TABLES

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Squad Attack Range, Rifle Squad Tactical Range, Trainfire II Range Complex	Area of Range 23 appears to have been used for training since at least 1945 and as a range from at least the mid 1950s. Use of the range appears to have changed some over time, starting as a Trainfire Range Complex, becoming a Rifle Squad Tactical Range in 1965.	Small arms ammunition
NA	AR Table VIII Range	The range was labeled as AR Table VIII on the 1957 and 1958 training maps, AR VII on the 1961 training map and as Range 21 AR on the 1964 training map and the 1965 photo mosaic. Information from Range Control files indicates that Range 24 was constructed at this location in 1966 and was modified in 1975 and 1991. Prior to 1966 AR Table VIII is present in about the same location as the present Range 24. The area further inland from the current range fan appears to have been used as squad problems ranges in the 1940s based on the 1945 training map and 1940s aerial photographs.	Small arms ammunition
NA	Offensive Overhead Firing Course, Table VII Range, Table VIII Range, Range 41	Ranges within the area of Range 25 are shown on maps dating back to 1956. Review of Range control files indicates the range converted from an inactive pistol range to an overhead offensive firing course in 1975. The range was deactivated in 1976 upon close of Basic Combat Training. The range was re-activated in 1981 and used through 1989. Review of aerial photographs from 1966 and 1969 indicates that the berm may have been added to the range between 1966 and 1969. Review of maps indicated that when the Table Ranges were active in the 1950s and 1960s fire was more toward the west.	Small arms ammunition

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Machine Gun Transition, Machine Gun Field Fire, Machine gun, Table II	The range appears to have been used primarily for machine gun fire since the mid 1950s. Information from the range control files indicates that the range was wired for M-30 Target Devices in 1966 and that in November 1973 the range was modified from a Machine Gun Range to a Dry Fire and Movement Course used in conjunction with Range 27. In February 1975 it was reactivated as a Machine Gun Range. In 1991 the range was modified for SAW firing.	.30 Cal. Small Arms Ammunition
NA	Wild Cat Ridge Day/Night Combat Course	Area around Range 32 appears to have been used for training exercises from as early as the 1940s to the late 1980s. Use ranged from a submachine gun training area in the 1940s, to unspecified training area in the 1950s.	Small arms ammunition
NA	Close Combat Course	Range has been in use since 1950s. Records indicate it was used as a Close Combat Course from the late 1950s through late 1960s.	Small arms ammunition
NA	Grenade Assault Course	The Hand Grenade Assault Course is identified on the circa 1953 map and later era maps.	Hand Grenades, hand grenade fuzes
NA	Hand Grenade Range (HE)	Identified on training maps from after 1953 through 1958.	High explosive hand grenades and hand grenade fuzes
NA	Hand Grenade Training Area	This area is identified on training maps from the circa 1953 map through 1958. This area appears to fall within the footprint of the current MOUT training area.	Hand Grenades, hand grenade fuzes
NA	Rifle	This area is identified on training maps from the circa 1953 map until 1957. This area may fall within the northern portion of the current MOUT training area.	Unknown

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Rifle Grenade Range	According to range control records and historical training maps this range was used as a rifle grenade range. The range is indicated as rifle grenade range on the circa 1953 training map. Direction of fire on the circa 1953 map is toward the south.	Rifle-fired grenades
NA	Rifle Grenade Range	The firing point for this range is in the same general area as the firing point for Range 37, but the direction of fire is toward the southeast. This range is shown on training maps from 1956 through 1958.	Rifle-fired grenades
NA	Infiltration Course	This range appears to have been used as an infiltration course from as early as the mid 1940s through some of the 1960s. Range control records indicate that the Infiltration course was used from 1951 through 1973.	Small arms ammunition
NA	Rocket Launcher Range	This range is identified on training maps from circa 1953 through 1958.	3.5-inch Rockets
NA	Mortar Range #3 (60mm)	Appears this area of the inland ranges has been used since at least the 1940s. Use has changed from a close combat course in the 1940s and early 1950s to a mortar range in the late 1950s through present.	Mortars
NA	Bazooka Demonstration	Identified as "Bazooka Demonstration" on 1945 and 1946 training maps. Not identified on the after-1953 or later maps.	2.36-inch Rockets
NA	Field Firing Range 2	Appears this area of the inland ranges has been used since at least the mid 1940s. The area was used as a mortar firing range through the 1980s and possibly as early as the 1950s.	
NA	1000"	This range was identified as 1000" on training maps from 1957 through 1958.	Practice mortars?
NA	Field Firing Range 1	Identified as a Field Firing Range from after 1953 through 1958.	

