<p>Adequacy and Reliability of Controls. This addresses the adequacy and suitability of controls, if any, that are used to manage treatment residuals or untreated wastes that remain at the site.</p>	<p>For MRSs evaluated under the MEC HA, the input factors associated with LUCs include engineering controls (fences, signage, etc.) and institutional controls (land use restrictions). The MEC HA input factors for Site Accessibility and Potential Contact Hours can be affected through changes in land use and activities. This in turn will result in changes in the Hazard Levels.</p> <p>The long-term effectiveness and permanence of LUCs will in turn take into account the administrative feasibility of maintaining the LUCs and the potential risks or hazards should the controls fail. Evaluation of the effectiveness of LUCs could in turn lead to reassessment of explosive hazards without LUCs.</p>

**Table 5-3. CERCLA Nine-criteria and MEC HA Inputs and Outputs: Considerations for Evaluation of Remedial Alternatives**

CERCLA Nine-criteria	Description from EPA Guidance	Associated MEC HA Input Factors and Hazard Levels
Reduction of Toxicity, Mobility, or Volume Through Treatment	This criterion addresses the statutory preference for selecting remedial actions that employ treatment technologies that permanently and significantly reduce toxicity, mobility, or volume of a hazardous substance, especially the principal threats.	<p>The following MEC HA input factors provide information related to this criterion: Amount of MEC, Minimum MEC Depth Relative to the Maximum Intrusive Depth, and Migration Potential. All of these factors can be affected through treatment. This in turn will result in changes to scores and Hazard Levels.</p> <p>For MRS where the treatment options are generally limited to certain disposal options (blow-in-place, consolidated shot, containerized versions of these), the destruction of the MEC should be considered as constituting treatment that reduces the amount of MEC found. This is analogous to reduction in volume. Mobility in the context of waste treatment, where a hazardous substance is immobilized, does not have a direct analogy for MEC. Mobility may be considered a function of the ease of moving a MEC item, as well as physical processes (e.g., erosion, frost heave, flooding of surrounding soil or sediment, tidal currents) that may affect movement of MEC from its original depth or location. To the extent that MEC is detected, recovered, and disposed of, its ability to move is reduced.</p>
Short-Term Effectiveness	This criterion addresses four areas. These include protection of the community during remedial actions; protection of workers during remedial actions; environmental impacts during remedial actions; and the time required to implement and complete the remedial action. In addition, this criterion should address how any potential adverse effects associated with these four areas can be mitigated or eliminated during remedial actions.	Information from several of the input factors should be considered in the analysis under this criterion. Location of Additional Human Receptors and Site Accessibility are key considerations in evaluating current conditions and potential mitigation actions that would be appropriate under evaluation of other alternatives. Consideration of mitigation measures can affect the input scores and in turn affect the input factor scores and Hazard Levels.
Implementability	Technical Feasibility. This factor addresses construction and operation technical difficulties; availability and reliability of technologies to be implemented readily and without delays; the ease of undertaking additional actions at the project site where the remedy under consideration could make a future action more difficult; and long-term management issues associated with the action.	The MEC HA addresses this aspect of the criterion. It does this through information on Energetic Material Type, Location of Additional Human Receptors, Site Accessibility, Amount of MEC, MEC Classification, and MEC Size.

**Table 5-3. CERCLA Nine-criteria and MEC HA Inputs and Outputs: Considerations for Evaluation of Remedial Alternatives**

CERCLA Nine-criteria	Description from EPA Guidance	Associated MEC HA Input Factors and Hazard Levels
Implementability (continued)	Administrative Feasibility. Activities needed to coordinate with other offices and agencies (e.g., rights of entry for on-site activities and permits for off-site activities).	The MEC HA does not address this aspect of the criterion. However, administrative requirements associated with maintaining LUCs would need to be evaluated to determine if MEC HA evaluations of LUCs are based on realistic assumptions.
	Availability of Services and Materials. This includes availability of off-site treatment, storage, and disposal facilities; availability of equipment and specialists; availability of services and materials; and availability of prospective technologies.	The MEC HA does not directly address this aspect of the criterion.
Cost	The costs of activities typically include estimated capital costs (direct and indirect); annual operation and maintenance costs; a present worth analysis; and an evaluation of the accuracy of costs in the +50% to -30% range.	The MEC HA does not incorporate costs.
State Acceptance	This assessment evaluates the technical and administrative issues and concerns the State (or support agency in the case of State-led sites) may have regarding each of the alternatives. The project team will generally discuss this assessment during the course of the development and implementation of the RI/FS. It is also formally addressed in the decision documents.	The MEC HA is built on several principles, including systematic planning processes and collaborative decision-making. The input factors and Hazard Levels do not directly reflect these principles. However, when project teams follow these principles, then consensus decision-making and State acceptance is more likely to occur.
Community Acceptance	This assessment evaluates issues and concerns the public may have regarding each of the alternatives. As with State Acceptance, this criterion will be addressed in the decision document once comments on the RI/FS reports and proposed plan have been received.	The MEC HA is built on several principles, including systematic planning processes and collaborative decision-making. The input factors and Hazard Levels do not directly reflect these principles. However, when project teams follow these principles, then consensus decision-making and community acceptance is more likely to occur.

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## GLOSSARY

*The source for each term in this glossary is identified in one of two ways. First, when the term is used in a manner that is specific to this document, the definition is introduced with the phrase, "For the purposes of the MEC HA." Specific references are provided for the definitions of most other terms. To the extent if any that any definitions conflicts in any way with a statutory or promulgated definition, the statutory or promulgated definition controls. These definitions reflect references current as of January 2008.*

**Accessibility.** For the purposes of the MEC HA, a component of explosive hazard that reflects the ease with which a casual user can enter an area and thereby be potentially exposed to a MEC hazard.

**Applicable or relevant and appropriate requirements (ARARs).** *Applicable* requirements are those cleanup standards of control, and other substantive environmental protections, criteria, or limitations promulgated under Federal or State law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site. *Relevant and appropriate* requirements are those same standards mentioned above that, although not applicable to specific aspects of the CERCLA site, address problems or situations sufficiently similar to those encountered at the site that their use is well suited to the particular site.<sup>1</sup>

**Ammunition and explosives storage facility.** Any facility used for the storage of military munitions. This definition includes, but is not limited to, earth-covered magazines, above-ground magazines, and open-air storage areas.<sup>2</sup>

**Amount of MEC.** For the purposes of the MEC HA, this input factor to the MEC HA captures the *relative* quantity of MEC that may remain from past munitions-related activities at the MRS. The greater the number of MEC items, the greater the likelihood that one may be encountered by a receptor. Source area types (such as target areas, open burning/open detonation areas) are used to indicate this relative amount of munitions.

**Archive search report (ASR).** A historical records review process for munitions responses, developed by the U.S. Army Corp of Engineers. An ASR is an initial historical records review conducted at FUDS that have the potential for munitions contamination. The purpose of this records search is to locate and retrieve sufficient information related to the presence and use of military munitions at the site to determine program eligibility. When evidence of military munitions is found, it is documented in the ASR. The ASR serves as initial documentation of the FUDS as an MRS. In the event the ASR shows that a site may contain MEC, additional, more exhaustive historical investigation may be required.<sup>3</sup>

**Baseline risk assessment.** An assessment conducted using the data collected during the RI to characterize the current and potential threats to human health and the environment that may be posed by contaminants migrating to groundwater or surface water, releasing to air by leaching through soil, remaining in the soil, and bioaccumulating in the food chain.<sup>4</sup>

**Basic types of munitions.** Small arms ammunition, grenades, artillery ammunitions, bombs, pyrotechnics, rockets, jet-assisted take-offs, mines (sea/land), demolition materials, guided missiles, cartridge-actuated devices for aircraft use, torpedoes.<sup>5</sup>

**Bulk explosives.** Explosives that are not contained in a cased munition. They can result from industrial processes, discarded donor charges used for demolition, or explosives released from low-ordered rounds. The first two sources could result in large amounts of bulk explosives; large amounts are much less likely with the third source. In the MEC HA, the amount of concern is the amount associated with the “*maximum credible event*” for the scenario in question.

**Buried munitions.** See definition for *discarded military munitions* (DMM).

**Comprehensive Environmental Response, Compensation, and Liability Act ( CERCLA).** Commonly known as Superfund, a Federal law that provides for the cleanup of releases from abandoned waste sites that contain hazardous substances, pollutants, and contaminants.<sup>4</sup>

**Conceptual Site Model (CSM).** A description of a site and its environment that is based on existing knowledge and is updated regularly. It describes sources of MEC at a site; actual, potentially complete, or incomplete exposure pathways; current or reasonably anticipated future land use; and potential receptors. The source-receptor interaction is one descriptive output of a CSM. The CSM serves as a planning instrument, a modeling and data interpretation aid, and a communication device among the response team members.<sup>6</sup>

**Critical infrastructure.** For the purposes of the MEC HA, unoccupied structures that provide vital resource to the surrounding community. Examples of infrastructure include, but are not limited to, electrical transmission or distribution lines, telephone lines, electrical substations, pipelines, bridges and highways.

**Cultural resources.** For the purposes of the MEC HA, cultural, traditional, spiritual, religious, or historical features of a *munitions response site* (e.g., structures, artifacts, symbolism). For example, American Indians or Alaska Natives deem the MRS to be of religious significance if it contains areas that are used by American Indians or Alaska Natives for subsistence activities (e.g., hunting, fishing). Requirements for determining if a particular feature is a cultural resource are found in the National Historic Preservation Act, Native American Graves Protection and Repatriation Act, Archaeological Resources Protection Act, Executive Order 13007, and the American Indian Religious Freedom Act.

**Current land use.** For the purposes of the MEC HA, the prevailing use or activity occurring in a given area. Activities may include a wide variety of intrusive actions, such as construction, camping, or gardening.

**Department of Defense Explosives Safety Board (DDESB).** The Department of Defense organization that’s Chairman serves as the principal corporate manager and overseer of explosives safety and is charged with maintaining effective DoD explosives safety management (ESM) and annually reporting on the DoD ESM posture.<sup>7</sup>

**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 unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations.<sup>8</sup> (10 U.S.C. 2710 (e)(2))

**Ecological resources.** For purposes of the MEC HA, ecological resources include the following: (1) a threatened or endangered species (designated under the Endangered Species Act) present on the MRS; (2) an MRS designated under the ESA as critical habitat for a threatened or endangered species; or (3) identified sensitive ecosystems such as wetlands or breeding grounds present on the MRS.

**Energetic Material Type.** For the purposes of the MEC HA, this input factor is to be used to determine the potential severity of impact should a MEC item function. This factor indicates the type of explosives in the munitions.

**Engineering Controls.** Engineered measures designed to prevent or limit access and exposure to hazardous components left in place at a site or to ensure effectiveness of the chosen remedy. Engineering controls are usually, but not always, fences or other physical barriers to a site.

**Explosion.** A environmental contaminant reaction of any environmental contaminant compound or mechanical mixture that, when initiated, undergoes a very rapid combustion or decomposition, releasing large volumes of highly heated gases that exert pressure on the surrounding medium. Also, a mechanical reaction in which failure of the container causes sudden release of pressure from within a pressure vessel. Depending on the rate of energy release, an explosion can be categorized as a deflagration, a detonation, or a pressure rupture.<sup>5</sup>

**Explosive.** A substance or mixture of substances that is capable, by environmental contaminant reaction, of producing gas at such temperatures, pressure, and speed as to cause damage to the surroundings. The term *explosive* includes all substances variously known as high explosives and propellants, together with igniter, primer, initiator, and pyrotechnic (e.g., illuminant, smoke, delay, flare, and incendiary compositions).<sup>5</sup>

**Explosive Safety Quantity-Distance (ESQD).** The prescribed minimum distance between sites handling, processing, storing or treating hazard Class 1 explosive material and specified exposures (i.e., inhabited buildings, public highways, public railways, other storage or handling facilities or ships, aircraft, etc.) to afford an acceptable degree of protection and safety to the specified exposure. The size of the ESQD arc is proportional to the Net Explosive Weight present.

**Explosives Safety Site Approval.** The authorization obtained prior to beginning new construction, modifying existing structures, or conducting munitions response actions that create new or impact existing ESQD arcs at Navy shore activities where ammunition and explosives are handled, processed, stored or treated, or on a defense site that is known or suspected to contain MEC. Explosives safety site approval is obtained by submitting a Site Approval Request.

**Explosives Safety Submission (ESS).** An ESS is a document that details how explosives safety standards in Service-specific explosives safety directives are applied to munitions response actions. The ESS also addresses how the project complies with applicable environmental requirements related to the management of MEC.

**Feasibility Study (FS).** The FS provides an analysis of remedial action alternatives to address a release at a site. It consists of screening of alternatives and comparison of alternatives to the CERCLA nine criteria. The FS is typically developed in conjunction with the remedial investigation. (40 CFR 300.430 (e)(1)).

**Firing point or position.** The point or location at which a weapon, other than those undergoing demolition, is placed for firing. (For demolitions, the firing position is the point or location at which the firing crew will be located during demolition operations.)<sup>9</sup>

**Fixed ammunition.** Ammunition, except small arms and rocket ammunition, that consists of a cartridge case loaded with propellant and a projectile, which are loaded in one operation into the weapon, the cartridge case being firmly attached to the projectile.<sup>10</sup>

**Formerly used defense sites (FUDS).** Real property that was formerly owned by, leased by, possessed by, or otherwise under the jurisdiction of the Secretary of Defense or the DoD components, including organizations that predate DoD.<sup>11</sup>

**Fragment.** Any complete ammunition item, subassembly, pieces thereof, or its packaging material, which is propelled from the site of an explosion.<sup>12</sup>

**Fragmentation.** The breaking up of the confining material of a environmental contaminant compound or mechanical mixture when an explosion occurs. Fragments may be complete items, subassemblies, or pieces thereof, or pieces of equipment or buildings containing the items.<sup>10</sup>

**Function test range.** For the purposes of the MEC HA, the QA function test range is the area where munitions or weapons systems are tested. Testing may include components, partial functioning, or complete functions of stockpile or developmental items.

