



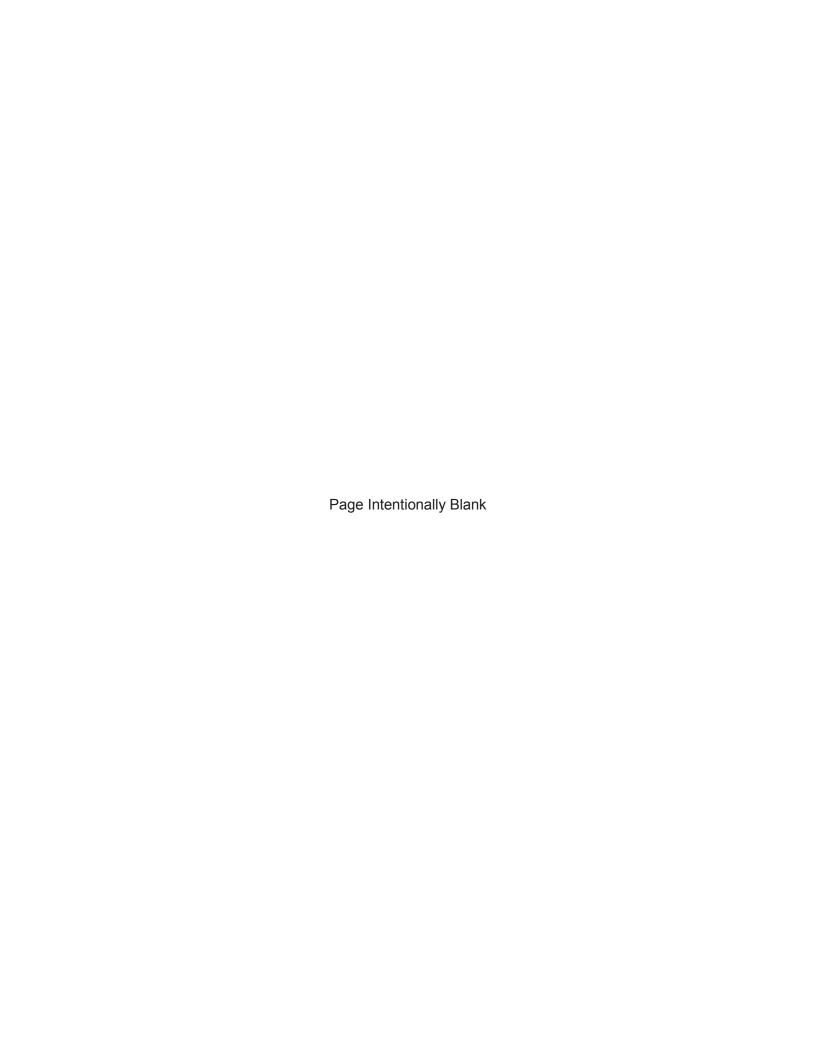
# Mountain Home Air Force Base, Idaho

Comprehensive Site Evaluation Phase II Report

Munitions Response Site Prioritization Protocol Tables

Military Munitions Response Program

October 2012



MAJCOM: ACC MRAID: 876 MRS: TS876

**FFID:** ID057212455700

### Table A

### **MRS Background Information**

е					
FORCE BASE					
Imore, ID					
Site Name/Project name (Project No.): 1940s Skeet Range					
3:52 PM					
Point of Contact Name: Richard Roller Point of Contact Phone: (208) 828-6667					
☐ RI		☐ FS	□RD		
☐ RC					
Media Evaluated (check all that apply):					
☐ Groundwater		nt (human receptor)	)		
	Surface	Water (ecological r	receptor)		
	Surface	Water (human rece	eptor)		
	R FORCE BASE Elmore, ID et Range 3:52 PM	R FORCE BASE Elmore, ID St Range  3:52 PM Point  RI  RC  Sedimel	Point of Contact Phone  R FORCE BASE  Strange  3:52 PM  Point of Contact Phone  RI FS  RC  Sediment (human receptor  Surface Water (ecological in the contact Phone)	## FORCE BASE  ## Imore, ID  ## Range  3:52 PM    Point of Contact Phone: (208) 828-6667	

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The 1940s Skeet Range (TS876) MRA is located in the southern portion of the base, east of the flight line. The area is currently an open field with low grass. Soils consist of Bahem silt loam, and topography is flat. There are no wetlands associated with this site. Depth to groundwater is 350 – 400 ft bgs throughout Mountain Home AFB.

The MRA is bounded to the north by fencing around the 726th Air Control Squadron building and a large storage yard. To the south, the MRA is bounded by an active fire training area and a recently constructed asphalt motorcycle training area. The flight line control fence located to the west of the MRA runs northwest to southeast and intersects the fenced fire training area. Access to the site is from a gravel parking area 100 meters southeast of Building 726 on Liberator Street (Bomber Road).

The range consisted of two firing points, two High Houses, two Low Houses, and a designated shot fall zone area. The range was in use from the early 1940s until the late 1940s or early 1950s. The range was oriented to the east indicating the direction of fire would have also been towards the east.

The 1940s Skeet Range (TS876) MRS is a 32-acre split from the original 32.9-acre 1940s Skeet Range MRA. TS876 is recommended for NFA based on analysis of environmental soil samples indicating concentrations of lead and PAH below human health screening levels. Based on the PAH contamination outside the original MRA boundary, the overall acreage increased from 32.9 acres to 33.1 acres.

Description of Pathways for Human and Ecological Receptors:

Lead was not detected above the 400 mg/kg human health screening level. Soil pathways are considered complete for human receptors. Lead was detected above the USEPA EcoSSL for the two most sensitive ecological receptors (insectivorous and herbivorous birds). Soil pathways are considered complete for these receptor categories.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

### CSE Report Reference (Section, Page #):

GENERAL - 5.1/9.0/10.0, LOCATION - 2.1/5.1.1, POC - 1.3, CONTRACTOR - 1.3

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## Table 1

### **EHE Module: Munitions Type Data Element Worksheet**

Classification	Description	Score
Sensitive	<ul> <li>- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions].</li> <li>- All hand grenades containing energetic filler.</li> <li>- Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.</li> </ul>	30
High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."  - All DMM containing a high-explosive filler that have:  - Been damaged by burning or detonation  - Deteriorated to the point of instability.	25
Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).  - All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:  - Been damaged by burning or detonation  - Deteriorated to the point of instability.	20
High explosive (unused)	- All DMM containing a high explosive filler that:  - Have not been damaged by burning or detonation  - Are not deteriorated to the point of instability.	15
Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).  - All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:  - Damaged by burning or detonation  - Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul> <li>- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated.</li> <li>- Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.</li> </ul>	10
Pyrotechnic (not used or damaged)	<ul> <li>- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:</li> <li>- Have not been damaged by burning or detonation</li> <li>- Are not deteriorated to the point of instability.</li> </ul>	10
Practice	<ul> <li>All UXO that are practice munitions that are not associated with a sensitive fuze.</li> <li>All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:</li> <li>Been damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul>	5
Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	<ul> <li>All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].</li> </ul>	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).	2

Site-specific data used in selection MUNITIONS TYPE classification:

Evidence of skeet range activity was observed in this MRS, consisting of clay target debris and concrete firing pad debris near the historic firing point and lead shot in the expected fall zone.

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## Table 2

### **EHE Module: Source of Hazard Data Element Worksheet**

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	1

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

Evidence of skeet range activity was observed in this MRS, consisting of clay target debris and concrete firing pad debris near the historic firing point and lead shot in the expected fall zone.

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## Table 3

### **EHE Module: Information on the Location of Munitions Data Element Worksheet**

Classification	Description	Score
Confirmed surface	Physical evidence indicates that there are UXO or DMM on the surface of the MRS     Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> </ul>	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).	1

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Evidence of skeet range activity was observed in this MRS, consisting of clay target debris and concrete firing pad debris near the historic firing point and lead shot in the expected fall zone.

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## Table 4

### **EHE Module: Ease of Access Data Element Worksheet**

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	<ul> <li>There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.</li> </ul>	0
Ease of Access	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	8

Site-specific characteristics used to select the EASE OF ACCESS classification:

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## Table 5

## **EHE Module: Status of Property Data Element Worksheet**

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

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## Table 6

### **EHE Module: Population Density Data Element Worksheet**

Classification	Description	
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

Population of Elmore County was 27, 038 according to the 2010 Census. Area of Elmore county is 3,077.57 square miles. Population density is 8.8 persons per square mile.

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## Table 7

## **EHE Module: Population Near Hazard Data Element Worksheet**

within  16 to 25 inhabited structures - There the bo	are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, the boundary of the MRS, or both.  are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	5
the bo	· · · · · · · · · · · · · · · · · · ·	4
11 to 15 inhabited structures - There	andary of the fill to the control of	
the bo	are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	3
	are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	2
	are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	1
	are no inhabited structures located up to 2 miles from the boundary of the MRS, within the ary of the MRS, or both.	0
Population Near Hazard DIRECT	IONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
Site-specific data characteristics used to select	t the POPULATION NEAR HAZARD classification:	J.

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## Table 8

## **EHE Module: Types of Activities/Structures Data Element Worksheet**

are conducted, or inhabited structures are located up to two miles from the MRS's or within the MRS's boundary, that are associated with any of the following purposes: I, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, tels, commercial, shopping centers, playgrounds, community gathering areas, religious ites used for subsistence hunting, fishing, and gathering.  are conducted, or inhabited structures are located up to two miles from the MRS's or within the MRS's boundary, that are associated with parks, nature preserves, or eational uses.	5
or within the MRS's boundary, that are associated with parks, nature preserves, or	4
	ı
are conducted, or inhabited structures are located up to two miles from the MRS's or within the MRS's boundary, that are associated with agriculture or forestry.	3
or within the MRS's boundary, that are associated with industrial activities or	2
9 1	1
S: Record the single highest score from above in the box to the right (maximum score = 5).	5
( i	or within the MRS's boundary, that are associated with agriculture or forestry.  are conducted, or inhabited structures are located up to two miles from the MRS's or within the MRS's boundary, that are associated with industrial activities or ing.  no known or recurring activities occurring up to two miles from the MRS's boundary or MRS's boundary.  S: Record the single highest score from above in the box to the right

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## Table 9

## **EHE Module: Ecological and/or Cultural Resources Data Element Worksheet**

There are both ecological and cultural resources present on the MRS.  There are ecological resources present on the MRS.	5
There are ecological resources present on the MRS.	3
	'
There are cultural resources present on the MRS.	3
There are no ecological resources or cultural resources present on the MRS.	0
IRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0
ect the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:	
IF	There are no ecological resources or cultural resources present on the MRS.  RECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).

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## Table 10

## **Determining the EHE Module Rating**

	Source	Score	•
Explosive Hazard Factor Data Elemen	ts		
Munitions Type	Table 1	2	2
Source of Hazard	Table 2		1
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 3	,	1
Ease of Access	Table 4	3	3
Status of Property	Table 5	(	)
Receptors Factor Data Elements		,	
Population Density	Table 6	,	1
Population Near Hazard	Table 7		5
Types of Activities/Structures	Table 8		5
Ecological and/or Cultural Resources	Table 9	(	)
	•	Sum <sup>2</sup>	:3

EHE Module Value	EHE Module Rating	
92 to 100	A	
82 to 91	В	
71 to 81	С	
60 to 70	D	
48 to 59	E	
38 to 47	F	
less than 38	G	
	Prioritization No Longer Required	
Alternative Module Ratings	No Known or Suspected Explosive Hazard	
	Evaluation Pending	

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## Table 20

## **Determining the CHE Module Rating**

	Source		Score
CWM Hazard Factor Data Elements			
CWM Configuration	Table 11		N/A
Source of CWM	Table 12		N/A
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 13		N/A
Ease of Access	Table 14		N/A
Status of Property	Table 15		N/A
Receptors Factor Data Elements			
Population Density	Table 16		N/A
Population Near Hazard	Table 17		N/A
Types of Activities/Structures	Table 18		N/A
Ecological and/or Cultural Resources	Table 19		N/A
	·	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	A
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

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## Table 21

### **HHE Module: Groundwater Data Element Worksheet**

Contaminant		Maximum Concentration (ug/L)	Comparison Value (ug/L)		Ratios
CHF Scale		CHF Value	Contamina	tion Hazard Factor (CHF)	No Data
CHF > 100		H (High)	2	[Maximum Concentration of (	Contaminantl
100 > CHF > 2		M (Medium)	$CHF = \sum_{\bullet}$	[Comparison Value for Con	
2 > CHF		L (Low)		<u> </u>	-
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident		lytical data or observable evidence indicates ent at, moving toward, or has moved to a poi			Н
Potential	coul	amination in groundwater has moved only slightly beyond the source (i.e., tens of feet), d move but is not moving appreciably, or information is not sufficient to make a rmination of Evident or Confined.			
Confined	grou	mation indicates a low potential for contaminant migration from the source via the Indwater to a potential point of exposure (possibly due to geological structures or physical rols).			
Migratory Pathway Factor	The	single highest value from above in the box to	ox to the right (maximum value = H).		
		Receptor Fac	tor		
Identified	curr		eatened water supply well downgradient of the source and the groundwater is a e of drinking water or source of water for other beneficial uses such as culture (equivalent to Class I or IIA aquifer).		
Potential	curr		e is no threatened water supply well downgradient of the source and the groundwater is ently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, or IIB aquifer).		
Limited	grou	re is no potentially threatened water supply well downgradient of the source and the ndwater is not considered a potential source of drinking water and is of limited beneficial use ivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).			
Receptor Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA
			Р	rioritization No Longer Requ	ired
Alte	rnative	Module Ratings	N	o Known or Suspected Ha	d

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was not conducted as part of the CSE Phase II investigations. All soil sampling results were below the human health screening level. Depth to groundwater is 350-400 feet throughout Mountain Home AFB.

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## Table 22

**HHE Module: Surface Water - Human Endpoint Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L)	Comparison	Value (ug/L)	Ratios		
CHF Scale		CHF Value	Contamination Hazard Factor (		No Data		
CHF > 100		H (High)		laximum Concentration of (	Contaminantl		
100 > CHF > 2		M (Medium)	CHF = \(\sum_{\text{in}}\)	Comparison Value for Conf	taminantl		
2 > CHF		L (Low)		Companson value for Com	lammantj		
CHF Value				CHF VALUE	NA		
		Migratory Pathwa	y Factor				
Evident		lytical data or observable evidence indicates tent at, moving toward, or has moved to a poi		in the surface water is	Н		
Potential	coul		nination in surface water has moved only slightly beyond the source (i.e., tens of feet), nove but is not moving appreciably, or information is not sufficient to make a ination of Evident or Confined.				
Confined		mation indicates a low potential for contaminant migration from the source via the surface r to a potential point of exposure (possibly due to geological structures or physical controls).					
Migratory Pathway Factor	The	single highest value from above in the box to	ox to the right (maximum value = H).				
		Receptor Fac	tor				
Identified	lden mov		fied receptors to have access to surface water to whick contamination has moved or can				
Potential	Pote		tial for receptors to have access to surface water to whick contamination has moved or can				
Limited		e or no potential for receptors to have access red or can move.	L				
Receptor Factor	The	single highest value from above in the box to	x to the right (maximum value = H).				
Alter	native	Module Ratings		ritization No Longer Requ			
Rationale for Selection of MF			— NO P	mown or ouspected na	zaru		

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

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## Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg/	kg) Comparison Value (mg/kg)	Ratios		
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data		
CHF > 100	H (High)	- Maximum Concentration of	Contaminant		
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of	otaminant]		
2 > CHF	L (Low)	[Comparison Value for Cor	ıtamınantj		
CHF Value		CHF VALUE	NA		
	Migratory Path	way Factor			
<b>Evident</b> Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.					
Potential		tamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could e but is not moving appreciably, or information is not sufficient to make a determination of ent or Confined.			
Confined		mation indicates a low potential for contaminant migration from the source via the sediment potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The single highest value from above in the bo	e single highest value from above in the box to the right (maximum value = H).			
	Receptor I	Factor Pactor			
Identified	Identified receptors to have access to sedime	tified receptors to have access to sediment to which contamination has moved or can move.			
Potential	Potential for receptors to have access to sedimove	ntial for receptors to have access to sediment to which contamination has moved or can			
Limited	Little or no potential for receptors to have acc or can move	or no potential for receptors to have access to sediment to which contamination has moved In move			
Receptor Factor	The single highest value from above in the bo	e single highest value from above in the box to the right (maximum value = H).			
Alte	rnative Module Ratings	Prioritization No Longer Req No Known or Suspected Ha			
Rationale for Selection of M	PF:				

Rationale for Selection of RF:

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC **MRAID**: 876 MRS: TS876

**FFID:** ID057212455700

## Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios		
CHF Scale		CHF Value	Contamina	ation Hazard Factor (CHF)	No Data		
CHF > 100		H (High)		[Maximum Concentration of	Contaminantl		
100 > CHF > 2		M (Medium)	CHF = <u>\</u>	[Comparison Value for Con	taminantl		
2 > CHF		L (Low)		[Companson value for Con	tarriiriaritj		
CHF Value				CHF VALUE	NA		
		Migratory Pathwa	y Factor				
Evident		ytical data or observable evidence indicates t ent at, moving toward, or has moved to a poi		on in the surface water is	Н		
Potential	could		mination in surface water has moved only slightly beyond the source (i.e., tens of feet), move but is not moving appreciably, or information is not sufficient to make a mination of Evident or Confined.				
Confined		rmation indicates a low potential for contamina er to a potential point of exposure (possibly du		L			
Migratory Pathway Factor	The	single highest value from above in the box to the right (maximum value = H).					
		Receptor Fac	tor				
Identified	lden mov		ified receptors have access to surface water to which contamination has moved or can e.				
Potential		ential for receptors to have access to surface move.	ial for receptors to have access to surface water to which contamination has moved or ove.				
Limited		or no potential for receptors to have access to surface water to which contamination has d or can move.			L		
Receptor Factor	The	single highest value from above in the box to the right (maximum value = H).					
			Р	rioritization No Longer Requ	uired		
Alternative Module Ratings			N	o Known or Suspected Ha	zard		
Rationale for Selection of MI	PF:						

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 876 MRS: TS876

**FFID:** ID057212455700

## Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg	g/kg) Comparison Value (mg/kg)	Ratios		
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data		
CHF > 100	H (High)	[Maximum Concentration of Co	ontaminant1		
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of Co			
2 > CHF	L (Low)	[Companson value for Conta	iriiriaritj		
CHF Value		CHF VALUE	NA		
	Migratory Pat	thway Factor			
Evident	Analytical data or observable evidence indicat, moving toward, or has moved to a point	cates that contamination in the sediment is present of exposure.	Н		
Potential		tamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could e but is not moving appreciably, or information is not sufficient to make a determination of ent or Confined.			
Confined		ormation indicates a low potential for contaminant migration from the source via the sediment a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).				
	Recepto	r Factor			
Identified	Identified receptors to have access to sedir	ment to which contamination has moved or can move.	Н		
Potential	potential for receptors to have access to se move.	ediment to which contamination has moved or can	М		
Limited	Little or no potential for receptors to have a or can move.	or no potential for receptors to have access to sediment to which contamination has moved in move.			
Receptor Factor	The single highest value from above in the	box to the right (maximum value = H).	NA		
		Prioritization No Longer Requi	red		
Alte	rnative Module Ratings	No Known or Suspected Haz	ard		
Rationale for Selection of M	Dr.				

