Appendix I MRSPP This page intentionally left blank.

Installation:	McGhee Tys	on Air	Nation G	iuard Base	
MAJCOM: AN	١G			MRAID:	893
FFID: TN457	282419600				

Table A

MRS Background Information

Munitions	Response	Site Name:	100-Meter Range

Component: Air Force

Installation/Property Name: McGhee Tyson Air Nation Guard Base

Location (City, County, State): Alcoa, Blount, TN

Site Name/Project name (Project No.): 100-Meter Range

Date Information Entered\Updated: 8/3/2021 2:19:16 PM

Point of Contact Name:	Lt. Col. Jack M. Carley	Point of Contact Phone:	(240) 612-8791
Project Phase (check onl	y one):		

	🗌 SI	RI	🗌 FS	RD
RA				

Media Evaluated (check all that apply):

Groundwater	Sediment (human receptor)
Surface soil	Surface Water (ecological receptor)
Sediment (ecological receptor)	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 100-Meter Range (SR893) is a former Small Arms Range measuring .75 acres in size on McGhee Tyson Air National Guard Base. The range is now generally flat, grassy and undeveloped. The range was constructed in 1973 on undeveloped land and used in 1970s and 1980s. In 1987, the range was shortened from 100 to 25 meters. As part of this effort, berm material was spread over the closed portions of the range.

Description of Pathways for Human and Ecological Receptors:

Incidental ingestion and/or dermal exposure to MC in subsurface soils, approximately 6ft to 8ft beneath the surface.

Description of Receptors (Human and Ecological):

MC: Future Construction Workers. No ecological receptors.

Reference (Section, Page #):

GENERAL - RACR Executive Summary, LOCATION - Section 2.1, POC - Section 1.3, CONTRACTOR - 1.0

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.

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.

Contaminant		Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)	No Dat
CHF > 100		H (High)	\Box [Maximum Concentration of	Contaminant1
100 > CHF > 2		M (Medium)	$CHF = \sum_{\text{[Maximum Concentration of]}} [Maximum Concentration of]} [Comparison Value for Con$	
2 > CHF		L (Low)		tammantj
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		Н
Potential	could	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.		М
Confined	grou	mation indicates a low potential for contaminant migration from the source via the ndwater to a potential point of exposure (possibly due to geological structures or physical rols).		L
Migratory Pathway Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA
		Receptor Fac	tor	
dentified	curre	e is a threatened water supply well downgrace ent source of drinking water or source of wate tion/agriculture (equivalent to Class I or IIA a	r for other beneficial uses such as	Н
Potential	curre	e is no threatened water supply well downgradient of the source and the groundwater is ntly or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, r IIB aquifer).		М
Limited	grou	e is no potentially threatened water supply well downgradient of the source and the L 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 (maximum value = H).	NA
	motivo	Modulo Dotingo	Prioritization No Longer Req	uired
Alte	mative	Module Ratings	No Known or Suspected Haz	zard

Rationale for Selection of RF:

Sample comments:

Groundwater is not a medium of concern at this MRS.

Contaminant		Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)	No D
CHF > 100		H (High)	CHF =[Maximum Concentration of	Contaminant]
100 > CHF > 2		M (Medium)	CHF =[Comparison Value for Con	taminant]
2 > CHF		L (Low)		-
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		Н
Potential	could		amination 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		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	single highest value from above in the box to	the right (maximum value = H).	NA
		Receptor Fac		
Identified	lden mov	•	ter to whick contamination has moved or can	Н
Potential	Pote mov	•	water to whick contamination has moved or can	М
Limited		e or no potential for receptors to have access ed or can move.	to surface water to whick contamination has	L
Receptor Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA
			Prioritization No Longer Rec	uired
Alte	rnative	Module Ratings	No Known or Suspected Ha	zord

Sample comments:

Surface water is not a medium of concern at this MRS.

		Table 2	3	
нн	E Mod	ule: Sediment - Human Endp	ooint Data Element Worksheet	
Contaminant		Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)	No Da
CHF > 100		H (High)	$CHF = \sum [Maximum Concentration of]$	Contaminant]
100 > CHF > 2		M (Medium)	CHF = [Comparison Value for Cor	
2 > CHF		L (Low)		
CHF Value			CHF VALUE	NA
		Migratory Pathway	<u>/ Factor</u>	
Evident		ytical data or observable evidence indicates the noving toward, or has moved to a point of expo	•	Н
Potential	mov	ontamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could ove but is not moving appreciably, or information is not sufficient to make a determination of vident or Confined.		М
Confined		mation indicates a low potential for contamina potential point of exposure (possibly due to ge	ant migration from the source via the sediment eological 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>	
dentified	Iden	tified receptors to have access to sediment to	which contamination has moved or can move.	Н
Potential	Pote mov	ntial for receptors to have access to sedimen e	t to which contamination has moved or can	М
Limited		Little or no potential for receptors to have access to sediment to which contamination has moved L or can move		L
Receptor Factor	The	single highest value from above in the box to	the right (maximum value = H).	NA
Alto	rnativo	Module Ratings	Prioritization No Longer Rec	quired
Alle	mative	inourie ratiliys	No Known or Suspected Ha	zard
Rationale for Selection of M				

Sample comments:

Sediment is not a medium of concern at this MRS.