**Future land use.** For the purposes of the MEC HA, defined as the type of land use intended to be implemented in a given area.

**Fuze.** (1) A device with explosive components designed to initiate a train of fire or detonation in ordnance. (2) A non-explosive device designed to initiate an explosion in ordnance.<sup>13</sup>

**Fuzed Sensitive DMM.** For the purposes of the MEC HA, DMM with a fuzing mechanism present, but not armed (put into a state of readiness) for use. DMM with special case fuzes can be armed and functioned through human activity (e.g., hand grenades).

**Fuze sensitivity.** For a choice associated with the MEC HA input factor called *MEC classification*, which reflects how sensitive a fuze may be to external forces, both mechanical and environmental. All fuzes that have been fired are assumed to be fully armed and as such have a risk associated with any movement or potential environmental actions on that item. Some fuzes have more risk with any movement (e.g., all-way-acting, cock-striker) or potential environmental conditions (e.g., piezoelectric).<sup>10</sup>

**Hazard.** Any real or potential condition that can cause injury, illness, or death of personnel; damage to or loss of a system, equipment, or property; or damage to the environment.<sup>14</sup>

**Hazard assessment.** For the purposes of the MEC HA, involves evaluation of the real and potential conditions at a munitions response site that can lead to an unplanned explosive incident (an explosive mishap) resulting from a member of the general public (i.e., a receptor) interacting with a MEC item. The evaluation considers the mishap risk (or likelihood) and the severity of the mishap if it occurs. The three components of explosive hazard that are used to conduct the MEC HA are severity, accessibility, and sensitivity.



**Hazard assessment framework.** For the purposes of the MEC HA, the hazard assessment framework incorporates the structure and input factors specified in the HA guidance to meet the objectives of the hazard assessment process.

**Hazard assessment methodology.** For the purposes of the MEC HA, the documentation developed to provide instruction on the objectives, hazard assessment framework, and hazard assessment process as developed by the MEC Hazard Assessment Technical Working Group.

**Hazard assessment process.** For the purposes of the MEC HA, the process by which MEC hazard is determined for munitions response sites. The hazard assessment process consists of the hazard assessment framework and the hazard assessment guidance used to meet the objectives.

**Hazard Level.** For the purposes of the MEC HA, *hazard level* refers to the information produced by the hazard assessment process using the input factors and MEC HA framework. The hazard level categories provide descriptions of the explosive hazard of an MRS.

**High explosive.** An explosive substance designed to function by detonation (e.g., main charge, booster, or primary explosive).<sup>5</sup>

**Impact area.** The identified area within a range intended to capture or contain ammunition, munitions, or explosives and resulting debris, fragments, and components from various weapon systems.<sup>15</sup>

**Incendiary.** A environmental contaminant agent used primarily for igniting combustible substances with which it is in contact by generating sufficient heat to cause ignition.<sup>16</sup>

**Inert items.** Inert ordnance poses no explosive hazard to personnel or material. Includes those practice and service items manufactured or made empty or inert for use in training, for desk nameplates, on display boards, in demonstrations or public functions, and in offices or work areas of engineers or other personnel.<sup>17</sup> Inert items should not be confused with practice or training munitions (see *Spotting charge*).

**Input factor.** For the purposes of the MEC HA, one of several options for describing a hazardous component of the MRS. The input factor is assessed and subsequently assigned a score in the hazard assessment.

**Input factor categories.** For the purposes of the MEC HA, within each input factor, one of several options to describe the site characteristics associated with each input factor. The selection of the input factor category results in the score for that input factor. Each category has a separate score that is equal to or less than the total score available for that input factor.

**Input factor component.** For the purposes of the MEC HA, conditions that describe the explosive hazard components and frame the input factors. Input factor components are severity, accessibility, and sensitivity.

**Institutional controls.** Non-engineered measures designed to prevent or limit exposure to hazardous substances left in place at a site or to ensure effectiveness of the chosen remedy. Institutional controls are usually, but not always, legal controls, such as easements, restrictive covenants, and zoning ordinances.<sup>18</sup>

**Interaction.** The means by which receptors come in contact with MEC, involving two closely connected elements: access and activity. Access is the ability of a receptor to enter the source

area. Activity is any action by a receptor that may result in direct contact with individual MEC items.<sup>6</sup>

**Intrusive depth.** For the purposes of the MEC HA, the depth below ground surface that activity on the land may intrude. Examples include construction activity, gardening, agricultural tilling, or erection of a tent (inserting stakes into the ground). This is a required information element for the input factor that is Minimum MEC Depth Relative to Maximum Intrusive Depth.

**Land use controls (LUCs).** Any type of physical (engineering controls), or legal, or administrative mechanisms (institutional controls) that restrict the use of, or limit access to, real property to prevent or reduce risks to human health, safety, and the environment. The objective of LUCs is to ensure that future land use remains compatible with the land use that was the basis for the evaluation, selection, and implementation of the response action. As such, LUCs are a common component of any response action that does not allow for unrestricted land use following the completion of the response action or of any response action that allows for unrestricted use, but that requires that the integrity of the remedy be protected. For example, in the case of a response to address military munitions (i.e., UXO or DMM), LUCs will likely be necessary to ensure protection of human health, public safety, and the environment, since technical limitations suggest that complete removal of the military munitions may not be possible.<sup>19</sup>

**Lead agency.** The agency that provides the on-scene coordinator or remedial project manager that will plan and implement response actions under the National Contingency Plan (NCP). EPA, the U.S. Coast Guard, another Federal agency, or a State may be the lead agency for a response action. In the case of a release of a hazardous substance, pollutant, or contaminant, where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of a Federal agency, that agency will be the lead agency. Lead agencies will operate under contract or by cooperative agreement under Section 104(d)(1) of CERCLA, or will be designated by a Superfund Memorandum of Agreement (SMOA) under subpart F of the NCP or other agreements.<sup>4</sup>

**Location of additional human receptors.** For the purposes of the MEC HA, an input factor to the MEC HA that applies to high explosives (i.e., bulk high explosives, or munitions filled with high explosives), fragmented munitions that contain high explosives (i.e., 37 mm), and munitions containing white phosphorus, and addresses the possibility that additional receptors, beyond the receptor that might cause an item to function, may be exposed to overpressure and fragmentation hazards from the detonation of the item.

**Maneuver area.** Area used for conducting military exercises in a simulated conflict area or war zone. It can also be used for other non-war simulations. Training aids and military munitions simulators, such as training ammunition, artillery simulators, smoke grenades, pyrotechnics, mine simulators, and riot control agents, are used in the maneuver area.

**MEC (Munitions and explosives of concern).** The term, which distinguishes specific categories of military munitions that may pose unique explosive safety risks, may include (1) unexploded ordnance (UXO) as defined in 10 U.S.C. 2710 (e)(9) and 40 CFR 266.201; (2) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e)(2); (3) or munitions constituents (MC) present in high enough concentrations to pose an explosive hazard.<sup>8</sup>

**MEC Classification.** For the purposes of the MEC HA, this input factor is associated with the MEC HA sensitivity component. MEC items are described as bulk explosives, UXO or DMM, and fuzed or unfuzed, and in terms of the sensitivity of the fuze.

**MEC Depth.** For the purposes of the MEC HA, MEC depth is the information required for the input factor “Minimum MEC Depth Relative to the Maximum Intrusive Depth” in the accessibility component. It is the level on or below ground surface at which MEC is found.

**MEC Size.** For the purposes of the MEC HA, this input factor in the sensitivity component indicates the ease with which a MEC item can be moved by receptor activity.

**Migration mechanism.** For the purposes of the MEC HA, the natural physical forces in an MRS (e.g., frost heave, erosion, etc.) that can expose subsurface MEC items or move surface or subsurface MEC items.

**Migration potential.** For the purposes of the MEC HA, an input factor in the accessibility category that is defined as the likelihood of MEC items to be moved by natural processes (e.g., erosion, frost heave, etc.).

**Military munitions.** All ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for the national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy; and National Guard Personnel. The term *military munitions* includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, environmental contaminant 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, other than non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.)<sup>8</sup>

**Minimum MEC Depth Relative to Maximum Intrusive Depth.** For the purposes of the MEC HA, this input factor describes the minimum depth of the MEC items (e.g., on the surface or below the surface) in relation to the maximum intrusive depth likely to occur from activities that take place in that area.

**Munitions constituents (MC).** Any materials originating from unexploded ordnance, discarded military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710 (e)(4)).<sup>8</sup>

**Munitions response.** Means response actions, including investigation, removal, and remedial actions to address the explosives safety, human health, or environmental risks presented by unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC), or to support a determination that no removal or remedial action is required.<sup>8</sup>

**Munitions response area (MRA).** Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. A munitions area comprises one or more munitions response sites.<sup>8</sup>

**Munitions response site (MRS).** A discrete location within an MRA that is known to require a munitions response.<sup>8</sup>

**Munitions Response Site Prioritization Protocol (Protocol).** A DoD protocol whose purpose is to assign a relative priority for munitions response to each location in the inventory of munitions response sites known or suspected of containing unexploded ordnance, discarded military munitions, or munitions constituents.<sup>8</sup>

**National Oil and Hazardous Substances Pollution Contingency Plan, or National Contingency Plan (NCP).** The regulations for responding to releases and threatened releases of hazardous substances, pollutants, or contaminants under CERCLA.<sup>4</sup>

**Net explosive weight.** The total weight of all high explosives and all propellants, expressed in pounds.<sup>5</sup>

**Open burning (OB).** The combustion of any material without control of combustion air to maintain adequate temperature for efficient combustion, without containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and without control of emissions of the gaseous combustion products.

**Open burning/open detonation (OB/OD) area.** Any area on an installation that was formally designated for disposal of munitions by either open burning or open detonation.

**Open detonation (OD).** A environmental contaminant process used for the treatment of unserviceable, obsolete, or waste munitions whereby an explosive donor charge initiates the munitions to be detonated. Although surface detonations can be performed under certain circumstances, most munitions are treated in 4- to 6-foot-deep pits for safety purposes. OD sites may be permitted as miscellaneous units as part of the EPA permitting process for treatment, storage, and disposal facilities.<sup>3</sup>

**Potential Contact Hours.** For the purposes of the MEC HA, this input factor describes the number of receptors and the amount of time each receptor spends in the MRS. This factor is calculated on a yearly basis for activities that may result in exposure, that is, current and future outdoor activities that could bring receptors into contact with MEC items. For cases where MEC is on the surface, any outdoor activity could lead to exposure; for cases where MEC is located subsurface only, the activities in question must have an intrusive component (e.g., digging a fire pit or latrine, or trail or fence maintenance).

**Preliminary assessment (PA).** Under CERCLA, PA involves review of existing information and a site reconnaissance, if appropriate, to determine if a release may require additional investigation or action.<sup>4</sup>

**Propellant, solid.** Explosive compositions used to propel projectiles and rockets and to generate gases for powering auxiliary devices.<sup>11</sup>

**Proximity.** For the purposes of the MEC HA, proximity applies only to high explosives and addresses the possibility that specific resources may be exposed to overpressure and/or fragmentation hazards from the detonation of an item.

**Pyrotechnics.** Used to send signals, to illuminate areas of interest, to simulate other weapons during training, and as ignition elements for certain weapons. When ignited, pyrotechnics undergo an energetic environmental contaminant reaction at a controlled rate intended to

produce, on demand in various combinations, specific time delays or quantities of heat, noise, smoke, light, or infrared radiation.<sup>20</sup>

**Range.** The term *range*, when used in a geographic sense, means a designated land or water area that is set aside, managed, and used for range activities of the Department of Defense. The term includes the following: (a) firing lines and positions, maneuver areas, firing lines, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas; (b) airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration. (10 U.S.C. 101 (e)(3))<sup>21</sup>

**Range fan.** That part of the range that includes firing points, target areas, and buffer areas.

**Receptor.** Exposed human or ecological individual relative to the exposure pathway considered.<sup>22</sup>

**Release.** Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant).<sup>23</sup>

**Remedial action (or Remedy).** Those actions consistent with a permanent remedy taken instead of, or in addition to, a removal action in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. (40 CFR 300.430(d)(1))<sup>4</sup>

**Remedial alternatives.** Potential remedies evaluated during the feasibility study that may include the following:

- One or more alternatives that involve little or no treatment, but provide protection of human health and the environment primarily by preventing or controlling exposure to hazardous substances, pollutants, or contaminants, through engineering controls, for example, containment, and, as necessary, institutional controls.
- For source control actions, an alternative in which treatment that reduces the toxicity, mobility, or volume of the hazardous substances, pollutants, or contaminants is a principal element.
- For groundwater response action, a limited number of remedial actions that attain site-specific remediation levels within different restoration time periods. (40 CFR 300.430(d)(1))<sup>4</sup>

**Remedial investigation (RI).** An investigation conducted for the purpose of collecting data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives. The RI includes field investigations, treatability studies, and a baseline risk assessment. (40 CFR 300.430 (d)(1))<sup>4</sup>

**Removal action.** Short-term response actions under CERCLA that address immediate threats to public health and the environment. (40 CFR 300.415)<sup>23</sup>

**Removal investigation** (also called a *Removal site evaluation*). The investigation conducted to see if removal action is necessary or appropriate. (40 CFR 300.410)<sup>23</sup>

**Resource Conservation and Recovery Act (RCRA).** The Federal statute that governs the management of all hazardous waste from cradle to grave. RCRA covers requirements regarding identification, management, and cleanup of waste, including (1) identification of when a waste is solid or hazardous; (2) management of waste transportation, storage, treatment, and disposal; and (3) corrective action, including investigation and cleanup, of old solid waste management units.<sup>24</sup>

**Response action.** As defined in Section 101 of CERCLA, remove, removal, remedy, or remedial action, including enforcement activities related thereto.<sup>23</sup>

**Risk.** The product of the probability or frequency that an accident will occur within a certain time and the accident's consequences to people, property, or the environment.<sup>5</sup>

**Risk characterization (also referred to as risk assessment).** A process used to identify potential risks posed by environmental contaminants. During risk characterization, environmental contaminant-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, is compared with measured contaminant exposure levels and to levels predicted through environmental fate and transport modeling. These comparisons determine whether concentrations of contaminants at or near the site are affecting, or could potentially affect, human health or the environment. Results of this analysis are presented with all critical assumptions and uncertainties so that significant risks can be identified.<sup>4</sup>

**Risk management.** A process by which decision-makers reduce or offset risk.<sup>190</sup>

**Rocket.** A complete missile that derives thrust from ejection of hot gases generated from propellants carried in the missiles.<sup>11</sup>

**Sensitivity.** For the purposes of the MEC HA, a component of explosive hazard that reflects the likelihood that a receptor will be able to interact with a MEC item such that it will detonate.