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Mortar Range, Mortar Range No. 1	Range location is shown on training maps from 1945 through base closure. Initially identified as a mortar range in 1958 use included 57mm recoilless rifles.	60mm and 81mm mortars and 57 recoilless rifles
NA	MG 30 cal	Range location is shown on 1945 and 1946 training maps. Length of time range was in use is unknown.	.30 Cal. Small arms ammunition
NA	Booby Traps	Range location is shown on 1945 and 1946 training maps. Length of time range was in use is unknown.	Firing Devices, standard coupling bases, practice mines
NA	30 cal AA Practice	Range location is shown on 1945 and 1946 training maps. Length of time range was in use is unknown.	.30 Cal. Small arms ammunition
NA	Dummy Grenade	Range location is shown on 1945 and 1946 training maps. Length of time range was in use is unknown.	Training grenades
NA	Live Hand Grenade	Range location is shown on 1945 and 1946 training maps. Length of time range was in use is unknown.	High explosive hand grenades and hand grenade fuzes
NA	Mortar Range No. 2	Range location is shown on the circa 1953 and 1956 training maps. Length of time range was in use is unknown. Range is not shown on the 1958 training areas and facilities map.	60mm and 81mm mortars
NA	Carbine Transition Course (North)	Range location is shown on 1945 and 1946 training maps. Length of time range was in use is unknown.	Small arms ammunition
NA	Carbine Transition Course (South), Rocket Launcher Range	Range location is shown on 1945 and 1946 training maps. Rocket Launcher Range (Moving target) appears in approximately the same location on the circa 1953 map only. Length of time range was in use is unknown.	Small arms ammunition; 2.36-inch and 3.5-inch rockets

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Rifle Transition Course (North), Combat in Cities No .1	Range location is shown on 1945 and 1953 training maps. Area that was used as combat in cities is shown as only a portion of the range. Length of time range was in use is not known.	Small arms ammunition
NA	Rifle Transition Course (South), Combat in Cities No. 1	Range location is shown on 1945 and 1953 training maps. Area that was used as combat in cities is shown as only a portion of the range. Length of time range was in use is not known.	Small arms ammunition
NA	Close Combat Course No. 1	Range location is shown after 1953 training map. Range is evident on 1965 air photo mosaic. Length of time range was in use is not known.	Small arms ammunition
NA	Combat In Cities	Range location is shown on the circa 1953 training map only. Length of time range was in use is not known.	Small arms ammunition; possibly practice hand grenades, flares, pyrotechnics, and possibly other caliber
NA	Weapons Demonstration Range	Range location is shown on the 1961 and 1964 training maps. Appears to be located just to the northeast of range MG Table 2. This range is labeled as "Range 37" on the 1964 map.	.30 Cal. Small arms ammunition
NA	MG Table 2	Range location is shown on the circa 1953 and 1956 training maps. Location appears to be to the south of the Weapons Demonstration Area.	.30 Cal. Small arms ammunition
NA	M-1 Table IX	Range is shown on 1956 Range Construction Priority Map. It is not known if this range was ever constructed. Range is located closer to North South Road than later ranges. This range was not present on 1961 and later training maps.	Name implies small arms ammunition only
NA	Squad Problems Range (North)	Range location is shown on 1945 and 1946 training maps. Range use not known.	Possibly small arms ammunition, pyrotechnics