		Table 2	24				
НН	E Module	e: Surface Water - Ecolog	gical Data Element Worksheet				
Contaminant		timum Concentration (ug/L)	Comparison Value (ug/L)	Ratios			
CHF Scale		F Value	Contamination Hazard Factor (CHF)	No Data			
CHF > 100 100 > CHF > 2		H (High)	CHF = [Maximum Concentration of	Contaminantl			
		M (Medium)	CHF = [Comparison Value for Con	taminantl			
2 > CHF		L (Low)		-			
CHF Value			CHF VALUE	NA			
		Migratory Pathwa	ay Factor				
Evident		Analytical data or observable evidence indicates that contamination in the surface water is H present at, moving toward, or has moved to a point of exposure.					
Potential	could mov	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		Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).					
Migratory Pathway Factor	The single	The single highest value from above in the box to the right (maximum value = H).					
		Receptor Fa	ctor				
dentified	Identified move.	Identified receptors have access to surface water to which contamination has moved or can H move.					
Potential	Potential f move.	Potential for receptors to have access to surface water to which contamination has moved or can M move.					
Limited		ittle or no potential for receptors to have access to surface water to which contamination has noved or can move.					
Receptor Factor	The single	he single highest value from above in the box to the right (maximum value = H).					
		ula Datinara	Prioritization No Longer Rec	quired			
Alternative Module Ratings		No Known or Suspected Ha	zard				
Rationale for Selection of MF	PF:						

Rationale for Selection of RF:

Sample comments:

Surface water is not a medium of concern at this MRS.

		Table 2	25				
HHE	Modul	e: Sediment - Ecological En	dpoint Data Element Workshee	et			
			-				
Contaminant		Maximum Concentration (mg/kg)		Ratios			
CHF Scale		CHF Value	Contamination Hazard Factor (CHF)				
CHF > 100 100 > CHF > 2 2 > CHF CHF Value		H (High)	$CHF = \sum [Maximum Concentration of]$	f Contaminant] ntaminant]			
		M (Medium) L (Low)	[Comparison Value for Cor				
			CHF VALUE	NA			
		Migratory Pathwa					
Evident			hat contamination in the sediment is present	Н			
Potential	mov	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	The single highest value from above in the box to the right (maximum value = H).					
		Receptor Fac		Н			
Identified	Iden	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		ttle or no potential for receptors to have access to sediment to which contamination has moved can move.					
Receptor Factor	The	The single highest value from above in the box to the right (maximum value = H).					
٨١٢٥	rnativo	Module Ratings	Prioritization No Longer Re	quired			
Alternative Module Ratings			No Known or Suspected Hazard				
Rationale for Selection of M	PF:						
Rationale for Selection of R	F						

Sample comments:

Sediment is not a medium of concern at this MRS.

	Ŧ					
	lä	able 26				
	HHE Module: Soil	l - Data Element Worksheet				
Contominant	Maximum Canaantustia		Ratios			
Contaminant		n (mg/kg) Comparison Value (mg/kg)				
CHF Scale	CHF Value	Contamination Hazard Factor (CH				
CHF > 100			7			
100 > CHF > 2	M (Medium)	M (Medium) $CHF = \sum_{i=1}^{N} Minimum Concentration C$				
2 > CHF	L (Low)	[Comparison Value for Co	ontaminant]			
CHF Value		CHF VALU				
	Migrator	ry Pathway Factor				
Evident						
Potential	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		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	The single highest value from above in the box to the right (maximum value = H).				
	Rec	ceptor Factor				
Identified	Identified receptors to have access to	Н				
Potential	Potential for receptors to have acces	Potential for receptors to have access to soil to which contamination has moved or can move.				
Limited	Little or no potential for receptors to h can move.	Little or no potential for receptors to have access to soil to which contamination has moved or can move.				
Receptor Factor	The single highest value from above	ne single highest value from above in the box to the right (maximum value = H).				
		Prioritization No Longer Re	equired			
Alter	native Module Ratings	No Known or Suspected H	azard			
Rationale for Selection of MI	DE-					

Rationale for Selection of RF:

Sample comments:

During the CSE Phase II, 66 surface soil samples were collected and analyzed for lead by XRF. All surface soil sample concentrations were below the human health screening criteria. During the implementation of the remedy, soils were excavated until confirmation samples demonstrated that the RAO was achieved at all locations.

Reference (Section, Page #):

RACR Section 1.2.2 / RACR Section 4

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	C				
HML	_				
ммм	D				
HLL	E				
MML					
MLL	F				
LLL	G				
	Prioritization No Longer Required				
Alternative Module Ratings	No Known or Suspected MC Hazard				
	Evaluation Pending				
HHE Module Ratings	N/A				

Table 28MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority	
		А	1			
A	2	В	2	A	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		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or S	uspected Hazard	No Known or Suspected Hazard		No Known or Suspected Hazard		
Evaluation Pending		Evaluation Pending		Evaluation Pending		
MRS Priority				n No Longer uired		