**Sensitive UXO.** For the purposes of the MEC HA, UXO items with fuzes that are more likely to function with any movement (e.g., all-way-acting fuzes) or potential environmental conditions (e.g., piezoelectric fuzes).

**Severity.** For the purposes of the MEC HA, a component of explosive hazard that reflects the potential consequences (e.g., death, severe injury, property damage, etc.) of the MEC item functioning.

**Site Accessibility.** For the purposes of the MEC HA, this input factor describes the ease with which people can access an MRS. The input factor captures the contribution that such receptor activities make to the likelihood that a receptor will encounter a MEC item.

**Site inspection (SI).** An on-site investigation to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.<sup>4</sup>

**Spotting charge.** Most practice or training munitions contain a small amount of smoke-producing material to facilitate locating that round during training activities. A few practice or training munitions, such as bombs, may contain small amounts of high explosives.

**Structure of hazard assessment.** For the purposes of the MEC HA, the interrelation of the various parts that make up the hazard assessment framework.

**Surface.** For the purposes of the MEC HA, the position of a munitions that is (1) entirely or partially exposed above the ground surface, or (2) entirely or partially exposed above the surface of a water body (e.g., as a result of tidal activity).

**Target impact area.** A point on the range at which the munitions are fired.

**Unexploded ordnance (UXO).** Military munitions that have been primed, fuzed, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and that remain unexploded either by malfunction, design, or any other cause. (10 U.S.C. 101 (e)(5))<sup>5</sup>

**White phosphorus (WP).** A bursting smoke filler that is frequently used in munitions activity. It burns rapidly when exposed to oxygen. In soils with low oxygen, unreacted white phosphorus can lie dormant for years but may re-ignite if exposed to oxygen.

#### Sources:

1. U.S. Environmental Protection Agency. *CERCLA Compliance with Other Laws Manual* "Guide to Manual." Directive 9234.2-02FS, September 1989.
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3. Department of Defense. *Policy to Implement the EPA's Military Munitions Rule*. July 1, 1998.
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5. Department of Defense 6055.9-STD, *Department of Defense Ammunition and Explosives Safety Standards*, October 5, 2004.
6. U.S. Army Corps of Engineers. *Conceptual Site Models for Ordnance and Explosives and Hazardous, Toxic and Radioactive Waste Projects*, EM 1110-1-1200, February 3, 2003.
7. Department of Defense Directive 6055.9E. *Explosives Safety Management and the DoD Explosives Safety Board*, August 19, 2005.
8. Department of Defense. *Military Munitions Response Site Prioritization Protocol (Final Rule)*, 32 CFR 179, October 5, 2005.
9. U.S. Army Regulation 385-63 MCO P3570.1A, *Policies and Procedures for Firing Ammunition for Training, Target Practice, and Combat*, October 15, 1983.
10. Department of the Army. *Safety Manual*, AMC-R 385-100, September 1995.
11. U.S. Army Corps of Engineers. *Engineering and Design Ordnance and Explosives Response*, Pamphlet No. 1110-1-18, April 24, 2000.
12. TB 700-2/NAVSEAINST 8020.8B/TO 11A-1-47/DLAR 8220.1, ,pp. 2-75, January 5, 1998.
13. Federal Advisory Committee for the Development of Innovative Technologies, *Unexploded Ordnance (UXO): An Overview*, Naval Explosive Ordnance Disposal Technology Division, UXO Countermeasures Department, October 1996.

14. Department of Defense. *Standard Practice for System Safety*, MIL-STD-882D.
15. Department of Defense Directive Number 4715.11, *Environmental and Explosives Safety Management on Operational Ranges within the United States*, May 2004.
16. Department of the Army and the Air Force. Technical Manual No. 3-215 and Air Force Manual No. 355.7, *Military Chemistry and Environmental contaminant Agents*, August 1956.
17. Department of the Army, *Ammunition and Explosive Safety Standards*-(DA PAM 385-64), December 15, 1999.
18. U.S. Environmental Protection Agency, Federal Facilities Restoration and Reuse Office. *Institutional Controls and Transfer of Real Property Under CERCLA Section 120 (h)(3)(a), (b), or (c)*, Interim Final Guidance, January 2000.
19. Department of Defense. *Management Guidance for Defense Environmental Program*, Office of the Deputy Under Secretary of Defense (Installations and Environment), September 2001.
20. Headquarters, Department of the Army. *Pyrotechnic Simulators*, TM 9-1370-207-10, March 31, 1991.
21. Department of Defense Definitions (Attachment B) provided by 10 U.S.C.101 (FY 2004 National Defense Authorization Act).
22. U.S. EPA. *Risk Assessment Guidance for Superfund: Volume 1 – Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)*, Interim, January 1998.
23. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601 et seq.
24. Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 et seq.



**APPENDIX A**  
**AUTOMATED MECHA WORKBOOK**  
*(MECHA Automated Workbook V1.0.xls)*

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## **APPENDIX B**

### **EXAMPLE MEC HA WORKSHEETS AND REPORT**

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### MEC HA Summary Information

Site ID:   
 Date:

### Comments

Please identify the single specific area to be assessed in this hazard assessment. From this point forward, all references to "site" or "MRS" refer to the specific area that you have defined.

**A. Enter a unique identifier for the site:**

Provide a list of information sources used for this hazard assessment. As you are completing the worksheets, use the "Select Ref(s)" buttons at the ends of each subsection to select the applicable information sources from the list below.

Ref. No.	Title (include version, publication date)
1	<input type="text" value="Camp Sample Archive Search Report, Final, 5/1999"/>
2	<input type="text" value="Camp Sample PA/SI Report, Final, 5/2004"/>
3	<input type="text" value="Camp Sample RI/FS Work Plan, Interim Final, 5/2005"/>
4	<input type="text" value="Remedial Investigation Field Notes, 6-8/2005"/>
5	<input type="text" value="Camp Sample Explosive Safety Submission, Final, 4/2005"/>
6	<input type="text"/>
7	<input type="text"/>
8	<input type="text"/>
9	<input type="text"/>
10	<input type="text"/>
11	<input type="text"/>
12	<input type="text"/>

**B. Briefly describe the site:**

1. Area (include units):

2. Past munitions-related use:

3. Current land-use activities (list all that occur):

4. Are changes to the future land-use planned?

5. What is the basis for the site boundaries?

Geophysical survey performed during the remedial investigation in June, 2005.

6. How certain are the site boundaries?

Reference(s) for Part B:

**Remedial Investigation Field Notes, 6-8/2005**

**C. Historical Clearances**

1. Have there been any historical clearances at the site?

2. If a clearance occurred:

a. What year was the clearance performed?

b. Provide a description of the clearance activity (e.g., extent, depth, amount of munitions-related items removed, types and sizes of removed items, and whether metal detectors were used):

Reference(s) for Part C:

**Camp Sample Archive Search Report, Final, 5/1999**

*D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)*



Site ID: **Camp Sample HEAT Target Area**  
Date:

**Cased Munitions Information**

Item No.	Munition Type (e.g., mortar, projectile, etc.)	Munition Size Units	Munition Size Mark/ Model	Energetic Material Type	Is Munition Fuzed?	Fuzing Type	Fuze Condition	Minimum Depth for Munition (ft)	Location of Munitions	Comments (include rationale for munitions that are "subsurface only")	
1	Rockets	2.36	inches		High Explosive	Yes	Impact	Armed	0	Surface and Subsurface	
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:  
**Camp Sample PA/SI Report, Final, 5/2004**  
**Remedial Investigation Field Notes, 6-8/2005**

**Bulk Explosive Information**

Item No.	Explosive Type	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above:

Site ID: **Camp Sample HEAT Target Area**  
Date:

**Activities Currently Occurring at the Site**

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours per year a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	Hiking	2,500	4	<b>10,000</b>	0	50 hikers/wk x 50 wks/yr
2	Nature Trail/Park Area Maintenance	100	8	<b>800</b>	2	1 worker x 2 days/wk x 50 wks/yr
3	Wildlife Research	48	8	<b>384</b>	0	2 workers x 2 days/mo x 12 mos/yr
4						
5						
6						
7						
8						
9						
10						
11						
12						
Total Potential Contact Time (receptor hrs/yr):				<b>11,184</b>		
Maximum intrusive depth at site (ft):					<b>2</b>	

Reference(s) for table above:

- Camp Sample RI/FS Work Plan, Interim Final, 5/2005**
- Camp Sample Explosive Safety Submission, Final, 4/2005**

Select Ref(s)



Site ID: **Camp Sample HEAT Target Area**  
Date:

**Planned Remedial or Removal Actions**

Response Action No.	Response Action Description	Expected Resulting Minimum MEC Depth (ft)	Expected Resulting Site Accessibility	Will land use activities change if this response action is implemented?	What is the expected scope of cleanup?	Comments
1	Access/Activity Change	0	Moderate Accessibility	Yes	No MEC cleanup	
2	Surface Clearance	0.25	Full Accessibility	No	cleanup of MECs located on the surface only	
3	Surface Clearance & Access/Activity Change	0.25	Moderate Accessibility	Yes	cleanup of MECs located on the surface only	
4	Subsurface Clearance	2.5	Full Accessibility	No	cleanup of MECs located both on the surface and subsurface	
5						
6						

**According to the 'Summary Info' worksheet, no future land uses are planned. For those alternatives where you answered 'No' in Column E, the land use activities will be assessed against current land uses.**

--	--

Reference(s) for table above:

**Camp Sample RI/FS Work Plan, Interim Final, 5/2005**  
**Remedial Investigation Field Notes, 6-8/2005**

Select Ref(s)
---------------

Site ID: **Camp Sample HEAT Target Area**  
Date:

***This worksheet needs to be completed for each remedial/removal action alternative listed in the 'Remedial-Removal Action' worksheet that will cause a change in land use.***

**Land Use Activities Planned After Response Alternative #1: Access/Activity Change**

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	Wildlife Research	48	8	384	0	2 researchers x 2 days/mo x 12 mos/yr
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
Total Potential Contact Time (receptor hrs/yr):				<b>384</b>		
Maximum intrusive depth at site (ft):					<b>0</b>	

Reference(s) for table above:

Select Ref(s)

**Land Use Activities Planned After Response Alternative #3: Surface Clearance & Access/Activity Change**

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	Wildlife Research	48	8	384	0	2 researchers x 2 days/mo x 12 mos/yr
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
Total Potential Contact Time (receptor hrs/yr):				<b>384</b>		
Maximum intrusive depth at site (ft):					<b>0</b>	

Reference(s) for table above:

Select Ref(s)

**Camp  
Sample  
HEAT  
Target Area**

Site ID:  
Date:

**Energetic Material Type Input Factor Categories**

The following table is used to determine scores associated with the energetic materials. Materials are listed in order from most hazardous to least hazardous.

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
High Explosive and Low Explosive Filler in Fragmenting Rounds	100	100	100
White Phosphorus	70	70	70
Pyrotechnic	60	60	60
Propellant	50	50	50
Spotting Charge	40	40	40
Incendiary	30	30	30

**The most hazardous type of energetic material listed in the 'Munitions, Bulk Explosive Info' Worksheet falls under the category 'High Explosive and Low Explosive Filler in Fragmenting Rounds'.**

**Score**

Baseline Conditions: **100**  
Surface Cleanup: **100**  
Subsurface Cleanup: **100**

**Location of Additional Human Receptors Input Factor Categories**

- What is the Explosive Safety Quantity Distance (ESQD) from the Explosive Siting Plan or the Explosive Safety Submission for the MRS?
- Are there currently any features or facilities where people may congregate within the MRS, or within the ESQD arc?
- Please describe the facility or feature.

810 feet  
No

MEC Item(s) used to calculate the ESQD for current use activities

Select MEC(s)

**Item #1. Rockets (2.36inches, High Explosive)**

The following table is used to determine scores associated with the location of additional human receptors (current use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

**4. Current use activities are 'Outside of the ESQD arc', based on Question 2.'**

**Score**

Baseline Conditions: **0**  
Surface Cleanup: **0**  
Subsurface Cleanup: **0**

**Comments**

Empty comment box for user input.