Rationale for Selection of RF

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 876 MRS: TS876

**FFID:** ID057212455700

## Table 26

### **HHE Module: Soil - Data Element Worksheet**

Contaminant		Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios		
Lead		49		0.1		
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)	0.1		
CHF > 100		H (High)	[Maximum Concentration of	Contaminant1		
100 > CHF > 2		M (Medium)	CHF = \( \sum_{[Maximum Concentration of the concentration of th			
2 > CHF		L (Low)	[Companson value for Cor	ıtamınanı		
CHF Value			CHF VALUE	L		
		Migratory Pathway	<u>/ Factor</u>			
Evident		lytical data or observable evidence indicates t ing toward, or has moved to a point of exposu		Н		
Potential	but i		oved only slightly beyond the source (i.e., tens of feet), could move y, or information is not sufficient to make a determination of Evident			
Confined		rmation indicates a low potential for contamina ential point of exposure (possibly due to geolog	L			
Migratory Pathway Factor	The	single highest value from above in the box to	the right (maximum value = H).	L		
		Receptor Fac	<u>tor</u>			
Identified	lden	tified receptors to have access to soil to which	soil to which contamination has moved or can move.			
Potential	Pote	ential for receptors to have access to soil to wi	hich contamination has moved or can move.	М		
Limited		or no potential for receptors to have access to soil to which contamination has moved or move.				
Receptor Factor	The	single highest value from above in the box to	the box to the right (maximum value = H).			
	•		Prioritization No Longer Req	uired		
Alte	rnative	Module Ratings	No Known or Suspected Hazard			

Rationale for Selection of MPF:

Lead was detected in soil, however concentrations are below RSLs.

Rationale for Selection of RF:

Lead was detected in soil, however concentrations are below RSLs.

Sample comments:

51 surface soil samples (0-6 in.) were collected at the 1940s Skeet Range (TS876) for XRF analysis of lead. Lead was detected at concentrations ranging from 11 to 49 mg/kg. None of the surface samples exceeded the USEPA human health screening level for lead of 400 mg/kg.

CSE Report Reference (Section, Page #):

5.1.7.2

MAJCOM: ACC MRAID: 876 MRS: TS876

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# Table 27 Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	L	L	LLL	G

HHE Ratings (for reference only)				
Combination	Rating			
ННН	А			
ННМ	В			
HHL				
НММ	С			
HML				
МММ	D			
HLL	_			
MML	E			
MLL	F			
LLL	G			
	Prioritization No Longer Required			
Alternative Module Ratings	No Known or Suspected MC Hazard			
	Evaluation Pending			
HHE Module Ratings	G			

MAJCOM: ACC MRAID: 876 MRS: TS876

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# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		Α	1		
Α	2	В	2	Α	2
В	3	С	3	В	3
С	4	D	4	С	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No	Prioritization No Longer Required		Longer Required	Prioritization No	Longer Required
No Known or Si	No Known or Suspected Hazard		spected Hazard	No Known or St	uspected Hazard
Evaluatio	n Pending	Evaluation Pending		Evaluation Pending	
			MRS Priority		8

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

### Table A

### MRS Background Information

Munitions Response Site Name: 1940s Skeet Range (a)								
Component: Air Force								
Installation/Property Name: MOUNTAIN HOME AIR FORCE BASE								
Location (City, County, State): Mountain Home, Elmore, ID								
Site Name/Project name (Project No.): 1940s Ske	et Range (a)							
Date Information Entered\Updated: 5/17/2012 1:41:19 PM           Point of Contact Name: Richard Roller         Point of Contact Phone: (208) 828-6667           Project Phase (check only one):         RI         FS         RD           RA         RIP         RC         RC								
Media Evaluated (check all that apply):  ☐ Groundwater ☐ Sediment (human receptor) ☐ Surface soil ☐ Surface Water (ecological receptor)								
Sediment (ecological receptor)		Surface	Water (human receptor	r)				

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The 1940s Skeet Range (TS876) MRA is located in the southern portion of the base, east of the flight line. The area is currently an open field with low grass. Soils consist of Bahem silt loam, and topography is flat. There are no wetlands associated with this site. Depth to groundwater is 350 – 400 ft bgs throughout Mountain Home AFB.

The MRA is bounded to the north by fencing around the 726th Air Control Squadron building and a large storage yard. To the south, the MRA is bounded by an active fire training area and a recently constructed asphalt motorcycle training area. The flight line control fence located to the west of the MRA runs northwest to southeast and intersects the fenced fire training area. Access to the site is from a gravel parking area 100 meters southeast of Building 726 on Liberator Street (Bomber Road).

The range consisted of two firing points, two High Houses, two Low Houses, and a designated shot fall zone area. The range was in use from the early 1940s until the late 1940s or early 1950s. The range was oriented to the east indicating the direction of fire would have also been towards the east

The 1940s Skeet Range (a) (TS876a) MRS is a 1.1-acre split from the original 32.9-acre 1940s Skeet Range MRA. TS876a is recommended for further action based on analysis of environmental soil samples indicating concentrations of lead and PAH above human health screening levels. Based on the PAH contamination outside the original MRA boundary, the overall acreage increased from 32.9 acres to 33.1 acres.

Description of Pathways for Human and Ecological Receptors:

PAH compounds were detected above USEPA human health screening levels. Soil pathways are considered complete for human and ecological receptors.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

### CSE Report Reference (Section, Page #):

GENERAL - 5.1.1/5.1.2/8.0/9.0/10.0/12.5.1, LOCATION - 2.1/5.11, POC - 1.3, CONTRACTOR - 1.3

MAJCOM: ACC **MRAID:** 876 MRS: TS876a

**FFID:** ID057212455700

## Table 1

### **EHE Module: Munitions Type Data Element Worksheet**

Classification	Description	Score
Sensitive	<ul> <li>- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions].</li> <li>- All hand grenades containing energetic filler.</li> <li>- Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.</li> </ul>	30
High explosive (used or damaged)	<ul> <li>- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."</li> <li>- All DMM containing a high-explosive filler that have: <ul> <li>- Been damaged by burning or detonation</li> <li>- Deteriorated to the point of instability.</li> </ul> </li> </ul>	25
Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).  - All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:  - Been damaged by burning or detonation - Deteriorated to the point of instability.	20
High explosive (unused)	- All DMM containing a high explosive filler that:  - Have not been damaged by burning or detonation  - Are not deteriorated to the point of instability.	
Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).  - All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:  - Damaged by burning or detonation  - Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul> <li>- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated.</li> <li>- Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.</li> </ul>	10
Pyrotechnic (not used or damaged)	- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:  - Have not been damaged by burning or detonation  - Are not deteriorated to the point of instability.	
Practice	- All UXO that are practice munitions that are not associated with a sensitive fuze All DMM that are practice munitions that are not associated with a sensitive fuze and that have not: - Been damaged by burning or detonation - Deteriorated to the point of instability.	5
Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).	2

Site-specific data used in selection MUNITIONS TYPE classification:

Evidence of skeet range activity, consisting of clay target debris, small arms debris, and concrete debris located near the historic firing point, was identified at this MRS.

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## Table 2

### **EHE Module: Source of Hazard Data Element Worksheet**

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	1

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

Evidence of skeet range activity, consisting of clay target debris, small arms debris, and concrete debris located near the historic firing point, was identified at this MRS.

MAJCOM: ACC **MRAID**: 876 MRS: TS876a

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## Table 3

### **EHE Module: Information on the Location of Munitions Data Element Worksheet**

Classification	Description	Score
Confirmed surface	<ul> <li>Physical evidence indicates that there are UXO or DMM on the surface of the MRS</li> <li>Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.</li> </ul>	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> </ul>	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	<ul> <li>There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.</li> </ul>	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).	1

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Evidence of skeet range activity, consisting of clay target debris, small arms debris, and concrete debris located near the historic firing point, was identified at this MRS.

MAJCOM: ACC MRAID: 876 MRS: TS876a

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## Table 4

### **EHE Module: Ease of Access Data Element Worksheet**

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	8

Site-specific characteristics used to select the EASE OF ACCESS classification:

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## Table 5

## **EHE Module: Status of Property Data Element Worksheet**

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

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## Table 6

### **EHE Module: Population Density Data Element Worksheet**

Classification	Description	
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

Population of Elmore County was 27, 038 according to the 2010 Census. Area of Elmore county is 3,077.57 square miles. Population density is 8.8 persons per square mile.

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## Table 7

## **EHE Module: Population Near Hazard Data Element Worksheet**

within  16 to 25 inhabited structures - There the bo	are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, the boundary of the MRS, or both.  are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	5
the bo	· · · · · · · · · · · · · · · · · · ·	4
11 to 15 inhabited structures - There	andary of the fill to the control of	
the bo	are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	3
	are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	2
	are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within bundary of the MRS, or both.	1
	are no inhabited structures located up to 2 miles from the boundary of the MRS, within the ary of the MRS, or both.	0
Population Near Hazard DIRECT	IONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
Site-specific data characteristics used to select	t the POPULATION NEAR HAZARD classification:	J.

MAJCOM: ACC MRAID: 876 MRS: TS876a

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## Table 8

## **EHE Module: Types of Activities/Structures Data Element Worksheet**

Description	Score
- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	5
<ul> <li>Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.</li> </ul>	4
- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
<ul> <li>Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.</li> </ul>	2
- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
	<ul> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.</li> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.</li> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.</li> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.</li> <li>- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.</li> <li>DIRECTIONS: Record the single highest score from above in the box to the right</li> </ul>

MAJCOM: ACC MRAID: 876 MRS: TS876a

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## Table 9

## **EHE Module: Ecological and/or Cultural Resources Data Element Worksheet**

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0
Site-specific characteristics used to s	elect the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:	

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

# Table 10

## **Determining the EHE Module Rating**

	Source	Score	•
Explosive Hazard Factor Data Elemen	ts		
Munitions Type	Table 1	2	2
Source of Hazard	Table 2	1	1
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 3	1	1
Ease of Access	Table 4	8	3
Status of Property	Table 5	C	)
Receptors Factor Data Elements			
Population Density	Table 6	1	1
Population Near Hazard	Table 7	5	5
Types of Activities/Structures	Table 8	5	5
Ecological and/or Cultural Resources	Table 9	C	)
		Sum 2	3

EHE Module Value	EHE Module Rating	
92 to 100	A	
82 to 91	В	
71 to 81	С	
60 to 70	D	
48 to 59	Е	
38 to 47	F	
less than 38	G	
	Prioritization No Longer Required	
Alternative Module Ratings	No Known or Suspected Explosive Hazard	
	Evaluation Pending	

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

## Table 20

## **Determining the CHE Module Rating**

	Source		Score
CWM Hazard Factor Data Elements			
CWM Configuration	Table 11		N/A
Source of CWM	Table 12		N/A
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 13		N/A
Ease of Access	Table 14		N/A
Status of Property	Table 15		N/A
Receptors Factor Data Elements			
Population Density	Table 16		N/A
Population Near Hazard	Table 17		N/A
Types of Activities/Structures	Table 18		N/A
Ecological and/or Cultural Resources	Table 19		N/A
		Sum	N/A

CHE Module Value	CHE Module Rating			
92 to 100	A			
82 to 91	В			
71 to 81	С			
60 to 70	D			
48 to 59	E			
38 to 47	F			
less than 38	G			
	Prioritization No Longer Required			
Alternative Module Ratings	No Known or Suspected CWM Hazard			
	Evaluation Pending			

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

## Table 21

### **HHE Module: Groundwater Data Element Worksheet**

Contaminant		Maximum Concentration (ug/L)	Comparison Value (ug/L)		Ratios
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)		No Data
CHF > 100 100 > CHF > 2		H (High) M (Medium)	CHF = [Maximum Concentration of [Comparison Value for Con		Contaminantl
					taminantl
2 > CHF		L (Low)			tarriiriaritj
CHF Value			CHF VALUE		NA
		Migratory Pathwa	y Factor		
Evident		Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.			
Potential	coul	contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), ould move but is not moving appreciably, or information is not sufficient to make a etermination of Evident or Confined.			
Confined	grou	formation indicates a low potential for contaminant migration from the source via the oundwater to a potential point of exposure (possibly due to geological structures or physical ontrols).			
Migratory Pathway Factor	The	single highest value from above in the box to	NA		
		Receptor Fac	tor		
Identified	curre	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).			
Potential	curre	here is no threatened water supply well downgradient of the source and the groundwater is urrently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, A, or IIB aquifer).			
Limited	grou	ere is no potentially threatened water supply well downgradient of the source and the bundwater is not considered a potential source of drinking water and is of limited beneficial use quivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).			
Receptor Factor	The	single highest value from above in the box to	n the box to the right (maximum value = H).		
Alternative Module Ratings			Prioritization No Longer Required		
			No	Known or Suspected Ha	zard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was not conducted as part of the CSE Phase II investigations. Depth to groundwater is 350-400 feet throughout Mountain Home AFB.

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

## Table 22

HHE Module: Surface Water - Human Endpoint Data Element Worksheet

CHF Scale CHF > 100 100 > CHF > 2	CHF Value H (High) M (Medium)	CHF = [Maximum Concentration of C	No Data		
	M (Medium)	[Maximum Concentration of C			
100 > CHF > 2		CUE_	Contaminant1		
		[Comparison Value for Cont	aminantl		
2 > CHF	L (Low)	[Companson value for Conti	.ammantj		
CHF Value	IF Value CHF VAL		NA		
	Migratory Pathwa	y Factor			
Evident		alytical data or observable evidence indicates that contamination in the surface water is sent at, moving toward, or has moved to a point of exposure.			
Potential		ontamination in surface water has moved only slightly beyond the source (i.e., tens of feet), uld move but is not moving appreciably, or information is not sufficient to make a termination of Evident or Confined.			
Confined		ormation indicates a low potential for contaminant migration from the source via the surface ter to a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The single highest value from above in the box to	e single highest value from above in the box to the right (maximum value = H).			
	Receptor Fac	<u>ctor</u>			
Identified	Identified receptors to have access to surface wa move.	entified receptors to have access to surface water to whick contamination has moved or can ove.			
Potential	Potential for receptors to have access to surface move.	tential for receptors to have access to surface water to whick contamination has moved or can ove.			
Limited	Little or no potential for receptors to have access moved or can move.	e or no potential for receptors to have access to surface water to whick contamination has ved or can move.			
Receptor Factor	The single highest value from above in the box to	e single highest value from above in the box to the right (maximum value = H).			
Alternative Module Ratings		Prioritization No Longer Requ	ired		
		No Known or Suspected Haz	zard		

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC **MRAID**: 876 MRS: TS876a

**FFID:** ID057212455700

#### Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios		
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data		
CHF > 100	H (High)	CHE - [Maximum Concentration of	Contaminantl		
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of [Comparison Value for Cor			
2 > CHF	L (Low)	[Companson value for Cor	ıtarılınanı		
CHF Value CHF VALUE			NA		
	Migratory Pathway	y Factor			
Evident	Analytical data or observable evidence indicates t at, moving toward, or has moved to a point of exp	Н			
Potential	Contamination in sediment has moved only slightl move but is not moving appreciably, or information Evident or Confined.		M		
Confined		nformation indicates a low potential for contaminant migration from the source via the sediment o a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The single highest value from above in the box to	ne single highest value from above in the box to the right (maximum value = H).			
	Receptor Fac	<u>tor</u>			
Identified	Identified receptors to have access to sediment to	Identified receptors to have access to sediment to which contamination has moved or can move.			
Potential	Potential for receptors to have access to sedimen move	stential for receptors to have access to sediment to which contamination has moved or can ove			
Limited	Little or no potential for receptors to have access or can move	to sediment to which contamination has moved	L		
Receptor Factor	The single highest value from above in the box to	the right (maximum value = H).	NA		
		Prioritization No Longer Req	uired		
Alter	rnative Module Ratings	No Known or Suspected Ha	azard		
Rationale for Selection of MI	PF:				

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC **MRAID**: 876 MRS: TS876a

**FFID:** ID057212455700

#### Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios			
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data			
CHF > 100	H (High)	CHF = [Maximum Concentration of	Contaminantl			
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of [Comparison Value for Cor				
2 > CHF	L (Low)	[Companson value for Con	itaminantj			
CHF Value		CHF VALUE	NA			
	Migratory Pathw	ay Factor				
Evident		alytical data or observable evidence indicates that contamination in the surface water is esent at, moving toward, or has moved to a point of exposure.				
Potential	Contamination in surface water has moved only could move but is not moving appreciably, or inf determination of Evident or Confined.		M			
Confined		mation indicates a low potential for contaminant migration from the source via the surface r to a potential point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The single highest value from above in the box	single highest value from above in the box to the right (maximum value = H).				
	Receptor Fa	actor				
Identified	Identified receptors have access to surface water move.	er to which contamination has moved or can	Н			
Potential	Potential for receptors to have access to surface can move.	ntial for receptors to have access to surface water to which contamination has moved or nove.				
Limited	Little or no potential for receptors to have acces moved or can move.	or no potential for receptors to have access to surface water to which contamination has ed or can move.				
Receptor Factor	The single highest value from above in the box	to the right (maximum value = H).	NA			
	native Module Ratings	Prioritization No Longer Req No Known or Suspected Ha				
Rationale for Selection of MP	F:					

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

## Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg	g/kg) Comparison Value (mg/kg)	Ratios			
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data			
CHF > 100	H (High)	[Maximum Concentration of Co	ontaminant1			
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of Co				
2 > CHF	L (Low)	[Companson value for Conta	iriiriaritj			
CHF Value		CHF VALUE	NA			
	Migratory Pat	thway Factor				
Evident	Analytical data or observable evidence indicat, moving toward, or has moved to a point	Н				
Potential		amination in sediment has moved only slightly beyond the source (i.e., tens of feet), could but is not moving appreciably, or information is not sufficient to make a determination of ent or Confined.				
Confined		rmation indicates a low potential for contaminant migration from the source via the sediment potential point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The single highest value from above in the	box to the right (maximum value = H).	NA			
	Recepto	r Factor				
Identified	Identified receptors to have access to sedir	ment to which contamination has moved or can move.	Н			
Potential	potential for receptors to have access to se move.	ediment to which contamination has moved or can	М			
Limited	Little or no potential for receptors to have a or can move.	ccess to sediment to which contamination has moved	L			
Receptor Factor	The single highest value from above in the	box to the right (maximum value = H).	NA			
		Prioritization No Longer Requi	red			
Alte	rnative Module Ratings	No Known or Suspected Haz	ard			
Rationale for Selection of M	Dr.					