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Squad Problems Range (South)	Range location is shown on 1945 and 1946 training maps. Range use not known.	Possibly small arms ammunition, pyrotechnics
NA	A. R. Table VIII Range	Range location is shown on after 1953 training map and the 1956 training map. Range was located in the area of Range 25.	.30 Cal. Small arms ammunition; possibly other caliber small arms ammunition
NA	AR Table VIII Range	Range location is shown on after 1953 training map and the 1956 training map. Range was located in the area of Range 25.	.30 Cal. Small arms ammunition; possibly other caliber small arms ammunition
NA	Machine Gun Transition	Range location is shown on 1945 training map. Identified as "MG Familiarization Range" on the circa 1953 map. Range not shown on later maps.	.30 Cal. Small arms ammunition
NA	Rifle Night Firing; Small Arms Firing Course	Range is shown on after 1953 and 1956 training maps. Length of time range was in use in not known.	Small arms ammunition. Also may have involved pyrotechnics in support of the use of the range at night.
NA	Austin Anti-Tank	Identified as "Austin Anti-Tank" on 1945 and 1946 training maps. Not identified on the after-1953 or later maps.	2.36-inch Rockets and 3.5-inch Rockets
NA	Wild Cat Ridge Training Area	Range is shown on the circa 1953 training map and the 1958 training map. Range is located near present Range 32. Type of training completed in the 1950s is not documented.	Unknown

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Sub Mach Gun DSMTD	Range is only shown on the July 1956 Training Map. The use of the range is unknown, but based on the title of the range it may have been used for small arms.	Small arms ammunition
NA	Barloy Canyon Sub MG Range	Range is only shown on the Revised 1945 Training Map. Range is in area of Wildcat Ridge Training Area and later Range 32. See Range 32 above for additional information.	Small arms ammunition
NA	Small Arms Firing Course	Range only shown on the circa 1953 and 1958 Training Maps. Course is not shown on any other reviewed training maps. Initial visit by HLA in March 1999 indicated small arms use in the area.	Small arms ammunition
NA	Impossible Ridge Training Area	Area appears to have been used for training in the 1950s and early 1960s. The type of training done at the site is not documented.	Small arms ammunition
NA	Grant Close Combat Course	Range was labeled for Close Combat in the 1940s. It is not known whether small arms were used at this range in the 1940s. Range location is shown in the 1945 training map. The circa 1953 training map shows the range area named Grant training area. After the 1940s, the range area was used as a mortar range. The 1958 training areas and facilities map labeled the area as Grant.	Small arms ammunition; possibly smoke producing items
NA	Infiltration Course, Huffman Infiltration Course	Range was labeled as an Infiltration Course in the 1940s and 1950s. Appears it was also used as an infiltration course more recently as Range 40.	Small arms ammunition; possibly smoke producing items
NA	Bazooka Demonstration	Range location is shown on 1945 training map. Length of time the area was in use is unknown, but does not appear on the circa 1953 training map.	2.36-inch and 3.5-inch rockets

Table 3.1. Early Ranges (1940s and 1950s) Present in the Impact Area
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Potentially Used
NA	Mock Up Village, Combat in Cities	Range was labeled as Mock up Village in 1940s. Mock up Village is labeled on 1947 7.5 min quadrangle photo map of Seaside. In the 1950s the area is labeled as Combat in Cities. This area was investigated as part of HA-35A. See reconnaissance results.	Small arms ammunition?, smoke producing hand grenades
NA	Company Problems	Area was labeled as company problems on a 1945 training map. It is not known how long the area was used for company problems training. Ranges 43, 44, and 45 are currently located in this area.	Unknown
MRS-35	Former Range Control	The FRC was formerly used as Camp Huffman and currently serves as a BLM facility on the site. The ASR notes that UXB conducted sampling and found 508 live small arms and 2 MEC items. CMS performed military munitions surface removal from January to June 1998. No UXO was encountered, but one 3.5-inch practice rocket (munitions debris) was found. A reconnaissance of this area was conducted in July 1999. No evidence of a range was identified.	Possibly small arms ammunition, based on items found
NA	Artillery Firing Points	Firing into the Impact Area occurred from approximately three points to the north and northeast of the Impact Area. Dates of actual use unknown.	105mm, 155mm, and 8-inch projectiles

FRC = Former Range Control
UXB = UXB International, Inc.