### Minimum MEC Depth Relative to the Maximum Intrusive Depth Input Factor Categories

#### Current Use Activities

The shallowest minimum MEC depth, based on the 'Cased Munitions Information' Worksheet:

0 ft

The deepest intrusive depth:

2 ft

The table below is used to determine scores associated with the minimum MEC depth relative to the maximum intrusive depth:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240	150	95
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth does not overlap with subsurface MEC.	240	50	25
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150	N/A	95
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	50	N/A	25

**Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth will overlap after cleanup. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.' For 'Current Use Activities', only Baseline Conditions are considered.**

240 Score

#### Future Use Activities

Deepest intrusive depth:

ft

**Not enough information has been entered to determine the input factor category.**

Score

#### Response Alternative No. 1: Access/Activity Change

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet):

0 ft

**Based on the 'Planned Remedial or Removal Actions' Worksheet, land use activities will change if this alternative is implemented.**

**Maximum Intrusive Depth, based on the maximum intrusive depth listed for this alternative (see 'Post-Response Land Use' Worksheet)**

0 ft

**Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.'**

Score

240

Baseline Conditions:

Surface Cleanup:

Subsurface Cleanup:

#### Response Alternative No. 2: Surface Clearance

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet):

0.25 ft

**Based on the 'Planned Remedial or Removal Actions' Worksheet, land use activities will not change if this alternative is implemented.**

**Maximum Intrusive Depth, based on the maximum intrusive depth listed for current use activities (see 'Current and Future Activities' Worksheet)**

2 ft

**Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.'**





### Migration Potential Input Factor Categories

Is there any physical or historical evidence that indicates it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items, or move surface or subsurface MEC items?

If "yes", describe the nature of natural forces. Indicate key areas of potential migration (e.g., overland water flow) on a map as appropriate (attach a map to the bottom of this sheet, or as a separate worksheet).

The following table is used to determine scores associated with the migration potential:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Possible	30	30	10
Unlikely	10	10	10

**Based on the question above, migration potential is 'Unlikely.'**

**Score**  
Baseline Conditions: **10**  
Surface Cleanup: **10**  
Subsurface Cleanup: **10**

Reference(s) for above information:

### MEC Classification Input Factor Categories

**Cased munitions information has been inputted into the 'Munitions, Bulk Explosive Info' Worksheet; therefore, bulk explosives do not comprise all MECs for this MRS.**

**The 'Amount of MEC' category is 'Target Area'. It cannot be automatically assumed that the MEC items from this category are DMM. Therefore, the conservative assumption is that the MEC items in this MRS are UXO.**

Has a technical assessment shown that MEC in the OB/OD Area is DMM?

Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet:

- Submunitions
- Rifle-propelled 40mm projectiles (often called 40mm grenades)
- Munitions with white phosphorus filler
- High explosive anti-tank (HEAT) rounds
- Hand grenades
- Mortars

At least one item listed in the 'Munitions, Bulk Explosive Info' Worksheet was identified as 'fuzed'.

The following table is used to determine scores associated with MEC classification categories:

	UXO Special Case	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
UXO Special Case		180	180	180
UXO		110	110	110
Fuzed DMM Special Case		105	105	105
Fuzed DMM		55	55	55
Unfuzed DMM		45	45	45
Bulk Explosives		45	45	45

**Based on your answers above, the MEC classification is 'UXO Special Case'.**

**Score**  
Baseline Conditions: **180**  
Surface Cleanup: **180**  
Subsurface Cleanup: **180**

### MEC Size Input Factor Categories

The following table is used to determine scores associated with MEC Size:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Small	Any munitions (from the 'Munitions, Bulk Explosive Info' Worksheet) weigh less than 90 lbs; small enough for a receptor to be able to move and initiate a detonation	40	40	40
Large	All munitions weigh more than 90 lbs; too large to move without equipment	0	0	0

Based on the definitions above and the types of munitions at the site (see 'Munitions, Bulk Explosive Info' Worksheet), the MEC Size Input Factor is:

**Score**

Baseline Conditions: **40**  
Surface Cleanup: **40**  
Subsurface Cleanup: **40**

Vertical column of light blue rectangular boxes, likely a placeholder for a map or additional data entry.

**Scoring Summary**

Site ID: <b>Camp Sample HEAT Target Area</b>		a. Scoring Summary for Current Use Activities	
Date:		Response Action Cleanup:	No Response Action
Input Factor	Input Factor Category	Score	
I. Energetic Material Type	High Explosive and Low Explosive Filler in Fragmenting Rounds		100
II. Location of Additional Human Receptors	Outside of the ESQD arc		0
III. Site Accessibility	Full Accessibility		80
IV. Potential Contact Hours	10,000 to 99,999 receptor-hrs/yr		40
V. Amount of MEC	Target Area		180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth	Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.		240
VII. Migration Potential	Unlikely		10
VIII. MEC Classification	UXO Special Case		180
IX. MEC Size	Small		40
		<b>Total Score</b>	<b>870</b>
		<b>Hazard Level Category</b>	<b>1</b>

Site ID: <b>Camp Sample HEAT Target Area</b>		b. Scoring Summary for Future Use Activities	
Date:		Response Action Cleanup:	No Response Action
Input Factor	Input Factor Category	Score	
I. Energetic Material Type	High Explosive and Low Explosive Filler in Fragmenting Rounds		100
II. Location of Additional Human Receptors			
III. Site Accessibility			
IV. Potential Contact Hours			
V. Amount of MEC	Target Area		180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth			
VII. Migration Potential	Unlikely		10
VIII. MEC Classification	UXO Special Case		180
IX. MEC Size	Small		40
		<b>Total Score</b>	<b>510</b>
		<b>Hazard Level Category</b>	<b>4</b>

Site ID: <b>Camp Sample HEAT Target Area</b>		c. Scoring Summary for Response Alternative 1: Access/Activity Change	
Date:		Response Action Cleanup:	No MEC cleanup
Input Factor	Input Factor Category	Score	
I. Energetic Material Type	High Explosive and Low Explosive Filler in Fragmenting Rounds		100
II. Location of Additional Human Receptors	Outside of the ESQD arc		0
III. Site Accessibility	Moderate Accessibility		55
IV. Potential Contact Hours	<10,000 receptor-hrs/yr		15
V. Amount of MEC	Target Area		180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth	Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.		240
VII. Migration Potential	Unlikely		10
VIII. MEC Classification	UXO Special Case		180
IX. MEC Size	Small		40
		<b>Total Score</b>	<b>820</b>
		<b>Hazard Level Category</b>	<b>2</b>

Site ID: <b>Camp Sample HEAT Target Area</b>		d. Scoring Summary for Response Alternative 2: Surface Clearance	
Date:		Response Action Cleanup:	cleanup of MECs located on the surface only
Input Factor	Input Factor Category	Score	
I. Energetic Material Type	High Explosive and Low Explosive Filler in Fragmenting Rounds		100
II. Location of Additional Human Receptors	Outside of the ESQD arc		0
III. Site Accessibility	Full Accessibility		80
IV. Potential Contact Hours	10,000 to 99,999 receptor-hrs/yr		20
V. Amount of MEC	Target Area		120
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth	Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.		150
VII. Migration Potential	Unlikely		10
VIII. MEC Classification	UXO Special Case		180
IX. MEC Size	Small		40
		<b>Total Score</b>	<b>700</b>
		<b>Hazard Level Category</b>	<b>3</b>

Site ID: <b>Camp Sample HEAT Target Area</b>		e. Scoring Summary for Response Alternative 3: Surface Clearance & Access/Activity Change	
Date:		Response Action Cleanup:	cleanup of MECs located on the surface only
Input Factor	Input Factor Category	Score	
I. Energetic Material Type	High Explosive and Low Explosive Filler in Fragmenting Rounds	100	
II. Location of Additional Human Receptors	Outside of the ESQD arc	0	
III. Site Accessibility	Moderate Accessibility	55	
IV. Potential Contact Hours	<10,000 receptor-hrs/yr	10	
V. Amount of MEC	Target Area	120	
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth	Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	50	
VII. Migration Potential	Unlikely	10	
VIII. MEC Classification	UXO Special Case	180	
IX. MEC Size	Small	40	
		<b>Total Score</b>	<b>565</b>
		<b>Hazard Level Category</b>	<b>3</b>

Site ID: <b>Camp Sample HEAT Target Area</b>		f. Scoring Summary for Response Alternative 4: Subsurface Clearance	
Date:		Response Action Cleanup:	cleanup of MECs located both on the surface and subsurface
Input Factor	Input Factor Category	Score	
I. Energetic Material Type	High Explosive and Low Explosive Filler in Fragmenting Rounds	100	
II. Location of Additional Human Receptors	Outside of the ESQD arc	0	
III. Site Accessibility	Full Accessibility	80	
IV. Potential Contact Hours	10,000 to 99,999 receptor-hrs/yr	10	
V. Amount of MEC	Target Area	30	
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth	Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	25	
VII. Migration Potential	Unlikely	10	
VIII. MEC Classification	UXO Special Case	180	
IX. MEC Size	Small	40	
		<b>Total Score</b>	<b>475</b>
		<b>Hazard Level Category</b>	<b>4</b>

MEC HA Hazard Level Determination		
<b>Site ID:</b> Area		
<b>Date:</b>		
	Hazard Level Category	Score
a. Current Use Activities	<b>1</b>	<b>870</b>
b. Future Use Activities	4	510
c. Response Alternative 1: Access/Activity Change	<b>2</b>	<b>820</b>
d. Response Alternative 2: Surface Clearance	<b>3</b>	<b>700</b>
Change	<b>3</b>	<b>565</b>
f. Response Alternative 4: Subsurface Clearance	<b>4</b>	<b>475</b>
g. Response Alternative 5:		
h. Response Alternative 6:		
Characteristics of the MRS		
Is critical infrastructure located within the MRS or within the ESQD arc?	No	
Are cultural resources located within the MRS or within the ESQD arc?	No	
Are significant ecological resources located within the MRS or within the ESQD arc?	No	

## **APPENDIX C**

### **ANSWERS TO FREQUENTLY ASKED QUESTIONS**

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## **Frequently Asked Questions for Munitions and Explosives of Concern Hazard Assessment (MEC HA)**

### **1. Why was the MEC HA developed?**

The MEC HA was developed for a number of reasons:

- Because there was no universally accepted process to assess explosive safety hazards. The existing process to assess chemical risks is not suitable for assessing the explosive safety hazards associated with MEC.
- To meet the National Contingency Plan (NCP) directions for site-specific risk assessments under CERCLA, when applied to sites containing MEC. A fundamental part of the CERCLA process is the use of a risk assessment to facilitate understanding of whether and what kinds of actions should be undertaken.
- To provide a process for evaluating explosive hazards at a variety of munitions response sites (MRS), thereby saving project team resources that otherwise would have been applied to develop other site-specific hazard assessment tools.
- To provide a nationally recognized, uniform process to evaluate MRS conditions and support confidence in decision-making.
- To provide a transparent process to facilitate communication among project teams and stakeholders.
- Because EPA, DoD, Federal Land Managers, Tribal interests, and States agreed that a consensus methodology would be a valuable tool to support CERCLA Response Actions for MEC.

### **2. What are the expected benefits of the MEC HA?**

In addition to meeting the NCP directions for a risk assessment appropriate to the requirements of a site, the implementation of a common technical framework for a MEC HA is expected to provide substantial benefits at both the project team and national program level. It is designed to save both time and money in the investigation and decision-making process for a MRS. It is also designed to facilitate communication by contributing to a common understanding within project team and among other stakeholders of the nature of the hazard present, and the options for addressing that hazard. For project teams, the MEC HA is designed to:

- Provide a uniform process for multiple MRSs. Repeated use of the MEC HA by project teams should reduce costs and streamline oversight.
- Support the systematic planning process.
- Focus investigations on key data that should be collected to support decisions.
- Shorten the time-frame and costs to support site management decisions with a consistent process.

- Facilitate site-specific response decisions, including the evaluation of removal or remedial alternatives and identification of reasonably anticipated future land use activities.

At the national program level, the MEC HA is designed to:

- Increase confidence in project team decisions due to consistent approach and applications.
- Promote cost and time savings, which in turn will mean that more funds freed up for cleanup across the country.

### **3. When is the MEC HA Used in the CERCLA Process?**

The principle use of the MEC HA is after a removal investigation or remedial investigation and during the development of an engineering evaluation/cost evaluation (EE/CA) or feasibility study (FS).

For removal investigations and evaluations in the EE/CA report, the MEC HA is designed to support the following CERCLA removal authority activities:

- Evaluation of baseline explosive safety hazard conditions.
- Input to evaluation of removal alternatives criteria (implementability, effectiveness).

For remedial investigations and evaluations, the MC HA is designed to support the following CERCLA remedial authority activities:

- Evaluation of baseline explosive safety hazard conditions.
- Input to evaluation of remedial alternatives criteria (threshold and balancing criteria).

The MEC HA process may be helpful at several other steps in the CERCLA process.

- **After Removal or Remedial Action Completion** — It may be useful to rerun the MEC HA at the completion of a removal or remedial action if the cleanup objectives of the selected actions were not achieved; or if site conditions (e.g., land use activities) changed; or new information became available after the action was completed.
  - **As Part of Five Year Review Process** — The MEC HA can support evaluating the continued effectiveness of a remedy. This can include the impact of changes in land use activities and the effectiveness of land use controls. If conditions have not changed, it should not be necessary to rerun the MEC HA. If conditions have changed, project teams may find it to be useful to do so.
  - **As Part of the CERCLA Closeout Process.** The MEC HA can support evaluations for CERCLA closeout determinations.

### **4. Will an environmental chemical risk assessment also be required for an MRS?**

Yes, if there is evidence of the presence of munitions constituents or other environmental contaminants. The chemical risk assessment processes should be used to assess the potential

risks to human health and the environment from munitions constituents. The MEC HA Methodology is separate and distinct from those processes and does not affect the risk assessment processes.