Rationale for Selection of RF

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

#### Table 26

#### **HHE Module: Soil - Data Element Worksheet**

Contaminant	Maximum Concentration (m	g/kg)	Comparisor	n Value (mg/kg)	Ratios	
Lead		33		0.1		
Indeno[1,2,3-cd]pyrene		3.2		62	0.1	
Dibenz[ah]anthracene		0.54		6.2	0.1	
Benzo[k]fluoranthene		1.8		620	0.0	
Benzo[b]fluoranthene		5.2		62	0.1	
Benzo[a]pyrene		3.7		6.2	0.6	
Benz[a]anthracene		2.6		62	0.0	
CHF Scale	CHF Value		Contaminat	ion Hazard Factor (CHF)	0.9	
CHF > 100	H (High)			Maximum Concentration of	Contaminantl	
100 > CHF > 2	M (Medium)		CHF = \(\sum_{}\)	[Maximum Concentration of	· · · ·	
2 > CHF	L (Low)			[Comparison Value for Con	taminantj	
CHF Value				CHF VALUE	L	
	Migratory Pa	thway	Factor			
Evident		nalytical data or observable evidence indicates that contamination in the soil is present at, noving toward, or has moved to a point of exposure.			Н	
Potential		tamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move s not moving appreciably, or information is not sufficient to make a determination of Evident confined.				
Confined		mation indicates a low potential for contaminant migration from the source via the soil to a ntial point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The single highest value from above in the	single highest value from above in the box to the right (maximum value = H).			M	
	Recepto	or Fact	<u>:or</u>			
Identified	Identified receptors to have access to soil	to which	contamination	has moved or can move.	Н	
Potential	Potential for receptors to have access to s	ential for receptors to have access to soil to which contamination has moved or can move.			М	
Limited	Little or no potential for receptors to have can move.	or no potential for receptors to have access to soil to which contamination has moved or nove.				
Receptor Factor	The single highest value from above in the	e box to t	the right (maxim	um value = H).	L	
			Pr	oritization No Longer Req	uired	
Alteri	native Module Ratings		No	o Known or Suspected Ha	zard	

Rationale for Selection of MPF:

Lead was detected in soil, however concentrations are below RSLs. PAH compounds are present above human health screening levels and surface soil pathways are complete.

#### Rationale for Selection of RF:

Lead was detected in soil, however concentrations are below RSLs. PAH compounds are present above human health screening levels and surface soil pathways are complete. However; access to contaminated area is limited.

#### Sample comments:

10 surface soil samples were collected for PAH analysis where clay target debris was observed at the 1940s Skeet Range. PAHs were detected in all ten samples and each sample contained elevated PAH compounds that exceeded the USEPA human health screening levels.

The maximum lead concentration in this MRS was 33 mg/kg. This is below the human health screening level of 400 mg/kg.

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

CSE Report Reference (Section, Page #):

5.1.7.4/8.0/9.0/10.0

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

# Table 27 Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	M	L	MLL	F

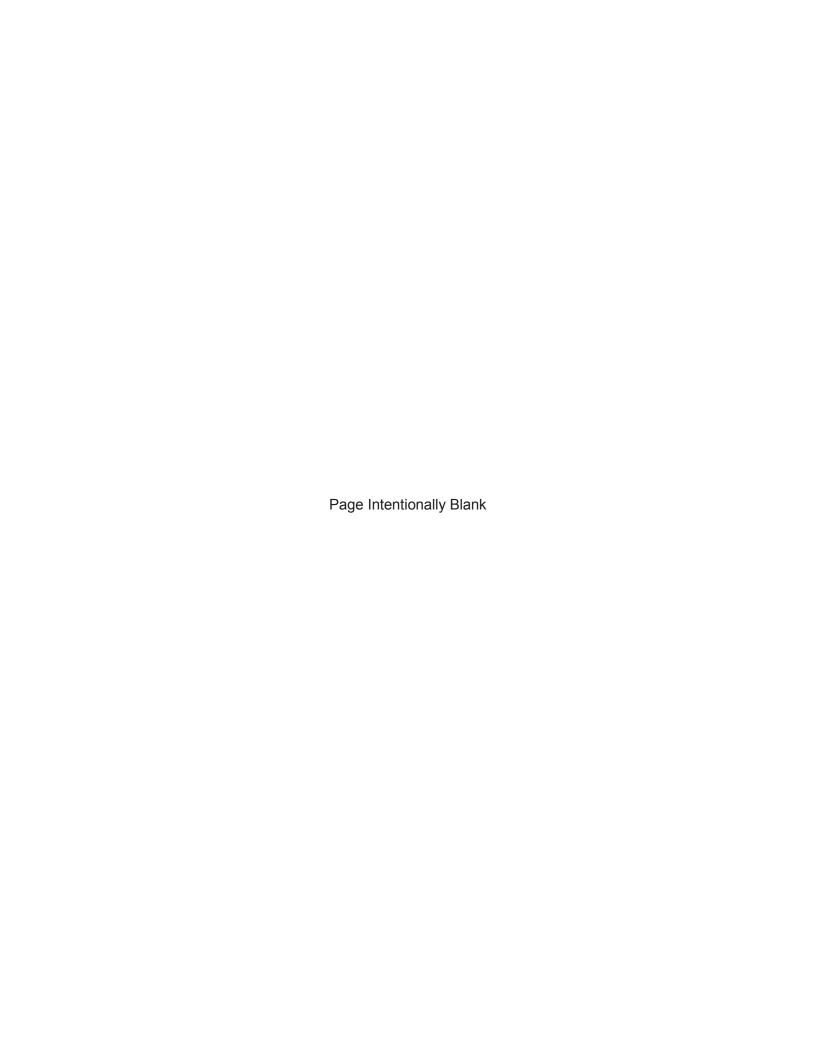
HHE Ratings (for reference only)				
Combination	Rating			
ННН	А			
ННМ	В			
HHL				
нмм	С			
HML				
ммм	D			
HLL	_			
MML	E			
MLL	F			
LLL	G			
Alfamatian Markela Bathana	Prioritization No Longer Required			
Alternative Module Ratings	No Known or Suspected MC Hazard			
	Evaluation Pending			
HHE Module Ratings	F			

MAJCOM: ACC MRAID: 876 MRS: TS876a

**FFID:** ID057212455700

# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		Α	1		
Α	2	В	2	Α	2
В	3	С	3	В	3
С	4	D	4	С	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No	Longer Required	Prioritization No	Longer Required	Prioritization No	Longer Required
No Known or Si	uspected Hazard	No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluatio	n Pending	Pending Evaluation Pending Evaluation Pending		n Pending	
			MRS Priority		7



MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID**: ID057212455700

#### Table A

#### **MRS Background Information**

Munitions Response Site Name: 1970s Skeet Rang	e						
Component: Air Force							
nstallation/Property Name: MOUNTAIN HOME AIR FORCE BASE							
Location (City, County, State): Mountain Home, E	lmore, ID						
Site Name/Project name (Project No.): 1970s Skee	t Range						
Date Information Entered\Updated: 5/17/2012 12:39:27 PM							
Point of Contact Name: Richard Roller		Point	of Contact Phone	(208) 828-6667			
Project Phase (check only one):							
☐ PA ✓ SI	□RI		☐ FS	□RD			
☐ RA ☐ RIP	☐ RC						
Media Evaluated (check all that apply):							
☐ Groundwater ☐ Sediment (human receptor)							
✓ Surface soil		Surface	Water (ecological re	eceptor)			
Sediment (ecological receptor)		Surface	Water (human rece	ptor)			

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The 1970s Skeet Range MRA is located in the southeastern portion of the base near the southern flightline. The coordinates of this site are 43.034818 degrees latitude, -115.841968 degrees longitude. The area is currently an open field with low grass. Soils consist of Bahem silt loam, and topography is flat. There are no wetlands associated with this site. Depth to ground water is 350 – 400 ft. bgs throughout Mountain Home AFB. The northern portion of the 1970s Skeet Range MRA is overlapped by the Former EOD Proficiency Range (TS879) and is accessed from a gravel road that runs south from Bomber Rd. The site is divided by two east-west trending fire breaks located to the north and the south of the concrete firing pad.

The range consisted of a firing point, a High House, a Low House, and a designated shot fall zone area. The concrete firing point is currently present. The MRA was in use in the late 1960s and 1970s and received heavy use in 1972. The range was orientated to the east indicating the direction of fire would have also been towards the east. The High and Low Houses were demolished in 1980 indicating that all activity at the skeet range would have ceased in 1980.

The 1970s Skeet Range (TS877) MRS is a 28-acre split from the original 29.6-acre 1970s Skeet Range MRA. This MRS is recommended for NFA based on analysis of environmental soil samples indicating concentrations of lead and PAH below human health screening levels. A portion of the 1970s Skeet Range overlaps the Former EOD Proficiency Range MRA. Evidence of EOD training was observed in the overlap area and since the entire Former EOD Proficiency Range is recommended for further munitions response action, 0.7 acres have been removed from the 1970s Skeet Range. The total acreage for the 1970s Skeet Range MRA is now 28.9 acres.

TP 30mm items found in TS877 will be removed in future installation work to clear site for NFA.

Description of Pathways for Human and Ecological Receptors:

Lead was not detected above the 400 mg/kg USEPA human health screening level. Soil pathways are considered complete for human receptors.

Lead was detected above the USEPA EcoSSL for the most sensitive receptor category (insectivorous brids). Soil pathways are considered complete for this receptor category.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

CSE Report Reference (Section, Page #):

GENERAL - 5.2.1/5.2.2/8.0/9.0/10.0, LOCATION - 2.1/5.2.1, POC - 1.3, CONTRACTOR - 1.3

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

## Table 1

#### **EHE Module: Munitions Type Data Element Worksheet**

Classification	Description	Score
Sensitive	<ul> <li>- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions].</li> <li>- All hand grenades containing energetic filler.</li> <li>- Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.</li> </ul>	30
High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."  - All DMM containing a high-explosive filler that have:  - Been damaged by burning or detonation  - Deteriorated to the point of instability.	25
Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).  - All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:  - Been damaged by burning or detonation  - Deteriorated to the point of instability.	20
High explosive (unused)	- All DMM containing a high explosive filler that:  - Have not been damaged by burning or detonation  - Are not deteriorated to the point of instability.	15
Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).  - All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:  - Damaged by burning or detonation  - Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul> <li>- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated.</li> <li>- Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.</li> </ul>	10
Pyrotechnic (not used or damaged)	<ul> <li>- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:</li> <li>- Have not been damaged by burning or detonation</li> <li>- Are not deteriorated to the point of instability.</li> </ul>	10
Practice	<ul> <li>All UXO that are practice munitions that are not associated with a sensitive fuze.</li> <li>All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:</li> <li>Been damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul>	5
Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	<ul> <li>All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].</li> </ul>	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).	2

Site-specific data used in selection MUNITIONS TYPE classification:

Three 30mm TP projectile cores were observed on this site. A bomb lug from unknown bomb type was also identified in the same area. These items are likely associated with an old facility for dealing with jammed rounds that used to occupy an area near the 1970s Skeet Range (TS877) MRA.

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

## Table 2

#### **EHE Module: Source of Hazard Data Element Worksheet**

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	1

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

Three 30mm TP projectile cores were observed on this site. A bomb lug from unknown bomb type was also identified in the same area. These items are likely associated with an old facility for dealing with jammed rounds that used to occupy an area near the 1970s Skeet Range (TS877) MRA.

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**FFID:** ID057212455700

#### Table 3

#### **EHE Module: Information on the Location of Munitions Data Element Worksheet**

Classification	Description	Score
Confirmed surface	Physical evidence indicates that there are UXO or DMM on the surface of the MRS     Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> </ul>	15
Suspected (physical evidence)	<ul> <li>There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.</li> </ul>	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).	1

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Three 30mm TP projectile cores were observed on this site. A bomb lug from unknown bomb type was also identified in the same area. These items are likely associated with an old facility for dealing with jammed rounds that used to occupy an area near the 1970s Skeet Range (TS877) MRA.

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**FFID:** ID057212455700

## Table 4

#### **EHE Module: Ease of Access Data Element Worksheet**

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	<ul> <li>There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.</li> </ul>	0
Ease of Access	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	10

Site-specific characteristics used to select the EASE OF ACCESS classification:

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## Table 5

#### **EHE Module: Status of Property Data Element Worksheet**

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

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## Table 6

#### **EHE Module: Population Density Data Element Worksheet**

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

Population of Elmore County was 27, 038 according to the 2010 Census. Area of Elmore county is 3,077.57 square miles. Population density is 8.8 persons per square mile.

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**FFID:** ID057212455700

## Table 7

#### **EHE Module: Population Near Hazard Data Element Worksheet**

Classification	Description	Score
26 or more inhabited structures	- There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	
16 to 25 inhabited structures	- There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	- There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	- There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	- There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	- There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
Population Near Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
Cita appoifia data abarastariation una	ed to select the POPULATION NEAR HAZARD classification:	

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

## Table 8

#### **EHE Module: Types of Activities/Structures Data Element Worksheet**

Description	Score
- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	5
<ul> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.</li> </ul>	4
- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
<ul> <li>Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.</li> </ul>	2
- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
	<ul> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.</li> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.</li> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.</li> <li>- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.</li> <li>- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.</li> <li>DIRECTIONS: Record the single highest score from above in the box to the right</li> </ul>

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## Table 9

#### **EHE Module: Ecological and/or Cultural Resources Data Element Worksheet**

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0
Site-specific characteristics used to s	elect the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:	_

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

# Table 10

## **Determining the EHE Module Rating**

	Source	Sco	ore
Explosive Hazard Factor Data Elemen	ts		
Munitions Type	Table 1		2
Source of Hazard	Table 2		1
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 3		1
Ease of Access	Table 4		10
Status of Property	Table 5		0
Receptors Factor Data Elements			
Population Density	Table 6		1
Population Near Hazard	Table 7		5
Types of Activities/Structures	Table 8		5
Ecological and/or Cultural Resources	Table 9		0
		Sum	25

EHE Module Value	EHE Module Rating	
92 to 100	A	
82 to 91	В	
71 to 81	С	
60 to 70	D	
48 to 59	E	
38 to 47	F	
less than 38	G	
	Prioritization No Longer Required	
Alternative Module Ratings	No Known or Suspected Explosive Hazard	
	Evaluation Pending	

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

## Table 20

#### **Determining the CHE Module Rating**

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	Table 11	N/A
Source of CWM	Table 12	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	Table 13	N/A
Ease of Access	Table 14	N/A
Status of Property	Table 15	N/A
Receptors Factor Data Elements		
Population Density	Table 16	N/A
Population Near Hazard	Table 17	N/A
Types of Activities/Structures	Table 18	N/A
Ecological and/or Cultural Resources	Table 19	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	A
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

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## Table 21

#### **HHE Module: Groundwater Data Element Worksheet**

Contaminant		Maximum Concentration (ug/L)	Comparis	on Value (ug/L)	Ratios
CHF Scale		CHF Value	Contamina	tion Hazard Factor (CHF)	No Data
CHF > 100		H (High)	2	[Maximum Concentration of (	Contaminantl
100 > CHF > 2		M (Medium)	$CHF = \sum_{\bullet}$	[Comparison Value for Con	
2 > CHF		L (Low)		<u> </u>	-
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident		lytical data or observable evidence indicates ent at, moving toward, or has moved to a poi			Н
Potential	coul	tamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), d move but is not moving appreciably, or information is not sufficient to make a ermination of Evident or Confined.			M
Confined	grou	rmation indicates a low potential for contaminant migration from the source via the undwater to a potential point of exposure (possibly due to geological structures or physical trols).			L
Migratory Pathway Factor	The	single highest value from above in the box to the right (maximum value = H).			NA
		Receptor Fac	tor		
Identified	curr	re is a threatened water supply well downgradient of the source and the groundwater is a ent source of drinking water or source of water for other beneficial uses such as ation/agriculture (equivalent to Class I or IIA aquifer).		Н	
Potential	curr	re is no threatened water supply well downgradient of the source and the groundwater is ently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, or IIB aquifer).			M
Limited	grou	re is no potentially threatened water supply well downgradient of the source and the ndwater is not considered a potential source of drinking water and is of limited beneficial use ivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).		L	
Receptor Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA
			Р	rioritization No Longer Requ	ired
Alte	rnative	Module Ratings	N	o Known or Suspected Ha	d

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was not conducted as part of the CSE Phase II investigations. All soil sampling results were below the human health screening level. Depth to groundwater is 350-400 feet throughout Mountain Home AFB.