Checked BPF Approved BLW

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
18	Record Firing Range, BRM Record	Range 18 is shown on maps dating back to 1961 and is present on the 1960 photo mosaic. The range fans do not appear to have changed since 1960 and the range is labeled as Range 18 from 1960. Use of the range is documented as Record Range from 1973 to present. Maps from 1945 do show a practice 30 cal AA, Dummy Grenade and 30 cal Machine Gun range in southern (Inland from current position) portion of the range. Evidence of these ranges is present on the 1947, 1949, and 1951 aerial photograph, and the 1960 and 1965 aerial photo mosaics.	Small arms ammunition (5.56mm, 7.62mm)
19	Record Firing Range, BRM Record	Range 19 is shown on maps dating back to 1956. It is labeled as Range 19 since 1961. The range fan has changed shape slightly in some years, but location has remained consistent. Use of the range is documented as a Record Firing Range from 1973 to present. Review of 1960 and 1965 Air Photo Mosaics shows similar vegetation pattern as is seen today. Appears some type of training, possibly small arms took place in the area of Range 19 in the 1940s and possibly early 1950s based on review of aerial photographs. The type of activities performed in the area during the 1940s and 1950s are not known.	Small arms ammunition (5.56mm, 7.62mm)
20	Unknown, Available	No evidence was found in the SOPs or other written records that Range 20 was ever used for firing. Historical evidence of use in the area is present on Aerial photographs from the 1960s. The range is also shown on the 1968 and 1971 training maps. It is listed as available on a 1967 Training Map.	Not documented

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
21	10m Machine Gun/25m Rifle Range	The range is not present on maps or air photos dated before 1968. Evidence of previous ranges is not seen on 1965 air photo mosaic. The use of the range appears to have been consistent. The 1973 SOP indicates it was a 10M Machine Gun Range, later a 25m Zero range was added (1980 through 1993).	Small arms ammunition (5.56mm, 7.62mm, 38 and 45 Cal Pistol, M60 MG)
22	0.50 cal Machine Gun Range	The range is not present on maps or air photos dated before 1984. Evidence of previous ranges is not seen on 1965 air photo mosaic. The use of the range appears to have been consistent.	Small arms ammunition (.50 cal, 5.56mm, 7.62mm)
23	Squad Attack Range, Rifle Squad Tactical Range, Trainfire II Range Complex	Area of Range 23 appears to have been used for training since at least 1945 and as a range from at least the mid 1950s. Use of the range appears to have changed some over time, starting as a Trainfire Range Complex, becoming a Rifle Squad Tactical Range in 1965. Because the range was used as a squad attack range, no fixed firing points are present. Movement down range was limited to 700 meters due to Range 19 and 25 safety fans.	Small arms ammunition (5.56mm, 7.62mm); 40mm practice (M781)
23M	Dragon Tracking Range (Nonfiring range)	Area identified in Site 39 Data Summary Report as a nonfiring range. Area was used for training area for laser-aimed Dragon anti-armor weapons. Although identified as non-firing, some Dragon rounds and 4.2-inch mortar fragments have been found on the range.	Infrared
24	Sniper Range, Table VII Range, Table VIII Range, AR Field Fire and Qualification	Information from Range Control files indicates that Range 24 was constructed in 1966 and was modified in 1975 and 1991. Prior to 1966 a Range is present in about the same location as the present Range 24. The range was labeled as Range 21 on the 1965 photo mosaic and as AR Table VII and AR Table VIII in 1950s maps. The area further inland from the current range fan appears to have been used as squad problems ranges in the 1940s based on the 1945 training map and 1940s aerial photographs.	Small arms ammunition (5.56mm, 7.62mm, M60 MG); 90mm Recoilless Rifle, Sub-Cal M72, 90mm Sub-Cal, 40mm Practice, LAW

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
25	Offensive Overhead Firing Course, Table VII Range, Table VIII Range, Range 41	Ranges within the area of Range 25 are shown on maps dating back to 1956. Review of Range control files indicates the range converted from an inactive pistol range to an overhead offensive firing course in 1975. The range was deactivated in 1976 upon close of Basic Combat Training. The range was re-activated in 1981 and used through 1989. Review of aerial photographs from 1966 and 1969 indicates that the berm may have been added to the range between 1966 and 1969. Review of maps indicated that when the Table Ranges were active in the 1950s and 1960s fire was more toward the west.	Small arms ammunition (7.62mm)
26	Machine Gun Transition, Machine Gun Field Fire, Machine Gun Table II	The firing point for this range is in the vicinity of the firing point for the "Austin Anti-Tank" range. Range 26H appears to have been used primarily for machine gun fire since the mid 1950s. Information from the range control files indicates that the range was wired for M-30 Target Devices in 1966 and that in November 1973 the range was modified from a Machine Gun Range to a Dry Fire and Movement Course used in conjunction with Range 27. In February 1975 it was reactivated as a Machine Gun Range. In 1991 the range was modified for SAW firing.	Small arms ammunition (5.56mm, 7.62mm)
27	Fire Movement Course, SAW Table I-IV, Close Combat Course	This range was constructed in 1967. It was placed on inactive status in 1975, reopened in 1984, operated until 1989, and was converted to SAW in 1990. In April 1973 the range operated as a Close Combat Course with targets about 50 to 250m. In 1992 targets were located at 100, 200, and 300m. A night firing course may have operated in this area in the 1950s.	Small arms ammunition (5.56mm, 7.62mm)
27A	10m Machine Gun/25m Rifle Range	This range was used from at least 1973 through 1991 as a 10m Machine Gun, 25m Zero range. Up to 70 firing points were used at this range. The range use appears to have been consistent over time.	Small arms ammunition (5.56mm, 7.62mm, M60, .38 and .45 Cal)