#### **5. Does the MEC HA analysis provide the answer to the question of “how clean is clean”?**

No, the MEC HA does not provide the answer to “how clean is clean?”. It provides input to the CERCLA removal and remedial criteria evaluation and the associated remedy selection processes. It is the site-specific project teams that will evaluate and recommend site management decisions to address site risks and hazards.

#### **6. How are land use controls addressed in the MEC HA?**

Land use controls are addressed through four input factors: Site Accessibility, Distance between Additional Receptors and Explosive Hazard, Potential Contact Hours, and Minimum MEC Depth Relative to Maximum Intrusive Depth (of receptor activities). For example:

- Land use control can affect the location of places where people congregate (add or remove them) that puts them in range of an explosive hazard.
- Site accessibility categories may change with the addition of different kinds of fences or other controls.
- Assumptions about intrusive activities may be affected if land use or institutional controls impose limits on the types of activities that can take place on the land.
- Assumptions about the number of people on the site each year who could initiate an explosion may change with the application of land use controls.

#### **7. How were the scoring and weighting of the input factors developed?**

The scoring and weighting factors were developed through a combination of professional judgment, outreach and feedback through consultations, pilot testing with established project teams, and a series of technical sensitivity analyses that are presented in Appendix D of the MEC HA Methodology.

#### **8. Why are some components and input factors weighted differently?**

There are a number of reasons for different weights. First, they reflect the relative importance of each input factor in evaluating the explosive hazard as determined by the work group. Second, the weights were modified based on an extensive series of sensitivity analyses of the technical framework.

The input factor weights help distinguish between the effects of different removal or remedial alternatives at the site-specific level. The input factor weights balance the input factors that do not change with the input factors that do change in response to a cleanup, and the input factors that change in response to a change in land use activities.

#### **9. Is the MEC HA used to evaluate the priority of future munitions responses for MRS sites?**

No, that is the role of the Munitions Response Site Prioritization Protocol.

**10. What is the relationship between the MEC HA and the Munitions Response Site Prioritization Protocol (MRSPP)?**

The MEC HA and the Protocol serve different and distinct purposes in the management of Munitions Response Sites (MRS). The structure and organization of both tools reflect these differences. The purpose of the Protocol is to prioritize MRS response actions on a national level. The Protocol is first applied after the CERCLA preliminary assessment.

The purpose of the MEC HA is to assist in the evaluation and selection of removal and remedial alternatives, including land use controls. This occurs at the EE/CA for removal actions and at the RI/FS for remedial actions.

The MEC HA and the Protocol use much of the same or similar site data. The following table illustrates the relationships between the Protocol data elements and the MEC HA input factors.

<b>Protocol EHE Data Element</b>	<b>Related MEC HA Input Factors</b>	<b>Remarks</b>
Munitions Type	Energetic Material Type MEC Classification	EHE Data Element classifications combine the two MEC HA Input Factors
Source of Hazard	Amount of MEC	
Information on Location of Munitions	Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth Migration Potential	EHE Data Element classifications address both the MEC depth (surface or subsurface) and the stability of the MRS
Ease of Access	Site Accessibility	
Status of Property	No related MEC HA Input Factor	
Population Density	Potential Contact Hours	
Population Near Hazard	Location of Additional Human Receptors Potential Contact Hours	
Types of Activities/ Structures	Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth Potential Contact Hours	
Ecological and /or Cultural Resources	No related MEC HA Input Factor	MEC HA guidance recommends that presence of ecological or cultural resources be addressed during CERCLA nine criteria analysis
No related EHE Data Element	MEC Size	

**11. How does the MEC HA address potential explosive safety hazards to cultural and ecological resources or critical infrastructure?**

The MEC HA only assesses explosive hazards to human receptors. When cultural, ecological resources or critical infrastructure are present at or near an MRS, the MEC HA Methodology recommends that project teams evaluate the potential for damage to the resources through the response process. This evaluation should include an analysis of location-specific and action-specific applicable or relevant and appropriate requirements (ARARs) in the planning and evaluation of investigations and removal/remedial actions. The MEC HA process incorporates the calculation of a hazardous fragmentation distances that can be used to determine if cultural and ecological resources or critical infrastructure may be subject to fragmentation damage.

**12. Do the results of the MEC HA establish a threshold for either action or no action at an MRS?**

No, the MEC HA provides information to support the decision-making process, but it is not the decision itself. The results of the MEC HA do not establish or infer a threshold above which action is required, or one below which no action is required.

## **APPENDIX D**

### **REPORT ON THE TECHNICAL BASIS FOR MECHA INPUT FACTOR SCORES, WEIGHTING, AND HAZARD LEVELS**

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## **Appendix D: Report on the Technical Basis for Munitions and Explosives of Concern Hazard Assessment Input Factor Scores, Weighting, and Hazard Levels**

### **Purpose**

This report was prepared to document the process and rationale that was used to develop the scores and weightings for the Input Factors, as well as the scoring ranges associated with the Hazard Levels. Together, these form the basis of the technical framework of the MEC HA Methodology document.

### **Introduction**

The MEC HA Methodology document includes descriptions of the technical framework, data requirements to use the MEC HA effectively, and the use of the MEC HA in evaluating baseline conditions and potential removal and remedial action alternatives under CERCLA. The development of the technical framework was an iterative process undertaken by the MEC HA technical working group (TWG). That group consists of personnel representing the U.S. Environmental Protection Agency, Department of Defense, the U.S. Department of the Interior, States, and Tribal organizations. The TWG initially evaluated a variety of framework options, input factors, and scoring approaches. Those evaluations are described in a series of Issue Papers that are part of the development record for the MEC HA Methodology document. The Issue Papers and other MEC HA materials can be viewed at [http://www.epa.gov/fedfac/documents/hazard\\_assess\\_wrkgrp.htm](http://www.epa.gov/fedfac/documents/hazard_assess_wrkgrp.htm). Appendix D describes the activities undertaken by the TWG to develop and evaluate the technical framework that was selected and is presented in the MEC HA Methodology document. The technical framework for the MEC HA consists of three elements:

- **Input Factors:** Input factors are site characteristics that describe explosive hazards. Each input factor has two or more categories that allow project teams to describe the site-specific explosive hazard conditions.
- **Structure:** The structure consists of the relative weights assigned to each input factor, the individual scores assigned to each input factor category, and the method used to combine the input factor category scores. The MEC HA scores range from a total of 125 to 1000. A simple additive model was selected as the combination method.
- **Output:** The output describes the explosive Hazard Level of the site. Hazard Levels map the scores to broad ranges in which the explosive hazard for different sites and site conditions are reflective of relative conditions.

Three of the primary tasks completed during the development of the MEC HA were to determine input factor weights, the scores for each individual input factor category, and score ranges for the Hazard Levels that would allow the MEC HA framework to meet performance criteria laid out at the beginning of the development process. This report documents the procedures used to accomplish these tasks.

The MEC HA framework can be thought of as a model of the site conditions that determine the relative level of explosive hazard. This model was structured to capture the collective judgment of the TWG, as well as input from external reviewers, about the



relative contribution of each of the input factors to overall explosive hazard, and the relative hazard of each input factor category. These judgments are captured in the numeric weights assigned to each input factor and the numeric scores assigned to each input factor category. *These numbers have meaning only in relation to one another, and should not be construed as absolute measures of explosive hazard.*

The TWG also developed the description of the characteristics associated with each Hazard Level. The relative weights and scores were calibrated along with the Hazard Level score ranges to ensure that the site conditions appropriate to each Hazard Level fell within that Hazard Level. The TWG undertook numerous deliberations on specific categories, weights, and scores. In addition, two calibration efforts were undertaken at key points in the development of the technical framework. The first effort was from August 2004 to February 2005. The second effort was from August 2005 through November 2005. Both of these efforts are described below.

The following text describes specific issues that were considered during the development of the input factor weights, the input factor category scores, and the Hazard Level ranges.

#### **Considerations in Determining Input Factor Weights**

The approach to determining the weights for the MEC HA input factors was selected to best meet the following two structure element performance criteria:

- The scores and weights assigned to input factors reflect the relative contribution of each factor to the overall site Hazard Levels.
- The method(s) used to combine input factors to assess the site-specific Hazard Levels accurately captures the effects of the interactions between input factors.

In determining input factor weights, it was useful to categorize the input factors in terms of the degree to which it was likely that an input factor score would change after as a result of a removal or remedial action. Scores for some of the input factors will always stay the same, scores for others will change after cleanup, and others will change depending on land use activities including those affected by land use controls (LUCs).

- **Input Factors with scores that will not change.** The input factor scores that will not change after cleanup are Energetic Material Type, Location of Additional Human Receptors, Site Accessibility, MEC Classification, and MEC Size. For example, a site with High Explosive (HE) will not have a reduction in score from Baseline Conditions to Surface Cleanup or Subsurface Cleanup. This is structured in this manner to address the lack of certainty that all items containing HE can be found with current technologies.
- **Input Factors with scores affected by cleanup activities.** These input factor scores will change after either a surface or subsurface cleanup has occurred. These can also be used to assess the effects of future surface or subsurface cleanup. The input factors

in this group are Potential Contact Hours, Amount of MEC, Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth, and Migration Potential.

- **Input Factors with scores affected by change in land use activities.** These input factor scores are the ones that will change if land use activities change. These factors are Location of Additional Human Receptors, Site Accessibility, Potential Contact Hours, and Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth.

In the judgment of the TWG, the factors affected by cleanup merited a higher weight than those affected by land use activities. The weights for the input factors are shown in Table 1.

**Table 1: Input Factor Maximum Scores and Weights**

<b>Explosive Hazard Component</b>	<b>Input Factor</b>	<b>Maximum Scores</b>	<b>Weights</b>
Severity	Energetic Material Type	100	10%
	Location of Additional Human Receptors	30	3%
<i>Category total</i>		<i>130</i>	<i>13%</i>
Accessibility	Site Accessibility	80	8%
	Potential Contact Hours	120	12%
	Amount of MEC	180	18%
	Minimum MEC Depth/ Maximum Intrusive Depth	240	24%
	Migration Potential	30	3%
<i>Category total</i>		<i>650</i>	<i>65%</i>
Sensitivity	MEC Category	180	18%
	MEC Size	40	4%
<i>Category total</i>		<i>220</i>	<i>22%</i>
<b>Total Score</b>		<b>1000</b>	<b>100%</b>

### **Considerations in Scoring Input Factor Categories**

The numeric scoring approach allows flexibility in describing the relative hazard of different input factor categories. This approach reflects the judgments of the TWG regarding the relative hazard between different categories within an input factor.

For example, in the MEC Classification input factor there is only a five point difference between the UXO and the Fuzed Sensitive DMM categories. This reflected the TWG judgment that munitions that fell into the Fuzed Sensitive DMM category were nearly as dangerous as UXO.

By contrast for the Amount of MEC input factor there is a 150 point difference between the score for an untreated Target Area and that for an associated untreated Safety Buffer. This reflects the judgment that a Target Area will contain a much larger number of UXO than its associated Safety Buffer.

Another aspect that was considered in the assignment of scores to the input factor categories is that the scores for the categories were selected solely with respect to the other categories within the input factor. Because each input factor had its own weight, a score of 30 for the Safety Buffer of the MEC Amount input factor (total weight of 18%) is not comparable to the score of 30 for the Possible category of the Migration Potential input factor (total weight of 3%).

Table 2 summarizes the scores for the MEC HA Input Factors.

**Table 2 Summary of Scoring for MEC HA Input Factors**

Input Factor	Category	Score		
		Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Energetic Material Type	High Explosives and Low Explosive Fillers in Fragmenting Rounds	100	100	100
	White Phosphorous	70	70	70
	Pyrotechnic	60	60	60
	Propellant	50	50	50
	Spotting Charge	40	40	40
	Incendiary	30	30	30
Location of Additional Human Receptors	Inside the MRS or inside the ESQD arc	30	30	30
	Outside of the ESQD arc	0	0	0
Site Accessibility	Full Accessibility	80	80	80
	Moderate Accessibility	55	55	55
	Limited Accessibility	15	15	15
	Very Limited Accessibility	5	5	5
Potential Contact Hours	Many Hours	120	90	30
	Some Hours	70	50	20
	Few Hours	40	20	10
	Very Few Hours	15	10	5
Amount of MEC	Target area	180	120	30
	OB/OD area	180	110	30
	Function Test Range	165	90	25
	Burial Pit	140	140	10
	Maneuver areas	115	15	5
	Firing points	75	10	5
	Safety buffer areas (Range safety fans and OB/OD kick-out areas)	30	10	5
	Storage	25	10	5
	Explosive-related industrial facility	20	10	5

**Table 2 Summary of Scoring for MEC HA Input Factors**

Input Factor	Category	Score		
		Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Minimum MEC Depth Relative to the Maximum Intrusive Depth	<b>Baseline Condition:</b> MEC located surface and subsurface; <b>After Cleanup:</b> Intrusive depth <i>overlaps</i> with subsurface MEC	240	150	95
	<b>Baseline Condition:</b> MEC located surface and subsurface; <b>After Cleanup:</b> Intrusive depth <i>does not overlap</i> with subsurface MEC	240	50	25
	<b>Baseline Condition:</b> MEC located only subsurface; <b>Baseline Condition or After Cleanup:</b> Intrusive depth <i>overlaps</i> with subsurface MEC	150	N/A*	95
	<b>Baseline Condition:</b> MEC located only subsurface; <b>Baseline Condition or After Cleanup:</b> Intrusive depth <i>does not overlap</i> with subsurface MEC	50	N/A*	25
Migration Potential	Possible	30	30	10
	Unlikely	10	10	10
MEC Category	Sensitive UXO	180	180	180
	UXO	110	110	110
	Fuzed Sensitive DMM	105	105	105
	Fuzed DMM	55	55	55
	Unfuzed DMM	45	45	45
	Bulk Explosives	45	45	45
MEC Size	Small	40	40	40
	Large	0	0	0
	Minimum Possible Score	365	160	125
	Maximum Possible Score	1000	870	595

\*N/A – Not Applicable: Surface cleanups for MEC would not be appropriate for site conditions where MEC is all in the subsurface.