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

## Table 22

HHE Module: Surface Water - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios	
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data	
CHF > 100	H (High)	CHF = [Maximum Concentration of	Contaminant1	
100 > CHF > 2	M (Medium)	[Comparison Value for Con	taminantl	
2 > CHF	L (Low)	[Companson value for Con	tariiriaritj	
CHF Value		CHF VALUE	NA	
	Migratory Pathwa	ay Factor		
Evident	Analytical data or observable evidence indicates present at, moving toward, or has moved to a positive control of the control		Н	
Potential	Contamination in surface water has moved only could move but is not moving appreciably, or inf determination of Evident or Confined.		M	
Confined		mation indicates a low potential for contaminant migration from the source via the surface or to a potential point of exposure (possibly due to geological structures or physical controls).		
Migratory Pathway Factor	The single highest value from above in the box t	e single highest value from above in the box to the right (maximum value = H).		
	Receptor Fa	<u>ictor</u>		
Identified	Identified receptors to have access to surface w move.	tified receptors to have access to surface water to whick contamination has moved or can e.		
Potential	Potential for receptors to have access to surface move.	ential for receptors to have access to surface water to whick contamination has moved or can e.		
Limited	Little or no potential for receptors to have access moved or can move.	e or no potential for receptors to have access to surface water to whick contamination has ed or can move.		
Receptor Factor	The single highest value from above in the box t	e single highest value from above in the box to the right (maximum value = H).		
		Prioritization No Longer Requ	uired	
Alte	rnative Module Ratings	No Known or Suspected Ha	azard	
Rationale for Selection of MF	PF:			

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

#### Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg/	Maximum Concentration (mg/kg) Comparison Value (mg/kg)		
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data	
CHF > 100	H (High)	- Maximum Concentration of	Contaminant	
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of	otaminant]	
2 > CHF	L (Low)	[Comparison Value for Cor	ıtamınanıj	
CHF Value		CHF VALUE	NA	
	Migratory Path	way Factor		
Evident	Analytical data or observable evidence indicat at, moving toward, or has moved to a point of	tes that contamination in the sediment is present exposure.	Н	
Potential		Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.		
Confined	Information indicates a low potential for conta to a potential point of exposure (possibly due	L		
Migratory Pathway Factor	The single highest value from above in the bo	e single highest value from above in the box to the right (maximum value = H).		
	Receptor I	Factor Pactor		
Identified	Identified receptors to have access to sedime	entified receptors to have access to sediment to which contamination has moved or can move.		
Potential	Potential for receptors to have access to sedimove	ential for receptors to have access to sediment to which contamination has moved or can we		
Limited	Little or no potential for receptors to have acc or can move	le or no potential for receptors to have access to sediment to which contamination has moved can move		
Receptor Factor	The single highest value from above in the bo	ox to the right (maximum value = H).	NA	
Alte	rnative Module Ratings	Prioritization No Longer Req No Known or Suspected Ha		
Rationale for Selection of M	PF:			

Rationale for Selection of RF:

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

#### Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios	
CHF Scale		CHF Value	Contamina	ation Hazard Factor (CHF)	No Data	
CHF > 100		H (High)		[Maximum Concentration of C	Contaminant]	
100 > CHF > 2		M (Medium)	CHF = <b>\( \_</b>	[Comparison Value for Cont	aminantl	
2 > CHF		L (Low)			ammantj	
CHF Value				CHF VALUE	NA	
		Migratory Pathway	/ Factor			
Evident		ytical data or observable evidence indicates t ent at, moving toward, or has moved to a poir		on in the surface water is	Н	
Potential	could		ination in surface water has moved only slightly beyond the source (i.e., tens of feet), ove but is not moving appreciably, or information is not sufficient to make a nation of Evident or Confined.			
Confined			ation indicates a low potential for contaminant migration from the source via the surface to a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The	single highest value from above in the box to the right (maximum value = H).			NA	
		Receptor Fac	<u>tor</u>			
Identified	lden mov	tified receptors have access to surface water e.	to which contar	mination has moved or can	Н	
Potential		ential for receptors to have access to surface vential for receptors to have access to surface ventions.	ial for receptors to have access to surface water to which contamination has moved or ove.			
Limited		or no potential for receptors to have access to surface water to which contamination has ed or can move.			L	
Receptor Factor	The	single highest value from above in the box to	the right (maxir	mum value = H).	NA	
Alteri	native	Module Ratings		rioritization No Longer Requ		
			N	o Known or Suspected Ha	zard	
Rationale for Selection of MP	F:					

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 877 MRS: TS877

**FFID:** ID057212455700

## Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

CHF > 100  H (High) 100 > CHF > 2  N (Medium) 2 > CHF CHF Value  NA  Migratory Pathway Factor  Evident  Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.  Potential  Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident of Confined  Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).  Migratory Pathway  The single highest value from above in the box to the right (maximum value = H).  NA  Potential  Potential  potential for receptors to have access to sediment to which contamination has moved or can move.  H  Potential  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Limited  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required No Known or Suspected Hazard	Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios	
Characteristic   Contaminant   Concentration of Contaminant	CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data	
Comparison Value for Contaminant]   Comparison Value for Contaminant]	CHF > 100	H (High)	[Maximum Concentration of Concentration	Contaminant]	
CHF Value    CHF Value   CHF Value   NA	100 > CHF > 2	M (Medium)	CHF = Z		
Migratory Pathway Factor   Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.   H	2 > CHF	L (Low)		.ammantj	
Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.  Potential  Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.  Confined  Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).  Migratory Pathway Factor  Receptor Factor  Identified  Identified Identified receptors to have access to sediment to which contamination has moved or can move.  H  Potential  potential for receptors to have access to sediment to which contamination has moved or can move.  Limited  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required  No Known or Suspected Hazard	CHF Value		CHF VALUE	NA	
at, moving toward, or has moved to a point of exposure.  Potential  Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.  Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).  Migratory Pathway The single highest value from above in the box to the right (maximum value = H).  NA  Receptor Factor  Identified  Identified receptors to have access to sediment to which contamination has moved or can move.  H  Potential  potential for receptors to have access to sediment to which contamination has moved or can move.  Limited  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required  No Known or Suspected Hazard		Migratory Pathwa	y Factor		
move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.  Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).  Migratory Pathway Factor  Receptor Factor  Identified  Identified receptors to have access to sediment to which contamination has moved or can move.  H  Potential  potential for receptors to have access to sediment to which contamination has moved or can move.  Limited  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required  No Known or Suspected Hazard	Evident			Н	
to a potential point of exposure (possibly due to geological structures or physical controls).  Migratory Pathway Factor  Receptor Factor  Identified  Identified receptors to have access to sediment to which contamination has moved or can move.  H  Potential  potential for receptors to have access to sediment to which contamination has moved or can move.  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required No Known or Suspected Hazard	Potential	move but is not moving appreciably, or information	e but is not moving appreciably, or information is not sufficient to make a determination of		
Receptor Factor   Identified   Identified receptors to have access to sediment to which contamination has moved or can move.   H	Confined				
Identified   Identified receptors to have access to sediment to which contamination has moved or can move.   H			NA		
Potential potential for receptors to have access to sediment to which contamination has moved or can move.  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required  No Known or Suspected Hazard		Receptor Fac	etor etor		
Limited  Little or no potential for receptors to have access to sediment to which contamination has moved or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required  No Known or Suspected Hazard	Identified	Identified receptors to have access to sediment to	o which contamination has moved or can move.	Н	
or can move.  Receptor Factor  The single highest value from above in the box to the right (maximum value = H).  NA  Prioritization No Longer Required  No Known or Suspected Hazard	Potential		t to which contamination has moved or can	M	
Alternative Module Ratings  Prioritization No Longer Required  No Known or Suspected Hazard	Limited				
Alternative Module Ratings  No Known or Suspected Hazard	Receptor Factor	The single highest value from above in the box to	the right (maximum value = H).	NA	
	Alterna	ative Module Ratings			
Rationale for Selection of MPF:	Rationale for Selection of MPF:				

Rationale for Selection of RF

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

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#### Table 26

#### **HHE Module: Soil - Data Element Worksheet**

Maximum Concentration (mg/kg CHF Value H (High)	36	400	)	0.1
	Contamin			٠. ١
H (High)		ation Hazard Factor (CHF)		0.1
(3)		[Maximum Concentration of	Contaminant	t1
M (Medium)	$CHF = \sum_{\bullet}$			_
2 > CHF L (Low)			-	
CHF Value CHF VALU		CHF VALUE	L	
Migratory Pathw	ay Factor			
1 ,		tion in the soil is present at,	Н	
			М	
The single highest value from above in the box	to the right (maxi	М		
Receptor Fa	<u>ictor</u>			
Identified receptors to have access to soil to wh	ied receptors to have access to soil to which contamination has moved or can move.			
Potential for receptors to have access to soil to	Il for receptors to have access to soil to which contamination has moved or can move.			
Little or no potential for receptors to have access can move.				
The single highest value from above in the box	to the right (maxi	mum value = H).	L	
	F	Prioritization No Longer Requ	uired	
tive Module Ratings	No Known or Suspected Hazard			
	Migratory Pathw  Analytical data or observable evidence indicates moving toward, or has moved to a point of expo  Contamination in soil has moved only slightly be but is not moving appreciably, or information is or Confined.  Information indicates a low potential for contam potential point of exposure (possibly due to geo  The single highest value from above in the box  Receptor Fa  Identified receptors to have access to soil to whe potential for receptors to have access to soil to Little or no potential for receptors to have access can move.	Migratory Pathway Factor  Analytical data or observable evidence indicates that contaminat moving toward, or has moved to a point of exposure.  Contamination in soil has moved only slightly beyond the source but is not moving appreciably, or information is not sufficient to ror Confined.  Information indicates a low potential for contaminant migration fr potential point of exposure (possibly due to geological structures)  The single highest value from above in the box to the right (maximaximaximaximaximaximaximaximaximaxi	Comparison Value for Con  L (Low)    CHF VALUE	Comparison Value for Contaminant    L (Low)

Rationale for Selection of MPF:

Lead was detected in soil, however concentrations are below RSLs.

Rationale for Selection of RF:

Lead was detected in soil, however concentrations are below RSLs.

Sample comments:

78 surface soil samples were collected at the 1970s Skeet Range (TS877) for XRF analysis of lead. Lead was detected at concentrations ranging from <a href="LOD">LOD</a> to 36 mg/kg. None of surface samples exceeded the USEPA human health screening level for lead of 400 mg/kg.

CSE Report Reference (Section, Page #):

5.1.7.2

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# Table 27 Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	M	L	MLL	F

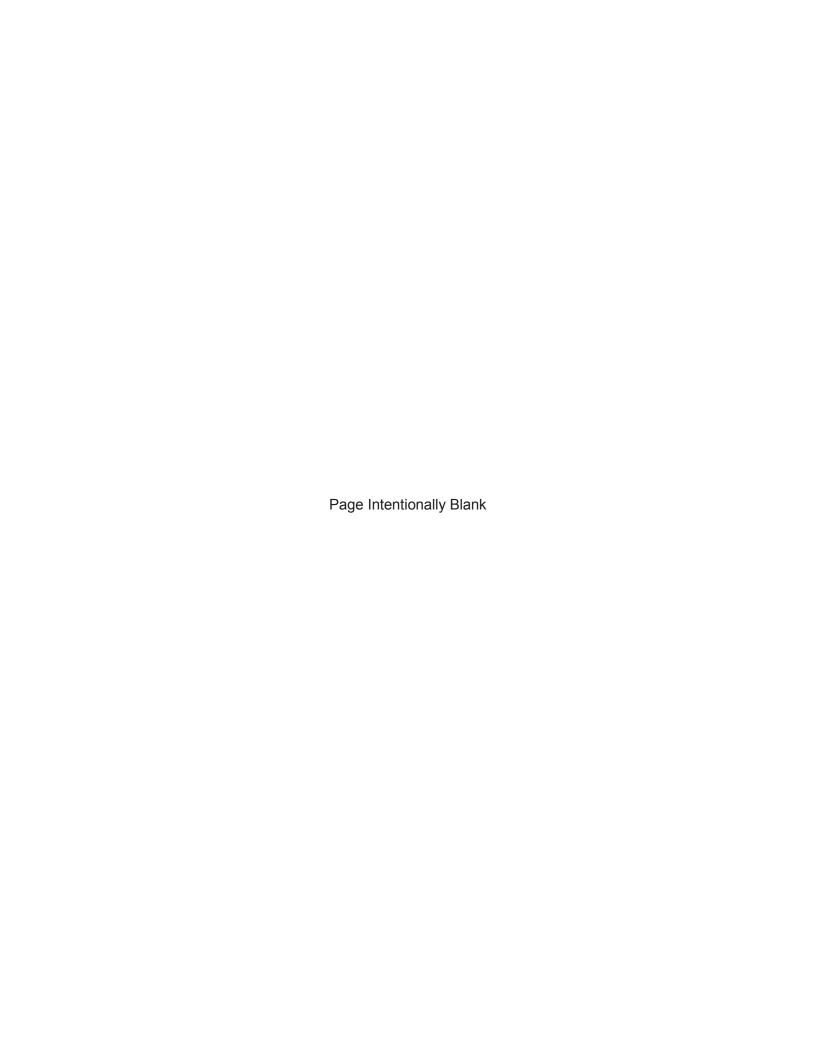
HHE Ratings (for reference only)				
Combination	Rating			
ННН	А			
ннм	В			
HHL				
нмм	С			
HML				
ммм	D			
HLL	_			
MML	E			
MLL	F			
LLL	G			
Alternative Market Detires	Prioritization No Longer Required			
Alternative Module Ratings	No Known or Suspected MC Hazard			
	Evaluation Pending			
HHE Module Ratings	F			

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# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority	
		Α	1			
Α	2	В	2	Α	2	
В	3	С	3	В	3	
С	4	D	4	С	4	
D	5	E	5	D	5	
E	6	F	6	E	6	
F	7	G	7	F	7	
G	8			G	8	
Prioritization No	Longer Required	Prioritization No	Longer Required	Prioritization No Longer Required		
No Known or St	No Known or Suspected Hazard		No Known or Suspected Hazard		uspected Hazard	
Evaluation Pending Evaluation Pending Evaluation Pending		n Pending				
			MRS Priority		7	



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#### Table A

#### **MRS Background Information**

Munitions Response Site Name: 1970s Skeet Ra	ange (a)				
Component: Air Force					
Installation/Property Name: MOUNTAIN HOME	AIR FORCE BASE				
Location (City, County, State): Mountain Home	e, Elmore, ID				
Site Name/Project name (Project No.): 1970s Si	keet Range (a)				
Date Information Entered\Updated: 5/17/2012 1	:47:42 PM				
Point of Contact Name: Richard Roller		Point	of Contact Phone	e: (208) 828-6667	
Project Phase (check only one):					
□ PA ✓ SI	□RI		☐ FS	□RD	
☐ RA ☐ RIP	☐ RC				
Media Evaluated (check all that apply):					
Groundwater	Sediment (human receptor)				
✓ Surface soil		Surface	Water (ecological r	receptor)	
Sediment (ecological receptor)		Surface	Water (human rece	eptor)	

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The 1970s Skeet Range MRA is located in the southeastern portion of the base near the southern flightline. The coordinates of this site are 43.034818 degrees latitude, -115.841968 degrees longitude. The area is currently an open field with low grass. Soils consist of Bahem silt loam, and topography is flat. There are no wetlands associated with this site. Depth to ground water is 350 – 400 ft. bgs throughout Mountain Home AFB. The northern portion of the 1970s Skeet Range MRA is overlapped by the Former EOD Proficiency Range (TS879) and is accessed from a gravel road that runs south from Bomber Rd. The site is divided by two east-west trending fire breaks located to the north and the south of the concrete firing pad.

The range consisted of a firing point, a High House, a Low House, and a designated shot fall zone area. The concrete firing point is currently present. The MRA was in use in the late 1960s and 1970s and received heavy use in 1972. The range was orientated to the east indicating the direction of fire would have also been towards the east. The High and Low Houses were demolished in 1980 indicating that all activity at the skeet range would have ceased in 1980.

The 1970s Skeet Range (a) (TS877a) MRS is a 0.9-acre split from the original 29.6-acre 1970s Skeet Range MRA.

This MRS is recommended for further action based on analysis of environmental soil samples indicating concentrations of lead and PAH above human health screening levels.

A portion of the 1970s Skeet Range overlaps the Former EOD Proficiency Range MRA. Evidence of EOD training was observed in the overlap area and since the entire Former EOD Proficiency Range is recommended for further munitions response action, 0.7 acres have been removed from the 1970s Skeet Range. The total acreage for the 1970s Skeet Range is now 28.9 acres.