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
28	Technique of Fire Range, Rifle Squad Tactical Range, Automatic Rifle and Army Training and Evaluation Program (ARTEP) Range	This range was used from at least 1964 through early 1990s. The range was labeled as a Rifle Squad Tactical Range in 1964 and was labeled as Automatic Rifle and ARTEP Range (Def) in SOPs from 1973 through 1991. The area may have been used in the mid 1950s as indicated by presence of a Carbine Range shown on the 1956 training map. According to range control records the range was used for day and night time activities.	Small arms ammunition (5.56mm, 7.62mm) LAW subcaliber, 40mm practice, Demolition charge (.25 lb. max), possible pyrotechnics for illumination
29	Machine Gun Assault Range, Squad Night Assault, Squad Battle Drill and Assault Range, 10m Machine Gun, 25m Zero, M-3 Machine Gun	This range was used from at least 1961 through 1975 as a Machine Gun Assault Range. It was reactivated in 1984 and a portion of the range was set up for mortar firing. In 1991 the machine gun assault course was converted to a 10m/25m range.	Small arms ammunition (5.56mm, 7.62mm, .38 and .45 Cal), Mortars (60mm, 81mm and 4.2-inch), 40mm practice, possible pyrotechnics for illumination
30/30A	Rifle Squad Tactical Ranges, Technique of Fire Ranges, Squad Defense ARTEP, Military Operations in Built-up Areas (MOBA)	This range was constructed in 1964 and used for BCT training until 1975. The range was reactivated in 1983 and deactivated in 1989. The range was listed as a Technique of Fire Range on the 1973 SOP, as a MOBA range in 1982 with blank ammo only, and as a Squad Defense ARTEP range in 1984. The range was not listed in the 1991 and 1992 SOPs. The area may have been used as a range in the 1950s based on the 1956 training map that shows a Submachine gun range in the area.	Small arms ammunition (5.56mm, 7.62mm and blanks), 40mm practice and high explosive

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
31	Platoon Attack Course, Demolition Range	This range is present on maps as far back as 1964. In 1973 the SOP indicated that the range was a Demolition Range for the 49th OD (EOD). Range control records indicate the Platoon Attack Range was constructed in 1974 or 1975, SOPs indicate Range was used as a Platoon Attack Course from at least 1980 to 1993.	Small arms ammunition (5.56mm, 7.62mm), Subcaliber LAW, 40mm practice, 90mm Subcaliber recoilless rifle, demolitions (25 lbs. max)
NA	STT Range 23	This range is present on the 1964 Training map.	Unknown
32	Wild Cat Ridge Day/Night Combat Course, Attack Helicopter and UH-1 Door Gunnery, Live Fire Exercise, Day/Night Combat	Area around Range 32 appears to have been used for training exercises from as early as the 1940s to the late 1980s. Use ranged from a submachine gun training area in the 1940s, to unspecified training area in the 1950s, as inactive through most of the 1970s, and as a helicopter attack range in the 1980s. Site visit indicated several areas around Wildcat ridge and Wildcat Canyon that may have been used for small arms training; however, concentrations of spent ammunition were not evident.	Small arms ammunition (5.56mm, 7.62mm, M60), 20mm, 40mm practice, possible pyrotechnics for illumination
33	Demolitions Range	This range was investigated as part of the Basewide Remedial Investigation/Feasibility Study.	25 lb max., no electrical blasting caps
34	Machine Gun Assault Range, Close Combat Course, Mortar Range	Area appears to have been used for training since the 1950s. Records indicate it was used as a Close Combat Course from the late 1950s through late 1960s. SOP from 1973 indicates it was a Machine Gun Assault Course. By 1980 the range was used as a mortar range to support Range 31. SOP from 6/91 indicates that the range was inactive. An initial visit to the site indicates that there are areas with greater than 10 percent spent ammunition.	Small arms ammunition (5.56mm, 7.62mm, M60), Mortars (81mm and 4.2-inch), 40mm practice