**Considerations in the Determination of Hazard Levels Score Ranges**

The MEC HA technical framework assesses a set of site conditions that include the types of munitions and how they were used with the current or proposed activities at the site. These are described in terms of the intrusiveness of the activities and the opportunities for human receptors to come into contact with an MEC item. The Hazard Levels reflect this interaction between the past munitions-related use of the site and the current, determined or reasonably anticipated future use activities at the site. The Hazard Levels score ranges are shown in Table 3.

**Table 3 Hazard Level Score Ranges**

<b>Hazard Level</b>	<b>Maximum MEC HA Score</b>	<b>Minimum MEC HA Score</b>
<b>1</b>	1000	840
<b>2</b>	835	725
<b>3</b>	720	530
<b>4</b>	525	125

**Procedures Used to Determine Weights, Scores, and Hazard Level Category Ranges**

The approaches used to determine the input factor weights, input factor category scores, and the score ranges for the Hazard Levels were undertaken in tandem with the development of the input factors and the input factor categories. Many of the iterations were in response to changes in the input factors rather than solely to refine the scoring. These changes came as a result of deliberations within the TWG, feedback from organizations represented by the TWG members, as well as from feedback from pilot tests of the framework at MEC sites, and from briefings and outreach efforts by TWG members.

The initial calibration effort and sensitivity runs on the technical framework were undertaken from August, 2004 through February, 2005. These served as the basis for most of the weighting, scoring, and hazard level category range decisions at that time in the development of the MEC HA framework. These runs were made for a specific, identical set of scenarios, which represented combinations of MEC Amount, munitions characteristics (i.e., energetic material, fuzing, and size), and land use activity scenarios. These sensitivity runs were completed for multiple iterations of weighting and scoring scenarios. They also addressed multiple iterations of input factors and input factor categories.

The second iteration of weights/scores/hazard level ranges was undertaken from August 2005 through November 2005. The second iteration evaluated recommended changes to scores and weights, and the impacts to Hazard Level score ranges. The approach followed the same general approach as the first iteration. As a result of this analysis several changes were made to the MEC HA framework.

Both of the sensitivity runs were performed on a theoretical possible combination of 480 sites based on the input factors. The actual potential number of combinations is over 180,000 “possible” site conditions. It is of note that as of the FY 2006 DoD Report to Congress, there are approximately 3,400 MEC sites within the Inventory of MMRP sites. These include both land-based and underwater sites. The MEC HA is only concerned with land-based sites. The combination of “reasonable” sites (i.e., those that could be encountered in the real world) far exceeds the actual number of MEC sites in the MMRP inventory. Therefore, the emphasis of “goodness of fit” for the sensitivity runs on the technical framework was focused, both initially and in the second evaluation, on the MEC site types that are known to exist, as well as some possible variations. In the view

of the TWG, the 480 combinations evaluated more than adequately reflect the real world conditions of MEC land-based sites.

**Sensitivity Runs – August 2004 through February 2005.**

The following tables summarize the different combinations of input factor categories that were used for the sensitivity runs from August 2004 through February 2005. Table 4 shows the combinations of input factor categories for Amount of MEC, MEC Classification, MEC Size, Energetic Material Type, and Migration Potential. The two use activity scenarios presented in Table 5 then were applied to each of the combinations from Table 4. Finally, the combinations of cleanup status and depths presented in Table 6 were applied to each of those resulting combinations. These combinations result in 480 permutations.

**Table 4 Combinations of Amount of MEC, MEC Classification, MEC Size, Energetic Material Type, and Migration Potential Used for Initial Sensitivity Runs**

Amount of MEC	MEC Classification	MEC Size	Energetic Material Type	Migration Potential
Target Area Function Test Range Safety Buffer	UXO, Special Case**	Small	HE, Spotting Charge *	Possible
		Large		Unlikely
	UXO	Small		Possible
		Large		Unlikely
Maneuver Area Storage Area	DMM with Category 1 Fuzed**	Small	HE, Spotting Charge *	Possible
		Large		Unlikely
	Unfuzed DMM	Small		Possible
		Large		Unlikely

\* At the next-to-last iteration, Propellant was substituted for Spotting Charge, because at that time Propellant was given a lower score than Spotting Charge. This is an example of the iterative processes that were ongoing during the framework development.

\*\* The MEC Classification category of “UXO, Special Case” was changed to “Sensitive UXO”, and the category “DMM with Category 1 Fuze” was changed to “Fuzed Sensitive DMM,” after the completion of the sensitivity runs.

**Table 5: Combinations of Site Accessibility, Potential Contact Hours, and Location of Additional Human Receptors used for Initial Sensitivity Runs**

Site Accessibility	Potential Contact Hours	Distance of Additional Potential Human Receptors to Explosive Hazard*
Full	Many	Within MRS or within the ESQD of the boundary of the MRS
Very Limited	Very Few	Outside the ESQD

\*The input factor title and categories for the Distance of Additional Potential Human Receptors to Explosive Hazard have changed slightly since the completion of the sensitivity runs.

**Table 6: Combinations of Clean-up Status and Minimum MEC Depth Relative to Maximum Intrusive Depth for Initial Sensitivity Runs**

Scoring Table Column	Minimum MEC Depth Relative to Maximum Intrusive Depth**
Baseline Condition*	MEC located on the surface
	MEC located subsurface, intrusive depth overlaps
	MEC located subsurface, intrusive depth does not overlap
Surface Cleanup	MEC located subsurface, intrusive depth overlaps
	MEC located subsurface, intrusive depth does not overlap
Subsurface Cleanup	MEC located subsurface, intrusive depth overlaps
	MEC located subsurface, intrusive depth does not overlap

\*Based on 2006 comments, the first column of the scoring table was re-titled as “Baseline Conditions”.

\*\*The categories for the Minimum MEC Depth Relative to Maximum Intrusive Depth have changed since the completion of the sensitivity runs.

Results from iterations of the sensitivity runs were discussed by the TWG in November and December 2004, and again in January 2005. Based on those discussions, determinations were made as to the suitability of the results. For example, in the judgment of the TWG, any Target Area or Function Test Range with UXO on the surface (i.e., sites of these types that were not yet cleaned up) should be in Hazard Levels 1 or 2. However, most untreated Safety Buffer sites could end up in Hazard Level 3, with only the most hazardous UXO and the most intensive uses going to Hazard Levels 1 or 2 for untreated Safety Buffer areas.

The input factor category scores, the Hazard Level score ranges, and the input factor weights were adjusted until the results of the sensitivity runs were consistent. Results of the final iteration for the initial calibration effort were incorporated into the working draft MEC HA Framework document that was used during the pilot tests performed during May 2005 – August 2005 with the Camp Butner and Camp Beale project teams.

#### **Sensitivity Runs – August 2005 through November 2005**

Revisions were made to some of the input factors and the scoring during TWG meetings that occurred in September and October of 2005. The revisions were made in response to feedback from the pilot tests, as well as comments received during the presentation of the MEC HA to the Munitions Response Committee and other outreach efforts. These and other efforts by the MEC HA TWG can be viewed at [http://www.epa.gov/fedfac/documents/hazard\\_assess\\_wrkgrp.htm](http://www.epa.gov/fedfac/documents/hazard_assess_wrkgrp.htm)

The primary revisions were:

- The categories for the Energetic Material Type input factor were expanded.[Note: based on comments in 2006 external reviews, “Filler Type” title was changed to “Energetic Material Type”]
- The categories for the Minimum MEC Depth Relative to the Maximum Intrusive Depth input factor categories were revised.
- The scoring for the Minimum MEC Depth Relative to the Maximum Intrusive Depth input factor was revised to provide a greater relative reduction for the reduction in hazard attained by a surface clearance.

A final set of sensitivity runs were undertaken to assist in adjusting the Hazard Levels in response to the scoring and category revisions. These runs were similar to the sensitivity runs described in Table 7, Table 8, and Table 9 document the combinations used for these sensitivity runs.

**Table 7 Combinations of Amount of MEC, MEC Classification, MEC Size, Energetic Material Type, and Migration Potential used for Final Sensitivity Runs**

Amount of MEC	MEC Classification	MEC Size	Energetic Material Type	Migration Potential
Target Area Function Test Range Safety Buffer	UXO Special Case*	Small	HE, Incendiary	Possible
		Large		Unlikely
	UXO	Small		Possible
		Large		Unlikely
Maneuver Area Storage Area	DMM with Category 1 Fuze*	Small	HE, Incendiary	Possible
		Large		Unlikely
	Unfuzed DMM	Small		Possible
		Large		Unlikely

\*The MEC Classification category of “UXO, Special Case” was changed to “Sensitive UXO”, and the category “DMM with Category 1 Fuze” was changed to “Fuzed Sensitive DMM,” after the completion of the sensitivity runs.

**Table 8: Combinations of Site Accessibility, Potential Contact Hours, and Distance of Additional Human Receptors to Explosive Hazard used for Final Sensitivity Runs**

Site Accessibility	Potential Contact Hours	Distance of Additional Potential Human Receptors to Explosive Hazard*
Full	Many	Within MRS or within the ESQD of the boundary of the MRS
Very Limited	Very Few	Outside the ESQD

\*The input factor title and categories for the Distance of Additional Potential Human Receptors to Explosive Hazard have changed slightly since the completion of the sensitivity runs. See Table 2 for the revised categories.

**Table 9: Combinations of Clean-up Status and Minimum MEC Depth Relative to Maximum Intrusive Depth for Final Sensitivity Runs**

Scoring Table Column	Minimum MEC Depth Relative to Maximum Intrusive Depth*
Baseline Condition	MEC located surface and subsurface, intrusive depth overlaps
	MEC located subsurface, intrusive depth overlaps
	MEC located subsurface, intrusive depth does not overlap
Surface Cleanup	MEC located surface and subsurface, intrusive depth overlaps
	MEC located surface and subsurface, intrusive depth does not overlap
Subsurface Cleanup	MEC located subsurface, intrusive depth overlaps
	MEC located subsurface, intrusive depth does not overlap

\*The category descriptions for the Minimum MEC Depth Relative to Maximum Intrusive Depth were revised for clarity after the completion of the sensitivity runs. See Table 2 for the revised categories.

These sensitivity runs were done in MS Excel. Attachment 1 to this Appendix contains the 1746 outputs from the sensitivity runs. The following sections describe the Hazard Levels that resulted from these final runs.



### **Hazard Level Characteristics**

This section characterizes the Hazard Levels by providing the most common combinations of the major input factor categories that score within each Hazard Level. The major input factors are those that contribute the most to the munitions hazard or to the accessibility of the hazard:

- Energetic Material Type
- MEC Classification
- MEC Minimum Depth Relative to Receptor Intrusive Depth
- Site Accessibility
- Potential Contact Hours

These combinations are presented in tables organized by the MEC Amount input factor categories. In each Hazard Level, there are separate tables for each of the cleanup conditions (Baseline Conditions, Surface Cleanup, and Subsurface Cleanup) which score in the level.

The tables were created by selecting the MEC Amount categories that made up the majority of the MRSs in the Hazard Level. The predominant Energetic Material Type, and MEC Classification, MEC Minimum Depth Relative to Receptor Intrusive Depth, Site Accessibility and Potential Contact Hour categories were then determined for each selected MEC Amount category. This means that the tables describe between 75% and 90% of the MRSs that score in each Hazard Level/cleanup condition; they do not encompass all the possible combinations.

To make the MEC HA generally applicable to all the types of MRSs, some combinations of input factor categories are not reasonable. For example, Burial Sites (by definition) will not have MEC located on the surface, and it is expected that, for example, Firing Points or Storage Areas will only have DMM (not UXO). The combinations of input factor categories used for developing the Hazard Level characterizations are presented in Table 10. Also for the Hazard Level characterization, the Site Accessibility categories of “limited” and “very limited” were only combined with the “few” and “very few” Potential Contact Hours categories.

Within these limitations, there are 71,424 possible “reasonable” combinations of input factor categories. As noted earlier, this greatly exceeds the number of sites in the MMRP Inventory. The following characterizations of the MEC HA Hazard Levels describe the sites that the MEC HA can address, not the sites that it will be used to address.