Description of Pathways for Human and Ecological Receptors:

PAH compounds were detected above USEPA human health screening levels. Soil pathways are considered complete for human and ecological receptors.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

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CSE Report Reference (Section, Page #):

GENERAL - 5.2.1/5.2.2/8.0/9.0/10.0/12.5.2/, LOCATION - 2.1/5.2.1, POC - 1.3, CONTRACTOR - 1.3

## Table 1

#### **EHE Module: Munitions Type Data Element Worksheet**

Classification	Description	Score
Sensitive	<ul> <li>- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions].</li> <li>- All hand grenades containing energetic filler.</li> <li>- Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.</li> </ul>	30
High explosive (used or damage	<ul> <li>- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."</li> <li>- All DMM containing a high-explosive filler that have:         <ul> <li>- Been damaged by burning or detonation</li> <li>- Deteriorated to the point of instability.</li> </ul> </li> </ul>	25
Pyrotechnic (used or damaged)	<ul> <li>- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).</li> <li>- All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:</li> <li>- Been damaged by burning or detonation</li> <li>- Deteriorated to the point of instability.</li> </ul>	20
High explosive (unused)	- All DMM containing a high explosive filler that: - Have not been damaged by burning or detonation - Are not deteriorated to the point of instability.	15
Propellant	<ul> <li>- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).</li> <li>- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:</li> <li>- Damaged by burning or detonation</li> <li>- Deteriorated to the point of instability.</li> </ul>	15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul> <li>- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated.</li> <li>- Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.</li> </ul>	10
Pyrotechnic (not used or damaged)	<ul> <li>- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:</li> <li>- Have not been damaged by burning or detonation</li> <li>- Are not deteriorated to the point of instability.</li> </ul>	10
Practice	<ul> <li>- All UXO that are practice munitions that are not associated with a sensitive fuze.</li> <li>- All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:</li> <li>- Been damaged by burning or detonation</li> <li>- Deteriorated to the point of instability.</li> </ul>	5
Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	<ul> <li>Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.</li> </ul>	0
MUNITIONS TYPE	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).	2
Site-specific data used in selection	MUNITIONS TYPE classification:	
Small arms debris and clay target of		
CSE Report Reference (Section,	Page #): 5 2 7 1	

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## Table 2

#### **EHE Module: Source of Hazard Data Element Worksheet**

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	1
Site-specific data characteristics use	d to select the SOURCE OF HAZARD classification:	
Small arms debris and clay target de	bris were observed at this site.	

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## Table 3

#### **EHE Module: Information on the Location of Munitions Data Element Worksheet**

Classification	Description	Score
Confirmed surface	<ul> <li>Physical evidence indicates that there are UXO or DMM on the surface of the MRS</li> <li>Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.</li> </ul>	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> </ul>	15
Suspected (physical evidence)	<ul> <li>There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.</li> </ul>	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	<ul> <li>There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.</li> </ul>	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).	1
Site-specific data characteristics use	d to select the LOCATION OF MUNITIONS classification:	
Clay target debris was observed near	r the firing point and lead shot was observed in the expected shot fall zone at this site.	
CCF Demant Defending (Continue De		

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## Table 4

#### **EHE Module: Ease of Access Data Element Worksheet**

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	10

Site-specific characteristics used to select the EASE OF ACCESS classification:

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## Table 5

#### **EHE Module: Status of Property Data Element Worksheet**

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

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# Table 6

## **EHE Module: Population Density Data Element Worksheet**

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

Population of Elmore County was 27, 038 according to the 2010 Census. Area of Elmore county is 3,077.57 square miles. Population density is 8.8 persons per square mile.

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# Table 7

# **EHE Module: Population Near Hazard Data Element Worksheet**

the boundary of the MRS, or both.  11 to 15 inhabited structures  - There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.		Score
the boundary of the MRS, or both.  11 to 15 inhabited structures  - There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.		5
the boundary of the MRS, or both.  - There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	· · · · · · · · · · · · · · · · · · ·	4
the boundary of the MRS, or both.  1 to 5 inhabited structures  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	· · · · · · · · · · · · · · · · · · ·	3
the boundary of the MRS, or both.  O inhabited structures  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).		2
boundary of the MRS, or both.  Population Near Hazard  DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	· · · · · · · · · · · · · · · · · · ·	1
(maximum score = 5).		0
Site-specific data characteristics used to select the POPLILATION NEAR HAZARD classification:		5
polic operation data orial action about to action the For all First First First First Conditions.	ed to select the POPULATION NEAR HAZARD classification:	
site opeoino data oriardoteriotico doc		within the boundary of the MRS, or both.  There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).

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# Table 8

# **EHE Module: Types of Activities/Structures Data Element Worksheet**

es are conducted, or inhabited structures are located up to two miles from the MRS's arry or within the MRS's boundary, that are associated with any of the following purposes: ntial, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, hotels, commercial, shopping centers, playgrounds, community gathering areas, religious or sites used for subsistence hunting, fishing, and gathering.	5
es are conducted, or inhabited structures are located up to two miles from the MRS's ary or within the MRS's boundary, that are associated with parks, nature preserves, or ecreational uses.	4
es are conducted, or inhabited structures are located up to two miles from the MRS's ary or within the MRS's boundary, that are associated with agriculture or forestry.	3
es are conducted, or inhabited structures are located up to two miles from the MRS's ary or within the MRS's boundary, that are associated with industrial activities or busing.	2
are no known or recurring activities occurring up to two miles from the MRS's boundary or the MRS's boundary.	1
ONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
ine	es are conducted, or inhabited structures are located up to two miles from the MRS's ary or within the MRS's boundary, that are associated with agriculture or forestry.  es are conducted, or inhabited structures are located up to two miles from the MRS's ary or within the MRS's boundary, that are associated with industrial activities or busing.  are no known or recurring activities occurring up to two miles from the MRS's boundary or the MRS's boundary.  ONS: Record the single highest score from above in the box to the right

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 9

# **EHE Module: Ecological and/or Cultural Resources Data Element Worksheet**

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0
Site-specific characteristics used to s	elect the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:	

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 10

# **Determining the EHE Module Rating**

	Source		Score
<b>Explosive Hazard Factor Data Element</b>	s		
Munitions Type	Table 1		2
Source of Hazard	Table 2		1
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 3		1
Ease of Access	Table 4		10
Status of Property	Table 5		0
Receptors Factor Data Elements			
Population Density	Table 6		1
Population Near Hazard	Table 7		5
Types of Activities/Structures	Table 8		5
Ecological and/or Cultural Resources	Table 9		0
		Sum	25

EHE Module Value	EHE Module Rating		
92 to 100	A		
82 to 91	В		
71 to 81	С		
60 to 70	D		
48 to 59	E		
38 to 47	F		
less than 38	G		
	Prioritization No Longer Required		
Alternative Module Ratings	No Known or Suspected Explosive Hazard		
	Evaluation Pending		

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 20

# **Determining the CHE Module Rating**

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	Table 11	N/A
Source of CWM	Table 12	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	Table 13	N/A
Ease of Access	Table 14	N/A
Status of Property	Table 15	N/A
Receptors Factor Data Elements		
Population Density	Table 16	N/A
Population Near Hazard	Table 17	N/A
Types of Activities/Structures	Table 18	N/A
Ecological and/or Cultural Resources	Table 19	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating		
92 to 100	Α		
82 to 91	В		
71 to 81	С		
60 to 70	D		
48 to 59	E		
38 to 47	F		
less than 38	G		
	Prioritization No Longer Required		
Alternative Module Ratings	No Known or Suspected CWM Hazard		
	Evaluation Pending		

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 21

#### **HHE Module: Groundwater Data Element Worksheet**

Contaminant	ninant Maximum Concentration (ug/L) Comparison Value (ug/L)			Ratios	
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)	No Data	
CHF > 100		H (High)	[Maximum Concentration	of Contaminant1	
100 > CHF > 2		M (Medium)	CHF = [Maximum Concentration of Comparison Value for C		
2 > CHF		L (Low)			
CHF Value			CHF VALUE NA		
		Migratory Pathwa	y Factor		
Evident		rtical data or observable evidence indicates ent at, moving toward, or has moved to a po		Н	
Potential	could	amination in groundwater has moved only slightly beyond the source (i.e., tens of feet), move but is not moving appreciably, or information is not sufficient to make a mination of Evident or Confined.			
Confined	grour	rmation indicates a low potential for contaminant migration from the source via the Lundwater to a potential point of exposure (possibly due to geological structures or physical trols).			
Migratory Pathway Factor	The	he single highest value from above in the box to the right (maximum value = H).			
		Receptor Fac	_		
Identified	curre	e is a threatened water supply well downgrant source of drinking water or source of watetion/agriculture (equivalent to Class I or IIA a		Н	
Potential	curre	re is no threatened water supply well downgradient of the source and the groundwater is ently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, or IIB aquifer).			
Limited	grour	undwater is not considered a potential source of drinking water and is of limited beneficial use uivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).			
Receptor Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA	
Δlto	rnative I	Module Ratings	Prioritization No Longer Re	quired	
Aite	mative i	nodule Ratings	No Known or Suspected I	Hazard	

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was not conducted as part of the CSE Phase II investigations. Depth to groundwater is 350-400 feet throughout Mountain Home AFB.

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 22

**HHE Module: Surface Water - Human Endpoint Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L) Comparison Value (ug/L)			Ratios
CHF Scale		CHF Value Contamination Hazard Factor (CHF)		No Data	
CHF > 100		H (High)		[Maximum Concentration of	Contaminantl
100 > CHF > 2		M (Medium)	$CHF = \sum_{\bullet}$	[Comparison Value for Cont	
2 > CHF		L (Low)		tariiriaritj	
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident	_	nalytical data or observable evidence indicates that contamination in the surface water is esent at, moving toward, or has moved to a point of exposure.			Н
Potential	coul		nination in surface water has moved only slightly beyond the source (i.e., tens of feet), nove but is not moving appreciably, or information is not sufficient to make a ination of Evident or Confined.		
Confined		nation indicates a low potential for contaminant migration from the source via the surface to a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA
		Receptor Fac	<u>tor</u>		
Identified	lden mov	tified receptors to have access to surface wa e.	ter to whick con	tamination has moved or can	Н
Potential	Pote	ential for receptors to have access to surface water to whick contamination has moved or can re.		M	
Limited		e or no potential for receptors to have access to surface water to whick contamination has ved or can move.			L
Receptor Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA
			Р	rioritization No Longer Requ	uired
Alte	rnative	Module Ratings	N	o Known or Suspected Ha	zard
Rationale for Selection of MI	PF:				

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations investigation.

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg	Maximum Concentration (mg/kg) Comparison Value (mg/kg)				
CHF Scale	Scale CHF Value Contamination Hazard Factor (CHF)		No Data			
CHF > 100	H (High)	[Maximum Concentration of	Contaminantl			
100 > CHF > 2	M (Medium)	CHF = Z				
2 > CHF	L (Low)	L (Low) [Comparison Value for Cont				
CHF Value CHF VALUE		NA				
	Migratory Pat	thway Factor				
Evident		Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.				
Potential		Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.				
Confined		formation indicates a low potential for contaminant migration from the source via the sediment a potential point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The single highest value from above in the	The single highest value from above in the box to the right (maximum value = H).				
	Recepto	r Factor				
Identified	Identified receptors to have access to sedin	dentified receptors to have access to sediment to which contamination has moved or can move. H				
Potential	Potential for receptors to have access to se move	tential for receptors to have access to sediment to which contamination has moved or can we				
Limited	Little or no potential for receptors to have a or can move	Little or no potential for receptors to have access to sediment to which contamination has moved or can move				
Receptor Factor	The single highest value from above in the	box to the right (maximum value = H).	NA			
Alte	rnative Module Ratings	Prioritization No Longer Req				
	3	No Known or Suspected Ha	azard			
Rationale for Selection of M	PF:					

Rationale for Selection of RF:

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios	
CHF Scale		CHF Value Contamination Hazard Factor (CHF) No			No Data	
CHF > 100		H (High)  CHF = [Maximum Concentration of Contamental Concentration of Contamental CHF = [Maximum Concentration of CHF = [		Contaminant]		
100 > CHF > 2		M (Medium)	CHF = <b>\( \_</b>	[Comparison Value for Cont	aminantl	
2 > CHF		L (Low)			ammantj	
CHF Value				CHF VALUE	NA	
		Migratory Pathway	/ Factor			
Evident		ytical data or observable evidence indicates t ent at, moving toward, or has moved to a poir		on in the surface water is	Н	
Potential	could		amination in surface water has moved only slightly beyond the source (i.e., tens of feet), I move but is not moving appreciably, or information is not sufficient to make a mination of Evident or Confined.			
Confined		nation indicates a low potential for contaminant migration from the source via the surface L to a potential point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The	single highest value from above in the box to the right (maximum value = H).				
		Receptor Fac	<u>tor</u>			
Identified	lden mov	tified receptors have access to surface water e.	to which contar	mination has moved or can	Н	
Potential	Pote can	·			М	
Limited		e or no potential for receptors to have access to surface water to which contamination has ed or can move.			L	
Receptor Factor	The	single highest value from above in the box to	the right (maxir	mum value = H).	NA	
Alteri	native	Module Ratings		rioritization No Longer Requ		
			N	o Known or Suspected Ha	zard	
Rationale for Selection of MP	F:					

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg	g/kg) Comparison Value (mg/kg)	Ratios		
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data		
CHF > 100	H (High)	[Maximum Concentration of Co	ontaminant1		
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of Co			
2 > CHF	L (Low)	[Companson value for Conta	iriiriaritj		
CHF Value		CHF VALUE	NA		
	Migratory Pat	thway Factor			
Evident	cates that contamination in the sediment is present of exposure.	Н			
Potential		slightly beyond the source (i.e., tens of feet), could remation is not sufficient to make a determination of	М		
Confined		ntaminant migration from the source via the sediment ue to geological structures or physical controls).	L		
The single highest value from above in the box to the right (maximum value = H).  Factor					
	Recepto	r Factor			
Identified	Identified receptors to have access to sedir	ment to which contamination has moved or can move.	Н		
Potential	potential for receptors to have access to se move.	ediment to which contamination has moved or can	М		
Limited	Little or no potential for receptors to have a or can move.	ittle or no potential for receptors to have access to sediment to which contamination has moved r can move.			
Receptor Factor	The single highest value from above in the	box to the right (maximum value = H).	NA		
		Prioritization No Longer Requi	red		
Alte	rnative Module Ratings	No Known or Suspected Haz	ard		
Rationale for Selection of M	Dr.				

Rationale for Selection of RF

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 877 MRS: TS877a

FFID: ID057212455700

### Table 26

#### **HHE Module: Soil - Data Element Worksheet**

Contaminant	Maximum Concentration (mg/kg) Comparison Value (mg/kg)			Ratios		
Lead	Lead 29			400	0.1	
Indeno[1,2,3-cd]pyrene		3.	9	62	0.1	
Dibenz[ah]anthracene		0.7	8	6.2	0.1	
Benzo[k]fluoranthene 1.			9	620	0.0	
Benzo[b]fluoranthene 4		5	62	0.1		
Benzo[a]pyrene		4.	8	6.2	0.8	
Benz[a]anthracene		1.	9	62	0.0	
CHF Scale		CHF Value	Contamin	ation Hazard Factor (CHF)	1.1	
CHF > 100		H (High)		[Maximum Concentration of	Contaminantl	
100 > CHF > 2		M (Medium)	$CHF = \sum_{i}$			
2 > CHF		L (Low)		[Comparison Value for Con	ntaminant]	
CHF Value				CHF VALUE	L	
		Migratory Pathwa	y Factor			
Evident	Analytical data or observable evidence indicates that contamination in the soil is present at, moving toward, or has moved to a point of exposure.				Н	
Potential	but is	Contamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.				
Confined	Infor	Information indicates a low potential for contaminant migration from the source via the soil to a potential point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).				M	
		Receptor Fa	<u>ctor</u>			
Identified	Ident	tified receptors to have access to soil to whi	ch contaminatio	on has moved or can move.	Н	
Potential	Pote	Potential for receptors to have access to soil to which contamination has moved or can move.				
Limited		Little or no potential for receptors to have access to soil to which contamination has moved or can move.				
Receptor Factor	The	ne single highest value from above in the box to the right (maximum value = H).				
			ſ	Prioritization No Longer Requ	uired	
Alter	native	Module Ratings	No Known or Suspected Hazard			

Rationale for Selection of MPF:

Lead was detected in soil, however concentrations are below RSLs. PAH compounds were detected in surface soils above USEPA human health screening levels. Soil pathways are complete for human receptors.

#### Rationale for Selection of RF:

Lead was detected in soil, however concentrations are below RSLs. PAH compounds were detected in surface soils above USEPA human health screening levels. Soil pathways are complete for human receptors. However, this area is currently not developed or frequently used by potential human receptors.

#### Sample comments:

9 surface soil samples were collected for PAH analysis where clay target debris were observed at the 1970s Skeet Range (TS877). PAHs were detected in all nine samples and six of the nine samples contained elevated PAH compounds that exceeded the USEPA human health screening levels.

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The maximum lead concentration in the MRS was 29 mg/kg which is below the 400 mg/kg human health screening level.