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
35A	Combat Pistol Range,	Range was in use as a combat pistol range from at least 1975. EOD clearance records from 1975 reference Range 35A. SOP information from September 1980 through October 1992 indicate that the range had 6 firing lanes and was authorized for 38 and 45 cal Pistol fire. Range is currently active.	Small arms ammunition (.38 and .45 Caliber)
35	Mout Complex, Quick Kill	This area is part of MRS-28.	Small arms ammunition (5.56mm, .38 and .45 Caliber, 12 Gauge riot gun), Fragmentation Hand Grenade, 40mm practice
36A	EOD	Demolitions	C4 and TNT 25 pound maximum charge
36	Fragmentation Hand Grenade, Hand Grenade Demolitions	Range was used as a hand grenade range from at least 1966 to 1993. SOPs from 1973 through 1992 indicate that the range was a hand grenade range or hand grenade demolitions.	Hand grenades, Claymore mines, C4 and TNT .25 lb.
37	25m Night Record Fire, Quick Kill and Night Fire	The range was labeled as a night firing range on 1961 maps. SOPs from 1973 to 1992 indicate the range was a 25 and 50 m range for night firing. The firing line was 185 meters with up to 60 firing points. Historical training maps indicate that this area was used as a bazooka range and possibly as a rifle grenade range in the late 1950s.	Small arms ammunition (5.56mm, 7.62mm), possible pyrotechnics for illumination

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
38	Zero Range, 25 M-2 Submachine Gun Shotgun	Range labeled as a rifle grenade range on training maps dated 1968 through 1984. May also have been present in the 1950s and 1960s but location is difficult to evaluate from the existing training maps. SOPs from 1973 through 1992 indicate this was used for machine gun, rifle, and pistol firing.	Small arms ammunition (5.56mm, 7.62mm, 12 gauge, .38 and .45 Caliber)
39	Bench Rest Rifle Range	This range was used for small arms from at least 1973 through 1993. The range is also shown on the 1968 training map and is in the area of Range 30 shown on the 1964 training map. The 1973 SOP states that the range was operated by the Rod and Gun Club. The range was still operated by the Rod and Gun Club in 1980. The range had 10 firing points. Review of historical maps indicates that ranges were not present in this location in the mid 1940s and late 1950s.	Small arms ammunition (Shotgun, Rifle, .38 and .45 caliber pistols)
40	Infiltration Course, 10-m and 25m Machine gun and rifle	This range appears to have been used as an infiltration course from as early as the mid 1940s through some of the 1960s. Range control records indicate that the Infiltration course was used from 1951 through 1973. Training Maps from 1977 indicate that the range was a CID Pistol Range. The SOPs indicate that the range was inactive in 1980 and that it was a 10M .50 caliber M2 Combat Pistol range in 1982 and 1984. .38, .45, and .50 caliber ammunition was authorized at that time. The 1991 SOP indicates that the range was an infiltration course. In 1992 the range was listed as a 10m MG, 25m Zero range with 5.56mm and 7.62mm ammunition authorized.	Small arms ammunition (5.56mm, 7.62mm, .38, .45 and .50 caliber)