<b>Table 10 “Reasonable” Combinations of Amount of MEC, MEC Classification, MEC Size, Energetic Material Type, and Migration Potential for Characterizing Hazard Levels</b>					
<b>Amount of MEC</b>	<b>MEC Classification</b>	<b>MEC Size</b>	<b>Energetic Material Type</b>	<b>Migration Potential</b>	<b>Minimum MEC Depth Relative to Maximum Intrusive Depth</b>
<b>Target Area</b>	<b>Sensitive UXO UXO</b>	<b>All categories</b>	<b>All categories</b>	<b>All categories</b>	<b>All categories</b>
<b>OB/OD Area</b>	<b>All categories</b>				
<b>Function Test Range</b>	<b>Sensitive UXO UXO</b>				
<b>Burial Pit</b>	<b>Fuzed Sensitive DMM Fuzed DMM Unfuzed DMM Bulk Explosives</b>	<b>All categories</b>	<b>All categories</b>	<b>All categories</b>	<b>Subsurface only, intrusive depth overlaps Subsurface only, intrusive depth does not overlap</b>
<b>Maneuver Area</b>	<b>Fuzed Sensitive DMM Fuzed DMM Unfuzed DMM Bulk Explosives</b>	<b>All categories</b>	<b>All categories</b>	<b>All categories</b>	<b>All categories</b>
<b>Firing Point</b>					
<b>Safety Buffer Area</b>					
<b>Storage</b>	<b>Fuzed Sensitive DMM Fuzed DMM Unfuzed DMM Bulk Explosives</b>				
<b>Explosives-Related Industrial Facility</b>	<b>Bulk Explosives</b>				

### **Hazard Level 1 Characteristics**

All of the MRSs in Hazard Level 1 are in the baseline condition, that is, the MRSs have not had cleanup. Table 11 summarizes the primary Hazard Level 1 characteristics

**Table 11: Hazard Level 1 Characteristics (Baseline Conditions)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
<b>Target Area</b>	<b>High Explosives, White Phosphorous</b>	<b>Sensitive UXO, UXO</b>	<b>Surface and subsurface</b>	<b>Full or moderate</b>	<b>Many or some</b>
<b>OB/OD Area</b>					

### Hazard Level 2 Characteristics

Hazard Level 2 contains sites in both the baseline and surface cleanup conditions. Table 12 summarizes the Hazard Level 2 baseline conditions characteristics. Table 13 summarizes the Hazard Level 2 surface cleanup characteristics. The MRSs with surface cleanup in Hazard Level 2 are the most hazardous of the baseline Hazard Level 1 sites where the receptor intrusive depth still overlaps with the minimum MEC depth.

**Table 12: Hazard Level 2 Characteristics (Baseline Conditions)**

MRS Type	Energetic Material Type	MEC Classification	MEC Depth	Site Accessibility	Potential Contact Hours
Target Area	All categories	Sensitive UXO, UXO	Surface and subsurface, Subsurface only, intrusive depth overlaps	Full or moderate	All categories
OB/OD Area	All categories	Sensitive UXO, UXO, Fuzed Sensitive DMM	Surface and subsurface, Subsurface only, intrusive depth overlaps	Full or moderate	All categories
Function Test Range	High explosives, White phosphorous, Pyrotechnics	Sensitive UXO, UXO	Surface and subsurface	Full or moderate	Many or some
Maneuver Area	High explosives, White phosphorous	Fuzed Sensitive DMM	Surface and subsurface	Full or moderate	Many or some
Safety Buffer	High explosives, White phosphorous	Sensitive UXO	Surface and subsurface	Full or moderate	Many

**Table 13: Hazard Level 2 Characteristics (Surface Cleanup)**

MRS Type	Energetic Material Type	MEC Classification	MEC Depth	Site Accessibility	Potential Contact Hours
Target Area	High explosives	Sensitive UXO	Subsurface only, intrusive depth overlaps	Full or moderate	Many
OB/OD Area	High explosives	Sensitive UXO	Subsurface only, intrusive depth overlaps	Full or moderate	Many

### Hazard Level 3 Characteristics

Hazard Level 3 MRSs are more diverse than Hazard Level 1 and Hazard Level 2 sites. Hazard Level 3 also contains sites in baseline, and surface cleanup conditions. Table 14

contains the Hazard Level 3 characteristics for the baseline conditions, and Table 15 contains them for surface cleanup conditions. A small number of MRSs with subsurface cleanup also scored in Hazard Level 3, but they were only sites where the receptor intrusive depth overlaps with the minimum MEC depth. This combination (a site with a subsurface cleanup that was not below the receptor intrusive depth) is not likely to occur, and so has not been included in the Hazard Level 3 characteristics.

**Table 14: Hazard Level 3 Characteristics (Baseline Conditions)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
Target Area	High Explosives, White Phosphorous	Sensitive UXO, UXO	Subsurface only, intrusive depth does not overlap or Subsurface only, intrusive depth overlaps	Limited or Very limited	Few or Very few
	Pyrotechnics, Propellant, Spotting Charge, Incendiary			Full or moderate	All categories
OB/OD Area	High Explosives, White Phosphorous	Sensitive UXO, UXO, Fuzed Sensitive DMM	Subsurface only, intrusive depth does not overlap or Subsurface only, intrusive depth overlaps	Limited or Very limited	Few or Very few
	Pyrotechnics, Propellant, Spotting Charge, Incendiary			Full or moderate	All categories
	All categories	Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	Full or moderate	Some, Few, or Very Few
Function Test Range	All categories	UXO	Subsurface only, intrusive depth does not overlap or Subsurface only, intrusive depth overlaps	Moderate, Limited, or Very Limited	Few or Very Few
			Subsurface only, intrusive depth overlaps		
Burial Pit	All categories	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Subsurface only, intrusive depth overlaps	Full or Moderate	All categories
Maneuver Area	High Explosives, White Phosphorous	Fuzed DMM, Special Case, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	Full or moderate	Many or some

**Table 14: Hazard Level 3 Characteristics (Baseline Conditions)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
Firing Point	High Explosives, White Phosphorous	Fuzed Sensitive DMM, Fuzed DMM	Surface and subsurface	Full or moderate	Many or some
Safety Buffer	High Explosives, White Phosphorous	Sensitive UXO, UXO, Fuzed Sensitive DMM	Surface and subsurface	Full or moderate	Many or some
Safety Buffer	High Explosives, White Phosphorous	Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	Full or moderate	Many or some
Storage	High Explosives, White Phosphorous	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	Full or moderate	Many or some

**Table 15: Hazard Level 3 Characteristics (Surface Cleanup)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
Target Area	All categories	Sensitive UXO, UXO	Subsurface only, intrusive depth overlaps	Full or moderate	All categories
OB/OD Area		Sensitive UXO, UXO, Fuzed Sensitive DMM			

### Hazard Level 4 Characteristics

Hazard Level 4 contains MRSs in baseline, surface cleanup, and subsurface cleanup conditions. Table 16 contains the Hazard Level 4 characteristics for the baseline conditions, Table 17 for the surface cleanup conditions, and Table 18 for the subsurface cleanup conditions.

<b>Table 16: Hazard Level 4 Characteristics (Baseline Conditions)</b>					
<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
OB/OD Area	All categories	Fuzed DMM, Unfuzed DMM, Bulk Explosives	Subsurface only, intrusive depth does not overlap	All categories	Few or Very Few
Burial Pit	All categories	Fuzed DMM, Unfuzed DMM, Bulk Explosives	Subsurface only, intrusive depth does not overlap	All categories	Few or Very Few
Maneuver Area	High Explosives, White Phosphorous	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	All categories	Few or Very Few
	Pyrotechnics, Propellant, Spotting Charge, Incendiary			All categories	All categories
	All categories		Subsurface only, intrusive depth overlaps, Subsurface only, intrusive depth does not overlap	All categories	All categories
Firing Point	High Explosives, White Phosphorous	Fuzed Sensitive DMM, Fuzed DMM	Surface and subsurface	All categories	Few or Very Few
	Pyrotechnics, Propellant, Spotting Charge, Incendiary			All categories	All categories
	All categories	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Subsurface only, intrusive depth overlaps, Subsurface only, intrusive depth does not overlap	All categories	All categories

**Table 16: Hazard Level 4 Characteristics (Baseline Conditions)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
Safety Buffer	High Explosives, White Phosphorous	Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	All categories	Few or Very Few
	Pyrotechnics, Propellant, Spotting Charge, Incendiary	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives		All categories	All categories
	All categories	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Subsurface only, intrusive depth overlaps, Subsurface only, intrusive depth does not overlap	All categories	All categories
Storage	High Explosives, White Phosphorous	Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives	Surface and subsurface	All categories	Few or Very Few
	Pyrotechnics, Propellant, Spotting Charge, Incendiary			All categories	All categories
	All categories		Subsurface only, intrusive depth overlaps, Subsurface only, intrusive depth does not overlap	All categories	All categories
Industrial	All categories	Bulk Explosives	All categories	All categories	All categories

**Table 17: Hazard Level 4 Characteristics (Surface Cleanup)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
Target Area	All categories	Sensitive UXO, UXO	Subsurface only, intrusive depth overlaps	Limited or Very Limited	Few or Very Few
			Subsurface only, intrusive depth does not overlap	All categories	All categories

**Table 17: Hazard Level 4 Characteristics (Surface Cleanup)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
OB/OD Area	All categories	Sensitive UXO, UXO, Fuzed Sensitive DMM	Subsurface only, intrusive depth overlaps	Limited or Very Limited	Few or Very Few
			Subsurface only, intrusive depth does not overlap	All categories	All categories
		Fuzed DMM, Unfuzed DMM, Bulk Explosives	Subsurface only, intrusive depth overlaps, Subsurface only, intrusive depth does not overlap	All categories	All categories
Function Test Range	All categories	Sensitive UXO, UXO	Subsurface only, intrusive depth overlaps, Subsurface only, intrusive depth does not overlap	All categories	All categories
Maneuver Area		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Firing Point		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Safety Buffer Area		Sensitive UXO, UXO, Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Storage		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Industrial		Bulk Explosives			



**Table 18: Hazard Level 4 Characteristics (Subsurface Cleanup)**

<b>MRS Type</b>	<b>Energetic Material Type</b>	<b>MEC Classification</b>	<b>MEC Depth</b>	<b>Site Accessibility</b>	<b>Potential Contact Hours</b>
Target Area	All categories	Sensitive UXO, UXO	Subsurface only, intrusive depth does not overlap	All categories	All categories
OB/OD Area		All categories			
Function Test Range		Sensitive UXO, UXO			
Burial Pit		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Maneuver Area		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Firing Point		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Safety Buffer Area		All categories			
Storage		Fuzed Sensitive DMM, Fuzed DMM, Unfuzed DMM, Bulk Explosives			
Industrial		Bulk Explosives			

**Attachment 1 to  
Appendix D  
Results of Final Sensitivity Runs**

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	1000	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	985	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	980	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	970	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	965	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	960	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	955	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	950	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	945	1

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	940	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	935	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	930	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	930	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	930	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	925	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	915	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	915	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	915	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	910	1

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	910	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	910	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	910	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	900	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	900	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	895	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	895	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	895	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	895	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	890	1

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	890	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	890	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	885	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	885	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	880	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	880	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	880	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	875	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	875	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	875	1

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	870	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	870	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	870	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	865	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	865	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	865	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	860	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	860	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	860	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	860	1

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	860	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	855	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	855	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	855	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	850	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	850	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	845	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	845	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	845	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	845	1



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	840	1
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	840	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	840	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	840	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	840	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	840	1
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	840	1
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	835	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	830	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	830	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	830	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	825	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	825	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	825	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	825	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	825	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	825	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	820	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	820	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	820	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	820	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	820	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	820	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	820	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	820	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	815	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	810	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	810	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	810	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	810	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	810	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	810	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	805	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	805	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	805	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	805	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	805	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	800	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	800	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	800	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	800	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	800	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	800	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	800	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	800	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	795	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	795	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	795	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	795	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	790	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	790	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	790	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	790	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	790	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	790	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	790	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	790	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	790	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	790	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	785	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	785	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	785	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	785	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	780	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	780	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	780	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	780	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	780	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	780	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	780	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	780	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	780	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	775	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	775	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	775	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	775	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	775	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	770	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	770	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	770	2



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	770	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	770	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	770	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	770	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	770	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	770	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	770	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	770	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	770	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	765	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	765	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	765	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	765	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	760	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	760	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	760	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	760	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	760	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	760	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	760	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	760	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	760	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	760	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	755	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	755	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	755	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	755	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	755	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	755	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	750	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	750	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	750	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	750	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	750	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	750	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	750	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	750	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	750	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	750	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	750	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	750	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	750	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	750	2
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	750	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	750	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	745	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	745	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	740	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	740	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	740	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	740	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	740	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	740	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	740	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	740	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	740	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	740	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	740	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	735	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	735	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	735	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	735	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	735	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	735	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	735	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	730	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	730	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	730	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	730	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	730	2

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	730	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	730	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	730	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	730	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	730	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	730	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	730	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	730	2
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	730	2
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	730	2