CSE Report Reference (Section, Page #):

5.2.7.4

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# **Table 27**Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	M	M	MML	E

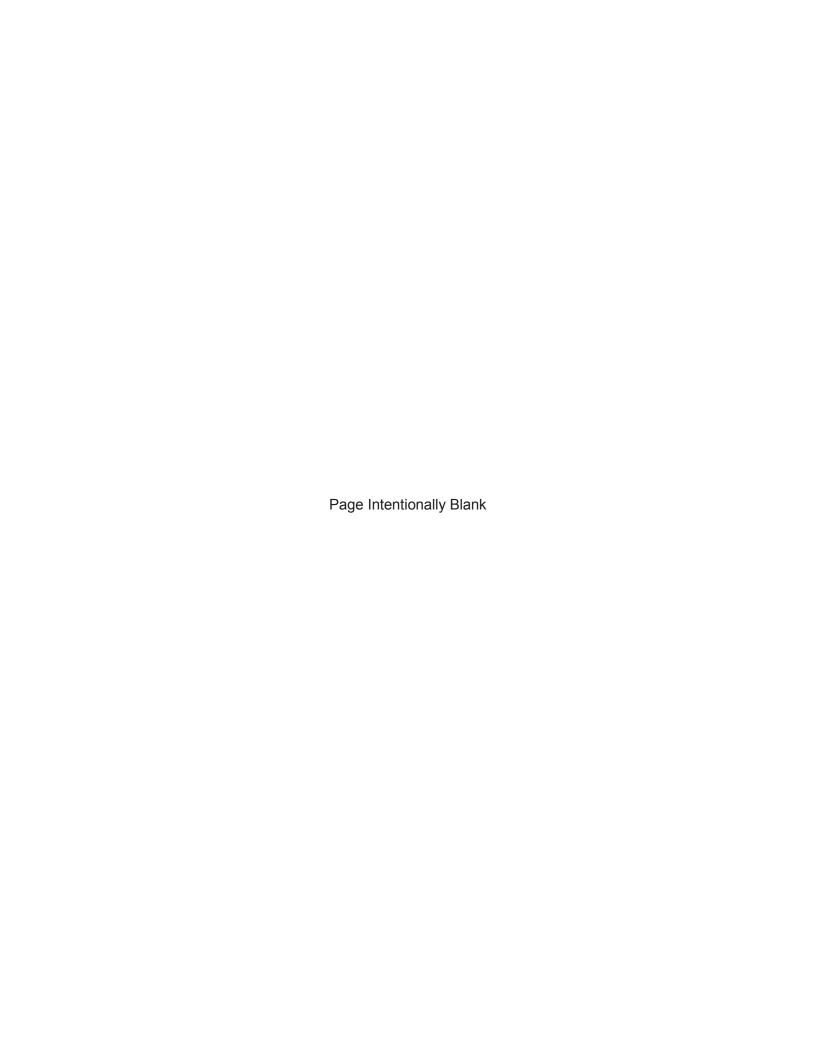
HHE Ratings (for reference only)				
Combination	Rating			
ннн	А			
ннм	В			
HHL				
нмм	С			
HML				
ммм	D			
HLL	_			
MML	E			
MLL	F			
LLL	G			
	Prioritization No Longer Required			
Alternative Module Ratings	No Known or Suspected MC Hazard			
	Evaluation Pending			
HHE Module Ratings	Е			

MAJCOM: ACC MRAID: 877 MRS: TS877a

**FFID:** ID057212455700

# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		Α	1		
Α	2	В	2	Α	2
В	3	С	3	В	3
С	4	D	4	С	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No	Longer Required	Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
			MRS Priority		6



MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID**: ID057212455700

#### Table A

#### **MRS Background Information**

Munitions Response Site Name: 1970s Skeet Ra	nge (b)				
Component: Air Force					
Installation/Property Name: MOUNTAIN HOME A	IR FORCE BASE				
Location (City, County, State): Mountain Home	, Elmore, ID				
Site Name/Project name (Project No.): 1970s Sk	eet Range (b)				
Date Information Entered\Updated: 5/15/2012 1:	31:43 PM				
Point of Contact Name: Richard Roller		Point	of Contact Phone:	: (208) 828-6667	
Project Phase (check only one):			or contact mone.	(200) 020 0001	
Troject i nase (check only one).					
☐ PA ✓ SI	☐ RI		☐ FS	RD	
☐ RA ☐ RIP	RC				
Media Evaluated (check all that apply):					
☐ Groundwater ☐ Sediment (human receptor)					
☐ Surface soil ☐ Surface Water (ecological receptor)					
Sediment (ecological receptor)		Surface	Water (human rece	ptor)	

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The 1970s Skeet Range MRA is located in the southeastern portion of the base near the southern flightline. The coordinates of this site are 43.034818 degrees latitude, -115.841968 degrees longitude. The area is currently an open field with low grass. Soils consist of Bahem silt loam, and topography is flat. There are no wetlands associated with this site. Depth to ground water is 350 – 400 ft. bgs throughout Mountain Home AFB. The northern portion of the 1970s Skeet Range MRA is overlapped by the Former EOD Proficiency Range (TS879) and is accessed from a gravel road that runs south from Bomber Rd. The site is divided by two east-west trending fire breaks located to the north and the south of the concrete firing pad.

The range consisted of a firing point, a High House, a Low House, and a designated shot fall zone area. The concrete firing point is currently present. The MRA was in use in the late 1960s and 1970s and received heavy use in 1972. The range was orientated to the east indicating the direction of fire would have also been towards the east. The High and Low Houses were demolished in 1980 indicating that all activity at the skeet range would have ceased in 1980.

The 1970s Skeet Range (b) (TS877b) MRS is a 0.7-acre split from the original 29.6-acre 1970s Skeet Range MRA. This MRS consists of the overlap between the 1970s Skeet Range (TS877) and the Former EOD Proficiency Range (ED879). This acreage was included in both the Former EOD Proficiency Range and the 1970s Skeet Range in the CSE Phase I. The overlap has been included as part of the Former EOD Proficiency Range (ED879) due to evidence of EOD training in the overlap area. The TS877b MRS is therefore administratively closed out and the acreage removed from the 1970s Skeet Range (TS877) MRA.

Description of Pathways for Human and Ecological Receptors:

Lead was not detected above the 400 mg/kg USEPA human health screening level. Soil pathways are considered complete for human receptors.

Lead levels exceeded the USEPA EcoSSL for only the most sensitive ecological receptor category (insectivorous birds). Soil pathways are considered complete for this receptor category.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

#### CSE Report Reference (Section, Page #):

GENERAL - 5.2.1/5.2.2/8.0/9.0/10.0/12.5.2/, LOCATION - 2.1/5.2.1, POC - 1.3, CONTRACTOR - 1.3

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# Table 10 Determining the EHE Module Rating

	Source	Score
Explosive Hazard Factor Data Elemen	ts	
Munitions Type	Table 1	N/A
Source of Hazard	Table 2	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	Table 3	N/A
Ease of Access	Table 4	N/A
Status of Property	Table 5	N/A
Receptors Factor Data Elements		
Population Density	Table 6	N/A
Population Near Hazard	Table 7	N/A
Types of Activities/Structures	Table 8	N/A
Ecological and/or Cultural Resources	Table 9	N/A
		Sum N/A

EHE Module Value	EHE Module Rating
92 to 100	A
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected Explosive Hazard
	Evaluation Pending

Tables 1-9 were not generated because there is no known or suspected explosive hazard at the MRS.

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# Table 20

# **Determining the CHE Module Rating**

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	Table 11	N/A
Source of CWM	Table 12	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	Table 13	N/A
Ease of Access	Table 14	N/A
Status of Property	Table 15	N/A
Receptors Factor Data Elements		
Population Density	Table 16	N/A
Population Near Hazard	Table 17	N/A
Types of Activities/Structures	Table 18	N/A
Ecological and/or Cultural Resources	Table 19	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	A
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# Table 21

#### **HHE Module: Groundwater Data Element Worksheet**

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios		
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data		
CHF > 100	H (High)	[Maximum Concentration of C	Contaminant1		
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of Comparison Value for Cont			
2 > CHF	L (Low)	[Oompanson value for oom	tarriiriaritj		
CHF Value		CHF VALUE	NA		
	Migratory Pathw	ay Factor			
Evident	Analytical data or observable evidence indicate present at, moving toward, or has moved to a p		Н		
Potential	Contamination in groundwater has moved only could move but is not moving appreciably, or in determination of Evident or Confined.		M		
Confined		Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).				
	Receptor Fa	actor			
dentified	There is a threatened water supply well downgr current source of drinking water or source of wa irrigation/agriculture (equivalent to Class I or IIA	iter for other beneficial uses such as	Н		
Potential	There is no threatened water supply well downg currently or potentially usable for drinking water IIA, or IIB aquifer).		M		
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).				
Receptor Factor	The single highest value from above in the box	to the right (maximum value = H).	NA		
		Prioritization No Longer Requ	ired		
Alter	native Module Ratings	No Known or Suspected Ha	zard		

Rationale for Selection of MPF:

Rationale for Selection of RF:

#### Sample comments:

TS877b consists of the overlap between Former EOD Proficiency Range (ED879) and 1970s Skeet Range (TS877). This acreage was counted for both MRAs during the CSE Phase I. The acreage covered by TS877b was included as part of Former EOD Proficiency Range (ED879) due to observation of a landmine training area, therefore TS877b is administratively closed out from the 1970s Skeet Range (TS877).

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

### Table 22

**HHE Module: Surface Water - Human Endpoint Data Element Worksheet** 

Contaminant		aximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios		
CHF Scale		HF Value	Contamination Hazard Factor (CHF)	No Data		
CHF > 100		H (High)	CHF = [Maximum Concentration of	Contaminant1		
100 > CHF > 2		M (Medium)	[Comparison Value for Con	taminant1		
2 > CHF		L (Low)	[Companson value for Con	itaminantj		
CHF Value			CHF VALUE	NA		
	"	Migratory Pathwa	ay Factor			
Evident	,	al data or observable evidence indicates at, moving toward, or has moved to a po	that contamination in the surface water is int of exposure.	Н		
Potential	could m	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.				
Confined		formation indicates a low potential for contaminant migration from the source via the surface atter to a potential point of exposure (possibly due to geological structures or physical controls).				
Migratory Pathway Factor	The sing	The single highest value from above in the box to the right (maximum value = H).				
		Receptor Fa	<u>ctor</u>			
Identified	Identifie move.	Identified receptors to have access to surface water to whick contamination has moved or can move.				
Potential	Potentia move.	I for receptors to have access to surface	M			
Limited		no potential for receptors to have access or can move.	L			
Receptor Factor	The sing	gle highest value from above in the box to	o the right (maximum value = H).	NA		
Δlte	rnative Mo	dule Ratings	Prioritization No Longer Req	uired		
Aite	THATIVE MIC	adio Ratings	No Known or Suspected Ha	azard		

Rationale for Selection of MPF:

Rationale for Selection of RF:

#### Sample comments:

TS877b consists of the overlap between Former EOD Proficiency Range (ED879) and 1970s Skeet Range (TS877). This acreage was counted for both MRAs during the CSE Phase I. The acreage covered by TS877b was included as part of Former EOD Proficiency Range (ED879) due to observation of a landmine training area, therefore TS877b is administratively closed out from the 1970s Skeet Range (TS877).

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

## Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant		Maximum Concentration (mg/kg)	) Comparison Value (mg/kg) Ratios		Ratios	
CHF Scale		CHF Value	Contamination	on Hazard Factor (CHF)	No Data	
CHF > 100		H (High)	0115	CHF = [Maximum Concentration of Contaminant]		
100 > CHF > 2		M (Medium)	<u>  CHF = \( \struct_{\text{-}} \)                                  </u>	[Comparison Value for Con	taminantl	
2 > CHF		L (Low)	[Companson value for Contaminant]			
CHF Value			CHF VALUE NA			
		Migratory Pathwa	y Factor			
Evident		ytical data or observable evidence indicates noving toward, or has moved to a point of exp		ion in the sediment is present	Н	
Potential	mov	ntamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could we but is not moving appreciably, or information is not sufficient to make a determination of dent or Confined.			М	
Confined		ormation indicates a low potential for contaminant migration from the source via the sediment a potential point of exposure (possibly due to geological structures or physical controls).			L	
Migratory Pathway Factor	The	e single highest value from above in the box to the right (maximum value = H).			NA	
		Receptor Fac	ctor			
Identified	Iden	tified receptors to have access to sediment t	o which contam	ination has moved or can move.	Н	
Potential	Pote		al for receptors to have access to sediment to which contamination has moved or can			
Limited		or no potential for receptors to have access to sediment to which contamination has moved L n move			L	
Receptor Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA	
			F	Prioritization No Longer Requ	uired	
Alter		Module Ratings	N	o Known or Suspected Ha	zard	

Rationale for Selection of MPF:

Rationale for Selection of RF:

#### Sample comments:

TS877b consists of the overlap between Former EOD Proficiency Range (ED879) and 1970s Skeet Range (TS877). This acreage was counted for both MRAs during the CSE Phase I. The acreage covered by TS877b was included as part of Former EOD Proficiency Range (ED879) due to observation of a landmine training area, therefore TS877b is administratively closed out from the 1970s Skeet Range (TS877).

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios
CHF Scale		CHF Value	Contamina	ation Hazard Factor (CHF)	No Data
CHF > 100		H (High)		[Maximum Concentration of	Contaminant]
100 > CHF > 2		M (Medium)	CHF = <u>\</u>	[Comparison Value for Con	taminantl
2 > CHF		L (Low)	[Gornpanson value for Gornammant]		
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident		lytical data or observable evidence indicates tent at, moving toward, or has moved to a poi		ion in the surface water is	Н
Potential	coul	tamination in surface water has moved only s d move but is not moving appreciably, or info rmination of Evident or Confined.			М
Confined		ormation indicates a low potential for contaminant migration from the source via the surface ter to a potential point of exposure (possibly due to geological structures or physical controls).			L
Migratory Pathway Factor	The	single highest value from above in the box to the right (maximum value = H).			NA
		Receptor Fac	<u>tor</u>		
Identified	lden mov	tified receptors have access to surface water e.	to which conta	mination has moved or can	Н
Potential		ential for receptors to have access to surface move.	al for receptors to have access to surface water to which contamination has moved or ove.		М
Limited		or no potential for receptors to have access to surface water to which contamination has d or can move.			L
Receptor Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA
			F	rioritization No Longer Requ	uired
Alter		Module Ratings	N	o Known or Suspected Ha	zard

Rationale for Selection of MPF:

Rationale for Selection of RF:

#### Sample comments:

TS877b consists of the overlap between Former EOD Proficiency Range (ED879) and 1970s Skeet Range (TS877). This acreage was counted for both MRAs during the CSE Phase I. The acreage covered by TS877b was included as part of Former EOD Proficiency Range (ED879) due to observation of a landmine training area, therefore TS877b is administratively closed out from the 1970s Skeet Range (TS877).

MAJCOM: ACC MRAID: 877 MRS: TS877b

FFID: ID057212455700

# Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

Contaminant		Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios	
CHF Scale		CHF Value	<b>Contamination Hazard Factor (CHF)</b>	No Data	
CHF > 100		H (High)	CHF = [Maximum Concentration of	Contaminant1	
100 > CHF > 2		M (Medium)	[Comparison Value for Con	taminantl	
2 > CHF		L (Low)		tariiriaritj	
CHF Value			CHF VALUE	NA	
		Migratory Pathway	y Factor		
Evident		lytical data or observable evidence indicates t noving toward, or has moved to a point of exp		Н	
Potential	mov	tamination in sediment has moved only slightly be but is not moving appreciably, or information lent or Confined.	amination in sediment has moved only slightly beyond the source (i.e., tens of feet), could but is not moving appreciably, or information is not sufficient to make a determination of ent or Confined.		
Confined		rmation indicates a low potential for contaminant migration from the source via the sediment potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA	
		Receptor Fac	<u>tor</u>		
Identified	lden	tified receptors to have access to sediment to	which contamination has moved or can move.	Ξ	
Potential	pote	·	ial for receptors to have access to sediment to which contamination has moved or can		
Limited		or no potential for receptors to have access to sediment to which contamination has moved n move.			
Receptor Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA	
Alter	native	Module Ratings	Prioritization No Longer Req		
Dationale for C. I. III.	NF.		No Known or Suspected Ha	azard	
Rationale for Selection of MF	1F:				

Rationale for Selection of RF

#### Sample comments:

TS877b consists of the overlap between Former EOD Proficiency Range (ED879) and 1970s Skeet Range (TS877). This acreage was counted for both MRAs during the CSE Phase I. The acreage covered by TS877b was included as part of Former EOD Proficiency Range (ED879) due to observation of a landmine training area, therefore TS877b is administratively closed out from the 1970s Skeet Range (TS877).

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# Table 26

**HHE Module: Soil - Data Element Worksheet** 

Contaminant		Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios	
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)	No Data	
CHF > 100		H (High)	CHE-\(\sigma\) [Maximum Concentration of	Contaminant]	
100 > CHF > 2		M (Medium)	CHF = [Maximum Concentration of Comparison Value for Con		
2 > CHF		L (Low)	[Gompanson value for Gom	itaminantj	
CHF Value			CHF VALUE	NA	
		Migratory Pathway	/ Factor		
Evident		lytical data or observable evidence indicates the ting toward, or has moved to a point of exposu		Н	
Potential	but i		ination in soil has moved only slightly beyond the source (i.e., tens of feet), could move of moving appreciably, or information is not sufficient to make a determination of Evident ned.		
Confined		mation indicates a low potential for contaminant migration from the source via the soil to a ntial point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The	single highest value from above in the box to	ngle highest value from above in the box to the right (maximum value = H).		
		Receptor Fac	<u>tor</u>		
Identified	Iden	tified receptors to have access to soil to which	n contamination has moved or can move.	Н	
Potential	Pote	ential for receptors to have access to soil to wh	al for receptors to have access to soil to which contamination has moved or can move.		
Limited		e or no potential for receptors to have access t move.	r no potential for receptors to have access to soil to which contamination has moved or ove.		
Receptor Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA	
Δlter	native	Module Ratings	Prioritization No Longer Req	uired	
Aitei	ative	modulo italiigo	No Known or Suspected Ha	azard	
Pationalo for Soloction of MI	DE:		<u> </u>	· · · · · · · · · · · · · · · · · · ·	

Rationale for Selection of MPF:

Rationale for Selection of RF:

#### Sample comments:

TS877b consists of the overlap between Former EOD Proficiency Range (ED879) and 1970s Skeet Range (TS877). This acreage was counted for both MRAs during the CSE Phase I. The acreage covered by TS877b was included as part of Former EOD Proficiency Range (ED879) due to observation of a landmine training area, therefore TS877b is administratively closed out from the 1970s Skeet Range (TS877).