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
41	Mortar Complex, Sub-Caliber Moving Target/Mortar	Appears this area of the inland ranges has been used since at least the 1940s. Use has changed from a close combat course in the 1940s and early 1950s to a mortar range in the late 1950s through present. Some spent small arms ammunition may be present at this range; however it does not appear that the range was used for small arms training in the more recent (1960s through 1990s) past. Two soil borings were sampled for explosives as part of the BW RI/FS. No explosives were detected.	Small arms ammunition (.30 and .50 caliber), 60mm, 81mm, 4.2-inch mortars, M60 and M72 90mm subcaliber recoilless rifles, 106mm subcaliber recoilless rifle, 14.5 (direct fire)
42	Mortar Range (Long Range), Mortar Complex	Appears this area has been used since at least the mid 1940s. The area was used as a mortar firing range from at least 1973 to 1993. Use prior to 1973 is not documented, but it appears based on review of maps that it may have been used for mortar fire as early as the 1950s. It is not known if small arms were used in the 1940s as part of the Grant training area.	60mm, 81mm, 4.2-inch mortars (including illumination)
43	Platoon Size Live Fire Course, Mortar Range	Appears this area of the inland ranges has been used since at least the mid 1940s. The area was used as a mortar firing range through the 1980s and possibly as early as the 1950s. The Platoon-Size Live Fire Course was constructed in 1991 and was used until 1993. Review of the SOPs from 1991 and 1992 indicate that small arms were used on this range at that time.	Small arms ammunition (5.56mm, 7.62mm), 60mm, 81mm, 4.2 mortars, AT-4 recoilless rifle, LAW rockets, 40mm grenades, fragmentation hand grenade, .25 lb demolitions

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
44	Antitank Weapons Range (Recoilless Rifle Rocket Launcher, Dragon Missile Rocket Launcher)	Range was used as an Antitank Range from at least 1973 through 1993. It is not known if small arms were used at this range in the past.	90mm recoilless rifles, 106mm subcaliber recoilless rifles, AT-4 recoilless rifles, rocket launchers (M72 LAW subcaliber devices, LAW 66mm HE, M202 Flash) and Dragon missile launcher
44A	Recoilless Rifle Rocket Launcher	From April 13, 1982 range SOP	90mm recoilless rifle, M72 LAW HE, 106 subcaliber
45	Grenade Launcher Range	Range was use as a grenade launcher range from at least the early 1970s until 1993. It is not known if small arms were used at this range in the past.	40mm practice and HE, 14.5 subcaliber, M202 rocket launcher (Flash), Claymore mine
45A	SABOT/14.5 Subcaliber	From April 13, 1982 range SOP	14.5 Subcaliber
46	Pistol Range, MP/CID Qualification Course, Night Record Fire, 10m MG	Range appears to have been used from the early 1960s, possibly as early as 1958 for night firing, pistol firing, and other small arms firing. Range control records indicate the range was used for CID/MP qualification for much of its history. Range 47 was located down range from Range 46 and was used as a grenade launching range.	Small arms ammunition (5.56mm and 7.62mm, and 9mm, .38 and.45 caliber pistol)
47	M79 Grenade Launcher	Range was abandoned in 1970. No SOP information is available. Not known if small arms were used in this area. No explosive compounds were detected in the soil sample.	Not documented

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
48	Mortar Range, Mortar Range No. 1, Machine Gun/Claymore, 14.5mm Artillery and Mortar Subcaliber Range, Light Antitank Weapons Range, Sniper Training, Weapons Familiarization	Range used as mortar range from at least the mid 1940s. Small arms have also been used at this range. The range has been used for Sniper training. Review of range control files, historical training maps, and SOP information indicates that small arms use was probably limited at this range.	Small arms ammunition (5.56mm and 7.62mm, .50 caliber spotter, and .50 caliber machine gun), 90mm recoilless rifle, 106mm recoilless rifle subcaliber, AT-4 recoilless rifle, 14.5 subcaliber, Claymore mines, rocket launchers (M72 LAW, and M202 [Flash]) and M47 Dragon missile launcher
NA	Close Combat Course No. 1	Range location is shown after 1953 training map. Range is evident on 1965 air photo mosaic. Length of time range was in use is not known.	Not documented
NA	Weapons Demonstration Range	Range location is shown on the 1961 and 1964 training maps. Appears to be located just to the northeast of range MG Table 2. This range is labeled as "Range 37" on the 1964 map.	.30 Cal. Small arms ammunition?
NA	A. R. Table VII Range, A. R. Table VIII Range	Ranges were located in area of Range 25.	
NA	Impossible Ridge Training Area	Area appears to have been used for training in the 1950s and early 1960s. The type of training done at the site is not documented.	Not documented

Table 3.2. Ranges Present Within the Impact Area from 1961 Through Base Closure
Track 3 Impact Area MRA RI/FS
Former Fort Ord, California