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	730	2
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	725	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	725	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	725	2
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	725	2
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	720	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	720	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	720	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	720	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	720	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	720	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	720	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	720	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	720	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	720	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	720	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	720	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	720	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	720	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	720	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	720	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	720	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	715	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	715	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	715	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	715	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	715	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	710	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	710	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	710	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	710	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	710	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	710	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	710	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	710	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	710	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	710	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	705	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	705	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	705	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	705	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	705	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	705	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	700	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	700	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	700	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	700	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	700	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	700	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	700	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	700	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	700	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	700	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	700	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	700	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	700	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	700	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	700	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	700	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	700	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	695	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	695	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	695	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	695	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	695	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	695	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	690	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	690	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	690	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	690	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	690	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	690	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	690	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	690	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	690	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	690	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	690	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	690	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	690	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	690	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	690	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	690	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	690	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	690	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	690	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	690	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	685	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	685	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	685	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	685	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	685	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	685	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	680	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	680	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	680	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	680	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	680	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	680	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	680	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	680	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	680	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	680	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	680	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	680	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	680	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	680	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	680	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	680	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	680	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	680	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	680	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	680	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	675	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	675	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	675	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	675	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	675	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	670	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	670	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	670	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	670	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	670	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	670	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	670	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	670	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	670	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	670	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	670	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	670	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	665	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	665	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	665	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	665	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	665	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	665	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	665	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	665	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	660	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	660	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	660	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	660	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	660	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	660	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	660	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	660	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	660	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	660	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	660	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	660	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	660	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	660	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	660	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	660	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	655	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	655	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	655	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	655	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	650	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	650	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	650	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	650	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	650	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	650	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	650	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	650	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	650	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	650	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	650	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	650	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	650	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	650	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	650	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	650	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	650	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	650	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	650	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	650	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	650	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	645	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	645	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	645	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	645	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	645	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	645	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	645	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	640	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	640	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	640	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	640	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	640	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	640	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	640	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	640	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	640	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	640	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	640	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	640	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	640	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	640	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	640	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	640	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	635	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	635	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	635	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	635	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	635	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	635	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	630	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	630	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	630	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	630	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	630	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	630	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	630	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	630	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	630	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	630	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	630	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	630	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	630	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	630	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	625	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	625	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	625	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	625	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	625	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	625	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	620	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	620	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	620	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	620	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	620	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	620	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	620	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	620	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	620	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	620	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	620	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	620	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	620	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	620	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	620	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	620	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	620	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	620	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	620	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	620	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	615	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	615	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	615	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	615	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	615	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	615	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	615	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	610	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	610	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	610	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	610	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	610	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	610	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	610	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	610	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	610	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	610	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	610	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	610	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	610	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	610	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	610	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	610	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	610	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	610	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	610	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	610	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	610	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	605	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	605	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	605	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	605	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	605	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	605	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	600	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	600	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	600	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	600	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	600	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	600	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	600	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	600	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	600	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	600	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	600	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	600	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	600	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	600	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	600	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	600	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	600	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	600	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	600	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	600	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	600	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	600	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	600	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	600	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	595	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	595	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	595	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	595	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	595	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	595	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	595	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	595	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	595	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	595	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	595	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	590	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	590	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	590	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	590	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	590	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	590	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	590	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	590	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	590	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	590	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	590	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	590	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	590	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	590	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	590	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	590	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	590	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	590	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	590	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	590	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	585	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	585	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	585	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	585	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	585	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	580	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	580	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	580	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	580	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	580	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	580	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	580	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	580	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	580	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	580	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	580	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	580	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	580	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	580	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	580	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	580	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	580	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	580	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	580	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	580	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	580	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	580	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	580	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	580	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	575	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	575	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	575	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	575	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	575	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	575	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	575	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	575	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	575	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	570	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	570	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	570	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	570	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	570	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	570	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	570	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	570	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	570	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	570	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	570	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	570	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	570	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	570	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	570	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	570	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	570	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	570	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	570	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	570	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	570	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	570	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	570	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	570	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	570	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	570	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	565	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	565	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	565	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	565	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	565	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	565	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	565	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	565	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	565	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	565	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	560	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	560	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	560	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	560	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	560	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	560	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	560	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	560	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	560	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	560	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	560	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	560	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	560	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	560	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	560	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	560	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	560	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	560	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	555	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	555	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	555	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	555	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	555	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	555	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	555	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	555	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	555	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	550	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	550	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	550	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	550	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	550	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	550	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	550	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	550	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	550	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	550	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	550	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	550	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	550	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	550	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	550	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	550	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	550	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	550	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	550	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	550	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	550	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	550	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	550	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	550	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	550	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	550	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	550	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	545	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	545	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	545	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	545	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	545	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	545	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	545	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	545	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	545	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	545	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	540	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	540	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	540	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	540	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	540	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	540	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	540	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	540	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	540	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	540	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	540	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	540	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	540	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	540	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	540	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	540	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	540	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	540	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	540	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	540	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	540	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	540	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	540	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	540	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	535	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	535	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	535	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	535	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	535	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	535	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	535	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	535	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	530	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	530	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	530	3



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	530	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	530	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	530	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	530	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	530	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	530	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	530	3
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	530	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	530	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	530	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	530	3
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	530	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	530	3
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	530	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	530	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	530	3
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	530	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	530	3
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	530	3
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	530	3

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	530	3
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	525	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	525	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	525	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	525	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	525	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	525	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	525	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	525	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	525	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	525	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	525	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	525	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	525	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	525	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	525	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	525	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	525	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	525	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	525	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	520	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	520	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	520	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	520	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	520	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	520	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	520	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	520	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	520	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	520	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	520	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	520	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	520	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	520	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	520	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	520	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	520	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	520	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	520	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	520	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	520	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	520	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	520	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	520	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	520	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	520	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	520	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	520	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	520	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	520	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	515	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	515	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	515	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	515	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	515	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	515	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	515	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	515	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	510	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	510	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	510	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	510	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	510	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	510	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	510	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	510	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	510	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	510	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	510	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	510	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	510	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	510	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	510	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	510	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	510	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	510	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	510	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	510	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	510	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	505	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	505	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	505	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	505	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	505	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	505	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	505	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	505	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	505	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	505	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	505	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	500	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	500	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	500	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	500	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	500	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	500	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	500	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	500	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	500	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	500	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	500	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	500	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	500	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	500	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	500	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	500	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	500	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	500	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	500	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	500	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	500	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	500	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	500	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	500	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	500	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	500	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	495	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	495	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	495	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	495	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	495	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	495	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	495	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	495	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	495	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	495	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	495	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	495	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	495	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	495	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	495	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	490	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	490	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	490	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	490	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	490	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	490	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	490	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	490	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	490	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	490	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	490	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	490	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	490	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	490	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	490	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	490	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	490	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	490	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	490	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	490	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	490	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	490	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	490	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	490	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	490	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	490	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	490	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	490	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	485	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	485	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	485	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	485	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	485	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	485	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	485	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	485	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	485	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	485	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	485	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	485	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	485	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	485	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	485	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	480	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	480	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	480	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	480	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	480	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	480	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	480	4
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Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	480	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	480	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	480	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	480	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	480	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	480	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	480	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	480	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	480	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	480	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	480	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	480	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	480	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	480	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	480	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	475	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	475	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	475	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	475	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	475	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	475	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	475	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	475	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	475	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	475	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	475	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	470	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	470	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	470	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	470	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	470	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	470	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	470	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	470	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	470	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	470	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	470	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	470	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	470	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	470	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	470	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	470	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	470	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	470	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	470	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	465	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	465	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	465	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	465	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	465	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	465	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	465	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	465	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	465	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	465	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	465	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	465	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	465	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	465	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	465	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	460	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	460	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	460	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	460	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	460	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	460	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	460	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	460	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	460	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	460	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	460	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	460	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	460	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	460	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	460	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	460	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	460	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	460	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	460	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	460	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	460	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	460	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	455	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	455	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	455	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	455	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	455	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	455	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	455	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	455	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	455	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	455	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	455	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	455	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	455	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	455	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	455	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Small	455	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	455	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	455	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	455	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	450	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	450	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	450	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	450	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	450	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	450	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	450	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	450	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	450	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	450	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	450	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	450	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	450	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	450	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	450	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	450	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	450	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	450	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	450	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	450	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	450	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	450	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	445	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	445	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	445	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	445	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	445	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	445	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	445	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	445	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	445	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	445	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	440	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	440	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	440	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	440	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	440	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	440	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	440	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	440	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	440	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	440	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	440	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	440	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	440	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	440	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	440	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	435	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	435	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	435	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	435	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	435	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	435	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	435	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	435	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	435	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	435	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	435	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	435	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	435	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	430	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	430	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	430	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	430	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	430	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	430	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	430	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	430	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	430	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	430	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	430	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	430	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	430	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	430	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	430	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	430	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	430	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	430	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	425	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	425	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	425	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	425	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	425	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	425	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	425	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	425	4

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Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	425	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	425	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	425	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	425	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	425	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	425	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	425	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	425	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	425	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	425	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	425	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	425	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	425	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	425	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	425	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	420	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	420	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	420	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	420	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	420	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	420	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	420	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	420	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	420	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	420	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	420	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	420	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	420	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	420	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	420	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	420	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	420	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	420	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	420	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	420	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	420	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	420	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	420	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	420	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	420	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	420	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	415	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	415	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	415	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	415	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	415	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	415	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	415	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	415	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	415	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	415	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Sensitive UXO	Large	415	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	415	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	415	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	415	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	415	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	410	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	410	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	410	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	410	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	410	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	410	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	410	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	410	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	410	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	410	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	410	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	410	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	410	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	410	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	410	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	410	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	405	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	405	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	405	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	405	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	405	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	405	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	405	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	405	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	405	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	405	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	405	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	400	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	400	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	400	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	400	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	400	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	400	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	400	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	400	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	400	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	400	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	400	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	400	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	400	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	400	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	395	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	395	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	395	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	395	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	395	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	395	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	395	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	395	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	395	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	395	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	395	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	395	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	395	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	395	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	395	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	395	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	395	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	395	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	390	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	390	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	390	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	390	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	390	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	390	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	390	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	390	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	390	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	390	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	390	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	390	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	390	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	390	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	390	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	390	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	390	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	390	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	390	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	390	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	390	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	385	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	385	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	385	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	385	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	385	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	385	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	385	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	385	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	385	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	385	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	385	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	385	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	385	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	385	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	385	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Small	385	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	385	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	385	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	385	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	385	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	385	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	380	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	380	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	380	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	380	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	380	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	380	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	380	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	380	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	380	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	380	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	380	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	380	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	380	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	380	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	380	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	380	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	380	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	380	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	380	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	380	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	380	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	380	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	375	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	375	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	375	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	375	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	375	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	375	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	375	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	370	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	370	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	370	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	370	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	370	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	370	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	370	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	370	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Small	370	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Small	370	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	370	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	370	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	370	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	365	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	365	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	365	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	365	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	365	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	365	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	365	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	365	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	365	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	365	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Small	365	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	365	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	365	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	365	4
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Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	365	4
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Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	360	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	355	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	355	4
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Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	355	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	355	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	355	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	355	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	355	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	355	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	355	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	355	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	355	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	355	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	355	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	355	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Small	355	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	350	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	350	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	350	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	350	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	350	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	350	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	350	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	350	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	350	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	350	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	350	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	350	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	350	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	350	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	350	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	350	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	350	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	350	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	350	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	345	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	345	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	345	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	UXO	Large	345	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	345	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	345	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	345	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	345	4
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	340	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	340	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	340	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	340	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	340	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	340	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	340	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	340	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	335	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	335	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	335	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	335	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	335	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	335	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	335	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	335	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	335	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	335	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	335	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	335	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	335	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	330	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	330	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	330	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	330	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Sensitive UXO	Large	330	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Sensitive UXO	Large	330	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	330	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	330	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	330	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	330	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	330	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	330	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	330	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	330	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	330	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	330	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	325	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	325	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	325	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	325	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	325	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	325	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	325	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	325	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	325	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	325	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	325	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	325	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	325	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Small	325	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	UXO	Large	325	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	325	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	325	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	325	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	325	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	325	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	320	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	320	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	320	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	320	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	320	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	320	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	320	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	320	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	320	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	320	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	320	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	320	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	320	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	315	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	315	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	315	4
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Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	315	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	315	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	315	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	315	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	315	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	315	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	315	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	315	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	315	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	315	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Sensitive UXO	Large	315	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	315	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	310	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	310	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	310	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	310	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	310	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	310	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	310	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	310	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	310	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	310	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	305	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	305	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	305	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	305	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	305	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	300	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	300	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Small	300	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Small	300	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	300	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	300	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Small	300	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Small	300	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	295	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	295	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	295	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	295	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Small	295	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Small	295	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	295	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	295	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	295	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	295	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	295	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	295	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	295	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	295	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	295	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	295	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	295	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	295	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	295	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	290	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	290	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	290	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	290	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	290	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	290	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	290	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	290	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	290	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	290	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	285	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	285	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Fuzed Sensitive DMM	Large	285	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Fuzed Sensitive DMM	Large	285	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	285	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	285	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	285	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	285	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	285	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	285	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	285	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	285	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	285	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	285	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Possible	Unfuzed DMM	Large	285	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	285	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	285	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Small	285	4
Baseline Conditions	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	280	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	280	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	280	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	280	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	280	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	280	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	280	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	280	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	280	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	275	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	275	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	275	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	270	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	270	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	265	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	265	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	265	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	265	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	265	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	265	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	265	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	265	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	265	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	265	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	265	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Small	265	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	UXO	Large	260	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	UXO	Large	260	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	260	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	260	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Sensitive UXO	Large	260	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Sensitive UXO	Large	260	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	260	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	260	4
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Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	255	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	255	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	255	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	255	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	255	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	255	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	255	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	255	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	255	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	255	4
Baseline Conditions	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	250	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	250	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	250	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	245	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	245	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	245	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	UXO	Large	245	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	240	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	240	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Small	235	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Small	235	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	235	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	235	4
Surface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	235	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	235	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Small	230	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Small	230	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	225	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	225	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	225	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Full	Many Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	225	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	225	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	225	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Small	225	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Small	225	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	225	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	225	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	UXO	Large	225	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	220	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	220	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	215	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Target Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	215	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	215	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	215	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	215	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	210	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Function Test Range	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	210	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	205	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Possible	Unfuzed DMM	Large	195	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: Overlap	Unlikely	Unfuzed DMM	Large	195	4



Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	195	4
Subsurface Cleanup	HE and Low Explosive Filler in Fragmenting Rounds	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	195	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	195	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	195	4
Surface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	195	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	UXO	Large	190	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Safety Buffer	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	UXO	Large	190	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Fuzed Sensitive DMM	Large	185	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Fuzed Sensitive DMM	Large	185	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	185	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Small	165	4

Scoring Column	Filler Type	Distance to Hazard	Site Accessibility	Potential Contact Hours	Amount of MEC	MEC Depth	Migration Potential	MEC Classification	MEC Size	Score	Hazard Level
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Small	165	4
Surface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Surface and Subsurface; After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	165	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	155	4
Subsurface Cleanup	Incendiary	Inside MRS or inside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	155	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Possible	Unfuzed DMM	Large	125	4
Subsurface Cleanup	Incendiary	Outside ESQD Arc	Very Limited	Very Few Hours	Maneuver Area	Baseline: Subsurface Only; Baseline or After Cleanup: No Overlap	Unlikely	Unfuzed DMM	Large	125	4