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# Table 27 Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	NA	NA	NA	NA	NA

HHE Ratings (for reference only)			
Combination	Rating		
ННН	А		
ННМ	В		
HHL			
нмм	С		
HML			
ммм	D		
HLL	_		
MML	E		
MLL	F		
LLL	G		
Alternative Market Patiens	Prioritization No Longer Required		
Alternative Module Ratings	No Known or Suspected MC Hazard		
	Evaluation Pending		
HHE Module Ratings	N/A		

MAJCOM: ACC MRAID: 877 MRS: TS877b

**FFID:** ID057212455700

# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		Α	1		
Α	2	В	2	Α	2
В	3	С	3	В	3
С	4	D	4	С	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No Longer Required		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or St	uspected Hazard	No Known or Su	spected Hazard	No Known or Suspected Hazard	
Evaluatio	n Pending	Evaluation Pending		Evaluation Pending	
			MRS Priority		)

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID**: ID057212455700

#### Table A

#### MRS Background Information

	-	me: Former EOD Proficience	cy Range				
С	omponent: Air Force						
Ir	stallation/Property Name:	MOUNTAIN HOME AIR FO	RCE BASE				
L	ocation (City, County, State	Mountain Home, Elmo	e, ID				
s	Site Name/Project name (Project No.): Former EOD Proficiency Range						
D	ate Information Entered\Up	odated: 5/17/2012 12:33:24	PM				
Р	Point of Contact Name: Richard Roller Point of Contact Phone: (208) 828-6667						
Р	roject Phase (check only o	ne):					
	□РА	<b>✓</b> SI	RI		☐ FS	□RD	
	□ RA	RIP	RC				
M	Media Evaluated (check all that apply):						
	☐ Groundwater ☐ Sediment (human receptor)						
	✓ Surface soil						
	Sediment (ecological re	eceptor)		Surface	Water (human receptor)		

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Former EOD Proficiency Range MRA is located in the southeastern portion of the installation, south of Silver Sage Golf Course, off Bomber Street. The area measured 1,255 ft by 1,261 ft, with a perimeter of 3,952 ft and an area consisting of 28.5 acres. The coordinates for the area are 43.038564 degrees latitude, -115.843601 degrees longitude. The MRA exhibits flat topography and vegetation consisting of sage brush and low grasses. The soil at the site consists of the Bahem silt loam and Minidoka-Minveno silt loams. There are no wetlands associated with this site. The MRA is overlapped to the south by the 1970s Skeet Range and is bisected by a north-south gravel road that runs west of center through the MRA. The northern portion of the MRA contains a circular gravel parking area near two amnesty ammo bunkers that are no longer in use. The northern periphery of the site is bounded by well established sage brush. The center of the MRA is marked by a large circle of bare ground where practice burns or detonations appear to have taken place. A large fire break runs east-west through the southern portion of the MRA. The MRA was in use until the late 1990s however, the exact dates of use are unknown. Although the exact types of munitions used here were not known before the CSE Phase II investigation, it is known that a variety of munitions were used and/or detonated at this range for training and proficiency exercises.

The entire ED879 MRS is recommended for further action.

Description of Pathways for Human and Ecological Receptors:

Lead was not detected above the 400 mg/kg USEPA human health screening level. Soil pathways are considered complete for human receptors. Lead levels exceeded the USEPA EcoSSL for only the most sensitive ecological receptor category (insectivorous birds). Soil pathways are considered complete for this receptor category.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

#### CSE Report Reference (Section, Page #):

GENERAL - 5.3.1/5.3.2/8.0/9.0/10.0, LOCATION - 2.1/5.3.1, POC - 1.3, CONTRACTOR - 1.3

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 1

# **EHE Module: Munitions Type Data Element Worksheet**

Classification	Description	Score
Sensitive	- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions].     - All hand grenades containing energetic filler.     - Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	30
High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."  - All DMM containing a high-explosive filler that have:  - Been damaged by burning or detonation  - Deteriorated to the point of instability.	25
Pyrotechnic (used or damaged)	<ul> <li>All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).</li> <li>All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have: <ul> <li>Been damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul> </li> </ul>	20
High explosive (unused)	- All DMM containing a high explosive filler that:  - Have not been damaged by burning or detonation  - Are not deteriorated to the point of instability.	15
Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).      - All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:     - Damaged by burning or detonation     - Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul> <li>All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated.</li> <li>Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.</li> </ul>	10
Pyrotechnic (not used or damaged)	- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:  - Have not been damaged by burning or detonation  - Are not deteriorated to the point of instability.	10
Practice	- All UXO that are practice munitions that are not associated with a sensitive fuze.     - All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:     - Been damaged by burning or detonation     - Deteriorated to the point of instability.	5
Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).	20

Bomb tail assembly and strong back plate, practice bombs, aluminum flare debris, fuze components, and unidentifiable MD visible on surface.

Munitions other than those described above may be present subsurface.

CSE Report Reference (Section, Page #): 5.3.7.1/5.3.7.2

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 2

### **EHE Module: Source of Hazard Data Element Worksheet**

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	8
Site-specific data characteristics used	to select the SOURCE OF HAZARD classification:	
EOD Proficiency Range		
CSE Papart Pataronea (Saction Pa	W	

CSE Report Reference (Section, Page #): 5.3.1/5.3.2/5.3.7.1/5.3.7.2

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 3

### **EHE Module: Information on the Location of Munitions Data Element Worksheet**

Classification	Description	Score
Confirmed surface	<ul> <li>Physical evidence indicates that there are UXO or DMM on the surface of the MRS</li> <li>Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.</li> </ul>	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> </ul>	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).	10

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Munitions debris is present on the surface. Digital Geophysical Mapping (DGM) identified a high density of subsurface anomalies, indicating potential for subsurface munitions presence.

CSE Report Reference (Section, Page #): 5.3.7.1/5.3.7.2

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 4

### **EHE Module: Ease of Access Data Element Worksheet**

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	10

Site-specific characteristics used to select the EASE OF ACCESS classification:

MAJCOM: ACC **MRAID**: 879 MRS: ED879

**FFID:** ID057212455700

# Table 5

# **EHE Module: Status of Property Data Element Worksheet**

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

CSE Report Reference (Section, Page #): 5.3.7.1/5.3.7.2

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 6

## **EHE Module: Population Density Data Element Worksheet**

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

Population of Elmore County was 27, 038 according to the 2010 Census. Area of Elmore county is 3,077.57 square miles. Population density is 8.8 persons per square mile.

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**FFID:** ID057212455700

# Table 7

# **EHE Module: Population Near Hazard Data Element Worksheet**

the boundary of the MRS, or both.  11 to 15 inhabited structures  - There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	Description	Score
the boundary of the MRS, or both.  11 to 15 inhabited structures  - There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, within the boundary of the MRS, or both.		5
the boundary of the MRS, or both.  - There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, within the boundary of the MRS, or both.		4
the boundary of the MRS, or both.  1 to 5 inhabited structures  - There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  - DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	· · · · · · · · · · · · · · · · · · ·	3
the boundary of the MRS, or both.  O inhabited structures  - There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.  DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).		2
boundary of the MRS, or both.  Population Near Hazard  DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).		1
(maximum score = 5).	· ·	0
Site-specific data characteristics used to select the POPULATION NEAR HAZARD classification:		5
one openine data characteristics accurate coloctars in the characteristics and construction	ed to select the POPULATION NEAR HAZARD classification:	
one opeome data enalectoristics de-		<ul> <li>There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.</li> <li>There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.</li> <li>There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.</li> <li>There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.</li> <li>There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.</li> <li>There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.</li> <li>DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).</li> </ul>

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## Table 8

## **EHE Module: Types of Activities/Structures Data Element Worksheet**

Activities are conducted, or inhabited structures are located up to two miles from the MRS's soundary or within the MRS's boundary, that are associated with any of the following purposes: esidential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, lams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious ites, or sites used for subsistence hunting, fishing, and gathering.  Activities are conducted, or inhabited structures are located up to two miles from the MRS's	5
	4
oundary or within the MRS's boundary, that are associated with parks, nature preserves, or ther recreational uses.	
Activities are conducted, or inhabited structures are located up to two miles from the MRS's coundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or varehousing.	2
There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
RECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	5
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.  Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or rarehousing.  There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.  ECTIONS: Record the single highest score from above in the box to the right

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## Table 9

## **EHE Module: Ecological and/or Cultural Resources Data Element Worksheet**

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0
Site-specific characteristics used to s	elect the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:	

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 10

## **Determining the EHE Module Rating**

	Source		Score
Explosive Hazard Factor Data Elemen	ts		
Munitions Type	Table 1		20
Source of Hazard	Table 2		8
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 3		10
Ease of Access	Table 4		10
Status of Property	Table 5		0
Receptors Factor Data Elements			
Population Density	Table 6		1
Population Near Hazard	Table 7		5
Types of Activities/Structures	Table 8		5
Ecological and/or Cultural Resources	Table 9		0
	•	Sum	59

EHE Module Value	EHE Module Rating
92 to 100	Α
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected Explosive Hazard
	Evaluation Pending

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 20

## **Determining the CHE Module Rating**

	Source	Score	
CWM Hazard Factor Data Elements			
CWM Configuration	Table 11	N/A	Α
Source of CWM	Table 12	N/A	Ā
Accessibility Factor Data Elements			
Information on Location of Munitions	Table 13	N/A	Α
Ease of Access	Table 14	N/A	Ā
Status of Property	Table 15	N/A	Ā
Receptors Factor Data Elements			
Population Density	Table 16	N/A	Α
Population Near Hazard	Table 17	N/A	Ą
Types of Activities/Structures	Table 18	N/A	Ā
Ecological and/or Cultural Resources	Table 19	N/A	Α
		Sum N/A	4

CHE Module Value	CHE Module Rating
92 to 100	Α
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

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**FFID:** ID057212455700

## Table 21

#### **HHE Module: Groundwater Data Element Worksheet**

Contaminant		Maximum Concentration (ug/L)	tration (ug/L) Comparison Value (ug/L)		Ratios
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)		No Data
CHF > 100		H (High)	CHF = [Maximum Concentration of Contain [Comparison Value for Contamina		Contaminantl
100 > CHF > 2		M (Medium)			taminantl
2 > CHF		L (Low)			-
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident		lytical data or observable evidence indicates ent at, moving toward, or has moved to a poi		on in the groundwater is	Н
Potential	coul	ntamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), Ild move but is not moving appreciably, or information is not sufficient to make a ermination of Evident or Confined.			M
Confined	grou	ormation indicates a low potential for contaminant migration from the source via the undwater to a potential point of exposure (possibly due to geological structures or physical atrols).			L
Migratory Pathway Factor	The	single highest value from above in the box to	the right (maxii	mum value = H).	NA
		Receptor Fac	tor		
Identified	curre	re is a threatened water supply well downgrad ent source of drinking water or source of wate ation/agriculture (equivalent to Class I or IIA a	r for other bene		Н
Potential	curre	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IA, or IIB aquifer).			M
Limited	grou	here is no potentially threatened water supply well downgradient of the source and the roundwater is not considered a potential source of drinking water and is of limited beneficial use equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).			L
Receptor Factor	The	single highest value from above in the box to	the right (maxii	mum value = H).	NA
Alto	rnative	Module Ratings	Pi	rioritization No Longer Requ	ired
Aite	mative	Module Natiliya	No	Known or Suspected Ha	zard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was not conducted as part of the CSE Phase II investigations. All soil sampling results were below the human health screening level. Depth to groundwater is 350-400 feet throughout Mountain Home AFB.

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

## Table 22

**HHE Module: Surface Water - Human Endpoint Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L) Comparison Value (ug/L)		Ratios	
CHF Scale		CHF Value	Contamina	ation Hazard Factor (CHF)	No Data
CHF > 100	HF > 100 H			[Maximum Concentration of	Contaminantl
100 > CHF > 2		M (Medium)	$CHF = \sum_{\bullet}$	[Comparison Value for Con	
2 > CHF		L (Low)	[Companison value for Co		tariiriaritj
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident	_	ytical data or observable evidence indicates t ent at, moving toward, or has moved to a poi		ion in the surface water is	Н
Potential	coul	amination in surface water has moved only slightly beyond the source (i.e., tens of feet), d move but is not moving appreciably, or information is not sufficient to make a rmination of Evident or Confined.			M
Confined		mation indicates a low potential for contaminant migration from the source via the surface r to a potential point of exposure (possibly due to geological structures or physical controls).			L
Migratory Pathway Factor	The	e single highest value from above in the box to the right (maximum value = H).		NA	
		Receptor Fac	<u>tor</u>		
Identified	lden mov	ntified receptors to have access to surface water to whick contamination has moved or can ve.		Н	
Potential	Pote	ential for receptors to have access to surface water to whick contamination has moved or can e.		M	
Limited		e or no potential for receptors to have access to surface water to whick contamination has yed or can move.			L
Receptor Factor	The	single highest value from above in the box to	the right (maxi	mum value = H).	NA
			Р	rioritization No Longer Requ	uired
Alte	rnative	Module Ratings	N	o Known or Suspected Ha	zard
Rationale for Selection of MI	PF:				

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.investigation.

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

## Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg/	/kg) Comparison Value (mg/kg)	Ratios	
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data	
CHF > 100	H (High)	[Maximum Concentration of	Contaminantl	
100 > CHF > 2	00 > CHF > 2			
2 > CHF	L (Low)	[Comparison Value for Con	ıtamınanıj	
CHF Value		CHF VALUE	NA	
	Migratory Path	nway Factor		
Evident	Analytical data or observable evidence indica at, moving toward, or has moved to a point o	ates that contamination in the sediment is present f exposure.	Н	
Potential		Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.		
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).			
Migratory Pathway Factor	The single highest value from above in the b	ox to the right (maximum value = H).	NA	
	Receptor	<u>Factor</u>		
Identified	Identified receptors to have access to sedime	ent to which contamination has moved or can move.	Н	
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move			
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move			
Receptor Factor	The single highest value from above in the bo	ox to the right (maximum value = H).	NA	
Altor	native Module Ratings	Prioritization No Longer Req	uired	
		No Known or Suspected Ha	azard	
Rationale for Selection of MP	PF:			

Rationale for Selection of RF:

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC **MRAID**: 879 MRS: ED879

**FFID:** ID057212455700

## Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant		Maximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios	
CHF Scale		CHF Value	Contamina	ation Hazard Factor (CHF)	No Data	
CHF > 100		H (High)	CHF = [Maximum Concentration of Contamina		Contaminantl	
100 > CHF > 2		M (Medium)	CHF = <u>\( \)                                 </u>	[Comparison Value for Con	taminantl	
2 > CHF		L (Low)		[Companson value for Con	tarriiriaritj	
CHF Value				CHF VALUE	NA	
		Migratory Pathwa	y Factor			
Evident		ytical data or observable evidence indicates t ent at, moving toward, or has moved to a poi		on in the surface water is	Н	
Potential	could		mination in surface water has moved only slightly beyond the source (i.e., tens of feet), move but is not moving appreciably, or information is not sufficient to make a nination of Evident or Confined.			
Confined		rmation indicates a low potential for contaminant migration from the source via the surface to a potential point of exposure (possibly due to geological structures or physical controls).			L	
Migratory Pathway Factor	The	single highest value from above in the box to the right (maximum value = H).		NA		
		Receptor Fac	tor			
Identified	lden mov	tified receptors have access to surface water e.	to which contar	nination has moved or can	Н	
Potential	Pote can	tial for receptors to have access to surface water to which contamination has moved or ove.		М		
Limited		or no potential for receptors to have access to surface water to which contamination has ed or can move.			L	
Receptor Factor	The	single highest value from above in the box to	the right (maxi	num value = H).	NA	
			Р	rioritization No Longer Requ	uired	
Alter	rnative	Module Ratings	N	o Known or Suspected Ha	zard	
Rationale for Selection of MI	PF:					

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg	g/kg) Comparison Value (mg/kg)	Ratios	
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data	
CHF > 100	H (High)	[Maximum Concentration of Co	ontaminant1	
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of Co		
2 > CHF	L (Low)	[Companson value for Conta	iriiriaritj	
CHF Value		CHF VALUE	NA	
	Migratory Pat	thway Factor		
Evident	Analytical data or observable evidence indicat, moving toward, or has moved to a point	cates that contamination in the sediment is present of exposure.	Н	
Potential		tamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could but is not moving appreciably, or information is not sufficient to make a determination of ent or Confined.		
Confined		mation indicates a low potential for contaminant migration from the source via the sediment potential point of exposure (possibly due to geological structures or physical controls).		
Migratory Pathway Factor	The single highest value from above in the	box to the right (maximum value = H).	NA	
	Recepto	r Factor		
Identified	Identified receptors to have access to sedir	ment to which contamination has moved or can move.	Н	
Potential	potential for receptors to have access to se move.	ential for receptors to have access to sediment to which contamination has moved or can re.		
Limited	Little or no potential for receptors to have a or can move.	le or no potential for receptors to have access to sediment to which contamination has moved can move.		
Receptor Factor	The single highest value from above in the	box to the right (maximum value = H).	NA	
		Prioritization No Longer Requi	red	
Alte	rnative Module Ratings	No Known or Suspected Haz	ard	
Rationale for Selection of M	Dr.			

Rationale for Selection of RF

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

## Table 26

#### **HHE Module: Soil - Data Element Worksheet**

Maximum Concentration (mg/kg)  40  CHF Value  H (High)  M (Medium)  L (Low)	<u>-</u>	of Contaminant]
H (High) M (Medium)	CHF = [Maximum Concentration	of Contaminant]
M (Medium)	CHF = Z	
· '	CHF = Z	
L (Low)	[Companson value for v	`ontaminant1
	CHF VAL	JE L
Migratory Pathway	<u>/ Factor</u>	
		Н
amination in soil has moved only slightly beyond the source (i.e., tens of feet), could move not moving appreciably, or information is not sufficient to make a determination of Evident nfined.		
rmation indicates a low potential for contaminant migration from the source via the soil to a chial point of exposure (possibly due to geological structures or physical controls).		
single highest value from above in the box to the right (maximum value = H).		
Receptor Fact	<u>tor</u>	
ied receptors to have access to soil to which	n contamination has moved or can move.	Н
ential for receptors to have access to soil to which contamination has moved or can move.		
e or no potential for receptors to have access to soil to which contamination has moved or move.		
ngle highest value from above in the box to	the right (maximum value = H).	L
	Prioritization No Longer R	equired
ternative Module Ratings  No Known or Suspected Hazard		
mnif aia	cal data or observable evidence indicates to toward, or has moved to a point of exposuration in soil has moved only slightly beyond moving appreciably, or information is no fined.  In a soil has moved only slightly beyond moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably, or information is no fined.  In a soil has moved only slightly beyond the moving appreciably beyond the moving appreciably, or information is no fined.  In a soil has moved on the moving appreciably beyond the movi	ot moving appreciably, or information is not sufficient to make a determination of Evidentined.  Intion indicates a low potential for contaminant migration from the source via the soil to a point of exposure (possibly due to geological structures or physical controls).  Intion indicates a low potential for contaminant migration from the source via the soil to a point of exposure (possibly due to geological structures or physical controls).  Interpretation in the box to the right (maximum value = H).  In potential for receptors to have access to soil to which contamination has moved or can move.  In potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil to which contamination has moved or one potential for receptors to have access to soil t

Rationale for Selection of MPF:

Lead was detected in soil, however concentrations are below RSLs.

Rationale for Selection of RF:

Lead was detected in soil, however concentrations are below RSLs.

Sample comments:

70 surface soil samples were collected at the Former EOD Proficiency Range (ED879) for XRF analysis of lead. Lead was detected at concentrations ranging from 14 to 40 mg/kg. None of surface samples exceeded the USEPA human health screening level for lead of 400 mg/kg.

CSE Report Reference (Section, Page #):

5.3.7.3

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# Table 27 Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	L	L	LLL	G

HHE Ratings (for reference only)					
Combination	Rating				
ННН	А				
ННМ	В				
HHL					
НММ	С				
HML					
МММ	D				
HLL	_				
MML	E				
MLL	F				
LLL	G				
Alfanordina Martini Badiana	Prioritization No Longer Required				
Alternative Module Ratings	No Known or Suspected MC Hazard				
	Evaluation Pending				
HHE Module Ratings	G				

MAJCOM: ACC MRAID: 879 MRS: ED879

**FFID:** ID057212455700

# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		Α	1		
Α	2	В	2	Α	2
В	3	С	3	В	3
С	4	D	4	С	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No	Longer Required	Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
		MRS Priority			6

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID**: ID057212455700

#### Table A

#### **MRS Background Information**

Munitions Response Site Name: Saylor Creek Range B	uffer Zone					
Component: Air Force						
Installation/Property Name: MOUNTAIN HOME AIR FO	RCE BASE					
Location (City, County, State): Bruneau, Owyhee, ID						
Site Name/Project name (Project No.): Saylor Creek Ra	ange Buffer Zo	ne				
Date Information Entered\Updated: 5/17/2012 2:05:59 PM						
Point of Contact Name: Richard Roller		Point	of Contact Phon	e: (208) 828-6667		
Project Phase (check only one):						
☐ PA ✓ SI	☐ RI		☐ FS	□RD		
☐ RA ☐ RIP	☐ RC					
Media Evaluated (check all that apply):						
☐ Groundwater ☐ Sediment (human receptor)						
Surface soil		Surface '	Water (ecological	receptor)		
Sediment (ecological receptor)		Surface '	Water (human rec	eptor)		

#### MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Saylor Creek Range is located approximately 20 miles southeast of Mountain Home AFB near the town of Bruneau, Idaho. Currently, the range consists of a 12,000-acre active range area surrounded by a 97,550.6-acre Buffer Zone. The active range is currently used for practice bombing activities. The 97,550.6-acre Saylor Creek Range Buffer Zone is 94,241 ft by 60,430 ft with a perimeter of 490,905 ft. The coordinates of this site are 42.740408 degrees latitude, -115.561029 degrees longitude. Numerous archaeological sites are situated within the site including a WWII-era small arms range and training area. The Saylor Creek Buffer Zone currently consists of open fields with low grass and sagebrush. Soils consist of loamy fine sand and fine sandy loam. The topography is gently rolling. There are no wetlands associated with this site.

The Buffer Zone is historically known to contain WWII-era MD, targets for practice bombing, strafing ranges, vehicular targets, and small arms ranges. During WWII, two areas within the Saylor Creek Range Buffer Zone (MU878) were used for precision bombing training: the Northwest Target Area and the Northeast Drop Site.

Documents reviewed indicate that this target area was active during WWII as a heavy munitions target. Aerial bombing and gunnery training was performed in the Northwest Target Area using precision bombing circles and aerial gunnery strafing lines. Evidence also suggests that after WWII, certain aspects of this range were used as either a small arms range and/or for napalm practice during the 1950s. A munitions burial mound containing heavy WWII practice ordnance is also present in the Northwest Target Area. According to the Mountain Home AFB personnel, there were two WWII bombing areas located in the Northeast Drop Site. Within the two target areas was one main target each (the specific type of target or names of the target area are unknown). Scattered across the top of a ridge in the Northeast Drop Site are over 500 heavy WWII ordnance practice bomb fragments.

After the completion of the CSE Phase II field investigation WAA and field verification, the AF confirmed that the Saylor Creek Range Buffer Zone is operational and is currently ineligible for the AF MMRP. This MRA is recommended for PNLR.

Description of Pathways for Human and Ecological Receptors:

Environmental sampling was not conducted in this MRA.

Description of Receptors (Human and Ecological):

Receptors at Mountain Home AFB include authorized installation personnel (i.e., base maintenance workers and construction workers and residents), authorized contractors and visitors (i.e., workers and recreational users) and trespassers, as well as ecological receptors. Ecological receptors include all current and future animal and plant life, which may be exposed to the soil or water in any of the MRAs.

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

CSE Report Reference (Section, Page #):

GENERAL - 5.4.1/5.4.2/5.4.9.2/8.0/9.0/10.0, LOCATION - 5.4.1, POC - 1.3, CONTRACTOR - 1.3

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

# Table 10 Determining the EHE Module Rating

	Source	Score
Explosive Hazard Factor Data Elemen	ts	
Munitions Type	Table 1	N/A
Source of Hazard	Table 2	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	Table 3	N/A
Ease of Access	Table 4	N/A
Status of Property	Table 5	N/A
Receptors Factor Data Elements	•	
Population Density	Table 6	N/A
Population Near Hazard	Table 7	N/A
Types of Activities/Structures	Table 8	N/A
Ecological and/or Cultural Resources	Table 9	N/A
	•	Sum N/A

EHE Module Value	EHE Module Rating		
92 to 100	A		
82 to 91	В		
71 to 81	С		
60 to 70	D		
48 to 59	E		
38 to 47	F		
less than 38	G		
	Prioritization No Longer Required		
Alternative Module Ratings	No Known or Suspected Explosive Hazard		
	Evaluation Pending		

Tables 1-9 were not generated because an appropriate response has been conducted and prioritization is no longer required.

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

# Table 20

## **Determining the CHE Module Rating**

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	Table 11	N/A
Source of CWM	Table 12	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	Table 13	N/A
Ease of Access	Table 14	N/A
Status of Property	Table 15	N/A
Receptors Factor Data Elements		
Population Density	Table 16	N/A
Population Near Hazard	Table 17	N/A
Types of Activities/Structures	Table 18	N/A
Ecological and/or Cultural Resources	Table 19	N/A
	•	Sum N/A

CHE Module Value	CHE Module Rating
92 to 100	A
82 to 91	В
71 to 81	С
60 to 70	D
48 to 59	Е
38 to 47	F
less than 38	G
	Prioritization No Longer Required
Alternative Module Ratings	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because an appropriate response has been conducted and prioritization is no longer required.

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

## Table 21

#### **HHE Module: Groundwater Data Element Worksheet**

Contaminant		Maximum Concentration (ug/L)	Comparis	on Value (ug/L)	Ratios
CHF Scale		CHF Value	Contamina	tion Hazard Factor (CHF)	No Data
CHF > 100 100 > CHF > 2		H (High)	. 5	[Maximum Concentration of	Contaminant1
		M (Medium)	CHF = \( \sum_{\text{-}} \)	[Comparison Value for Con	
2 > CHF		L (Low)		<u> </u>	-
CHF Value		CHF VALUE	NA		
		Migratory Pathwa	y Factor		
Evident		ytical data or observable evidence indicates ent at, moving toward, or has moved to a poi			Н
Potential	coul		amination in groundwater has moved only slightly beyond the source (i.e., tens of feet), I move but is not moving appreciably, or information is not sufficient to make a mination of Evident or Confined.		
Confined	grou	rmation indicates a low potential for contaminant migration from the source via the undwater to a potential point of exposure (possibly due to geological structures or physical trols).			L
Migratory Pathway Factor	The	e single highest value from above in the box to the right (maximum value = H).			NA
		Receptor Fac	tor		
Identified	curre	re is a threatened water supply well downgrad ent source of drinking water or source of wate ation/agriculture (equivalent to Class I or IIA a	er for other ben		Н
Potential	curre	re is no threatened water supply well downgradient of the source and the groundwater is ently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, or IIB aquifer).			M
Limited	grou	re is no potentially threatened water supply well downgradient of the source and the ndwater is not considered a potential source of drinking water and is of limited beneficial use ivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).			L
Receptor Factor	The	single highest value from above in the box to	the right (maxi	imum value = H).	NA
Alta	rnotive	Modulo Potingo	Pri	ioritization No Longer Req	uired
Alte	rnative	Module Ratings		No Known or Suspected Haz	ard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was not conducted as part of the CSE Phase II investigations. Depth to groundwater is 350-400 feet throughout Mountain Home AFB.

MAJCOM: ACC **MRAID:** 878 MRS: MU878

**FFID:** ID057212455700

# Table 22

**HHE Module: Surface Water - Human Endpoint Data Element Worksheet** 

Contaminant	N	Maximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios
CHF Scale		CHF Value	Contamina	ation Hazard Factor (CHF)	No Data
CHF > 100		H (High)		[Maximum Concentration of 0	Contaminantl
100 > CHF > 2		M (Medium)	CHF = \( \sum_{} \)	[Comparison Value for Con	
2 > CHF		L (Low)		[Companson value for Con	lammantj
CHF Value				CHF VALUE	NA
		Migratory Pathwa	y Factor		
Evident		ical data or observable evidence indicates nt at, moving toward, or has moved to a po		ion in the surface water is	Н
Potential	could i	mination in surface water has moved only a move but is not moving appreciably, or info nination of Evident or Confined.			M
Confined		ation indicates a low potential for contamir to a potential point of exposure (possibly d		L	
Migratory Pathway Factor	The si	e single highest value from above in the box to the right (maximum value = H).			NA
		Receptor Fac	<u>ctor</u>		
Identified	Identif move.	ied receptors to have access to surface wa	ater to whick cor	tamination has moved or can	Н
Potential	Potent move.	ntial for receptors to have access to surface water to whick contamination has moved or can e.			M
Limited		or no potential for receptors to have access to surface water to whick contamination has ed or can move.			L
Receptor Factor	The si	ngle highest value from above in the box to	the right (maxi	mum value = H).	NA
ΔΙτα	rnative M	lodule Ratings	Pri	oritization No Longer Req	uired
Aite	mative IVI	iodale italings	١	No Known or Suspected Haz	zard

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

## Table 23

**HHE Module: Sediment - Human Endpoint Data Element Worksheet** 

Contaminant	Maxii	mum Concentration (mg/	kg) Comparison Value (mg/kg)	Ratios
CHF Scale	CHF \	/alue	Contamination Hazard Factor (CHF)	No Data
CHF > 100		H (High)	[Maximum Concentration of	Contaminant]
100 > CHF > 2		M (Medium)	CHF = [Maximum Concentration of [Comparison Value for Cor	
2 > CHF		L (Low)		-
CHF Value			CHF VALUE	. NA
		Migratory Path	way Factor	
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.			Н
Potential		not moving appreciably, or inform	lightly beyond the source (i.e., tens of feet), could nation is not sufficient to make a determination of	М
Confined		formation indicates a low potential for contaminant migration from the source via the sediment a potential point of exposure (possibly due to geological structures or physical controls).		
Migratory Pathway Factor	The single h	ghest value from above in the bo	ox to the right (maximum value = H).	NA
		Receptor	<u>Factor</u>	
Identified	Identified red	eptors to have access to sedime	ent to which contamination has moved or can move.	Н
Potential	Potential for move	ential for receptors to have access to sediment to which contamination has moved or can e		
Limited	Little or no poor can move	e or no potential for receptors to have access to sediment to which contamination has moved an move		
Receptor Factor	The single hi	ghest value from above in the bo	ox to the right (maximum value = H).	NA
Altor	native Modul	e Ratings	Prioritization No Longer Red	quired
Aiter	nanve modul	e ivanilys	No Known or Suspected Ha	zard
Rationale for Selection of MF	PF:	-		

Rationale for Selection of RF:

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC **MRAID:** 878 MRS: MU878

**FFID:** ID057212455700

## Table 24

**HHE Module: Surface Water - Ecological Data Element Worksheet** 

Contaminant	Ma	ximum Concentration (ug/L)	Compariso	on Value (ug/L)	Ratios
CHF Scale	СН	F Value	Contamina	ation Hazard Factor (CHF)	No Dat
CHF > 100		H (High)		[Maximum Concentration of	Contaminant1
100 > CHF > 2		M (Medium)	CHF = \( \sum_{-1}^{-1} \)	[Comparison Value for Con	taminantl
2 > CHF		L (Low)			-
CHF Value				CHF VALUE	NA
	"	Migratory Pathwa	ay Factor		
Evident		l data or observable evidence indicates it, moving toward, or has moved to a po		ion in the surface water is	Н
Potential	could mo	nation in surface water has moved only ve but is not moving appreciably, or infation of Evident or Confined.			М
Confined		mation indicates a low potential for contaminant migration from the source via the surface or to a potential point of exposure (possibly due to geological structures or physical controls).			L
Migratory Pathway Factor	The singl	e highest value from above in the box t	o the right (maxii	mum value = H).	NA
		Receptor Fa	<u>ctor</u>		
Identified	Identified move.	receptors have access to surface water	r to which contai	mination has moved or can	Н
Potential	Potential can move	ntial for receptors to have access to surface water to which contamination has moved or move.			М
Limited		or no potential for receptors to have access to surface water to which contamination has ed or can move.			L
Receptor Factor	The singl	le highest value from above in the box t	o the right (maxi	mum value = H).	NA
Altau	motivo Ma	dula Patinga	Pri	oritization No Longer Rec	quired
Alternative Module Ratings			1	No Known or Suspected Haz	zard
Rationale for Selection of MF	PF:				

Rationale for Selection of RF:

Sample comments:

No surface water was identified within the MRAs, therefore surface water sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

# Table 25

**HHE Module: Sediment - Ecological Endpoint Data Element Worksheet** 

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios			
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data			
CHF > 100	H (High)	[Maximum Concentration of Co	ontaminant]			
100 > CHF > 2	M (Medium)	CHF = [Maximum Concentration of Co				
2 > CHF	L (Low)		NA NA			
CHF Value		CHF VALUE				
	Migratory Pathwa	ay Factor				
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.					
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.					
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).					
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).					
	Receptor Fa	ctor				
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.					
Potential	potential for receptors to have access to sediment to which contamination has moved or can move.					
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.					
Receptor Factor	The single highest value from above in the box t	o the right (maximum value = H).	NA			
Alteri	native Module Ratings	Prioritization No Longer Requi				
Rationale for Selection of MP	F:					

Rationale for Selection of RF

Sample comments:

No sediment was identified within the MRAs, therefore sediment sampling was not conducted as part of the CSE Phase II investigations.

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

## Table 26

**HHE Module: Soil - Data Element Worksheet** 

	( 3 3)	Comparison Value (mg/kg)	Ratios		
	CHF Value	Contamination Hazard Factor (CHF)	No Data		
	H (High)	[Maximum Concentration of	Contaminant]		
	M (Medium)	CHF = [Comparison Value for Con	taminant1		
	L (Low)		-		
	CHF VALU		NA		
	Migratory Pathway	/ Factor			
but i	is not moving appreciably, or information is not sufficient to make a determination of Evident				
The	single highest value from above in the box to the right (maximum value = H).				
	Receptor Fac	<u>tor</u>			
Iden	entified receptors to have access to soil to which contamination has moved or can move.				
Pote	ential for receptors to have access to soil to which contamination has moved or can move.				
The	e single highest value from above in the box to the right (maximum value = H).				
Alternative Module Ratings  No Known or Suspected Hazard					
	mov Con but i or C Infor pote The  Iden  Little can The	H (High)  M (Medium)  L (Low)  Migratory Pathway  Analytical data or observable evidence indicates t moving toward, or has moved to a point of exposure contamination in soil has moved only slightly beyon but is not moving appreciably, or information is not or Confined.  Information indicates a low potential for contaminate potential point of exposure (possibly due to geology). The single highest value from above in the box to the local dentified receptors to have access to soil to which the	H (High)  M (Medium)  L (Low)  CHF =   [Maximum Concentration of Comparison Value for Concentration of Comparison Value for Concentration of CHF VALUE  Migratory Pathway Factor  Analytical data or observable evidence indicates that contamination in the soil is present at, moving toward, or has moved to a point of exposure.  Contamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.  Information indicates a low potential for contaminant migration from the source via the soil to a potential point of exposure (possibly due to geological structures or physical controls).  The single highest value from above in the box to the right (maximum value = H).  Receptor Factor  Identified receptors to have access to soil to which contamination has moved or can move.  Potential for receptors to have access to soil to which contamination has moved or can move.  Little or no potential for receptors to have access to soil to which contamination has moved or can move.  The single highest value from above in the box to the right (maximum value = H).  Prioritization No Longer Receptable (Prioritization No Longer Receptable)		

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

No range features were identified to suggest any historical MC release at this site, therefore no soil sampling was conducted in this MRS.

CSE Report Reference (Section, Page #):

5.4.9

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

# Table 27 Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	NA	NA	NA	NA	NA

HHE Ratings (for reference only)				
Combination	Rating			
ннн	Α			
ннм	В			
HHL	_			
нмм	С			
HML				
ммм	D			
HLL	_			
MML	E			
MLL	F			
LLL	G			
	Prioritization No Longer Required			
Alternative Module Ratings	No Known or Suspected MC Hazard			
	Evaluation Pending			
HHE Module Ratings	N/A			

MAJCOM: ACC MRAID: 878 MRS: MU878

**FFID:** ID057212455700

# **Table 28**MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		Α	1		
Α	2	В	2	Α	2
В	3	С	3	В	3
С	4	D	4	С	4
D	5	E	5	D	5
Е	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No Longer Required		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
			MRS Priority		0