Range/Site Number	Range/Site Name(s)	Comments	Munitions Authorized For Use
OE-35	Former Range Control	The FRC was formerly used as Camp Huffman and currently serves as a BLM facility on the site. The ASR notes that UXB conducted sampling and found 508 live small arms and 2 MEC items. CMS performed a surface removal for MEC from January to June 1998. No MEC was encountered, but one 3.5-inch practice rocket (munitions debris) was found. A reconnaissance of this area was conducted in July 1999. No evidence of a range was identified.	Literature review and limited reconnaissance conducted.
NA	Artillery Firing Points	Firing into the Impact Area occurred from approximately three points to the north and northeast of the Impact Area. Dates of actual use unknown.	105mm, 155mm, and 8-inch projectiles

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Table 3.3
Number of MEC and Munitions Debris Removed During Impact Area Investigations
Track 3 Impact Area MRA
RI/FS
Former Fort Ord, California

Investigation/Removal Action	Number of Acres Investigated	Number of MEC removed	Number of Munitions Debris Removed	Pounds of Munitions Debris Removed	Comments/Source
Grid Sampling - MRS-15B/MSRS-15A	9.5	162	3,063	NA	
Impact Area Roads and Trails	47.72	341	181	1474	OE Removal AAR, USA environmental 2001
Fuel-Break Clearance	253	395	1835	50688	Reestablishment of Impact Area Fuel Breaks, Phases 1, 2, and 3 AAR, Parsons, 2005
MRS-15 Mortar Alley TCRA	26	7	432	340	TIP Surface Removal OE-15 Mortar Alley, Parsons 2002
MRS-15 Range 30A TCRA	391*	192	60	7252	TIP Surface Removal OE-15 Range 30A, Parsons 2002
MRS-Ranges 43-48 TCRA	555**	2325	132	36373	TIP Surface Removal OE Site Ranges 43-48
MRS-Ranges 43-48 Interim Action	499***	9,690	19,689	407,296	TIP MRS-Ranges 43-48 Interim Action, Draft
Watkins Gate Burn Area	1000	499	36	68590	TIP WGBA, Parsons 2004
Eucalyptus Fire Area	637	114	NA	25000	AAR MMR Eucalyptus Fire Area, SHAW 2005
Ordnance Detection and Discrimination Study					

* Only 1% of the site area was accessible for OE surveying.
** Only 35% of the site area was accessible for OE surveying.
*** Surface removal conducted over 499 acres, removal to depth completed over 286 acres.

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Table 3.4. MEC and Munitions Debris Quantities Removed During Ranges 43 through 48 Interim Action Track 3 Impact Area MRA RI/FS Former Fort Ord, California

Action	Quantity of MEC Removed	Quantity of Expended Munitions Debris Removed	Pounds of Munitions Debris Removed
Visual Surface Sweep	4,563	NA	49,084
Target Removal	346	NA	NA
Analog Removal	3,242	15,921	181,688
Digital Geophysics Removal	409	NA	34,711
Range 45 Sifting	1,086	3,432	139,259*
Range 45 Analog	44	336	2,554
Total	9,690	19,689	407,296

* Includes range related debris

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Table 4.1 Description of Receptors Evaluated in the Track 3 Impact Area MRA RI/FS

Receptor	Description	Level of Intrusion	Frequency of Entry	Intensity of Contact with Soil
Trespassers (Maximum 2-foot intrusion depth)	If a trespasser were to gain access to the site he would likely be able to remain in the area for an extended period as the area would not be well traveled by workers and visitors.	A trespasser is expected to intrude to a depth of 2 feet below the surface.	A trespasser is expected to occasionally enter the area.	A habitat trespasser is expected to spend less than 6 hours per day in contact with the soil in the area.
Surface Only Receptors	Surface only receptors include habitat monitors that may conduct plat counts or monitor animal species, habitat workers conducting invasive weed control through spraying, and escorted visitors that may be hiking or viewing wildlife.	Surface only receptors are not expected to intrude below the surface.	Surface only receptors are expected to frequently enter the area.	Surface only receptors are expected to spend up to 8 hours per day in contact with the soil in the area.
Shallow Intruding Receptor (Maximum 1 foot intrusion depth)	A shallow intruding receptor would include firefighters implementing prescribed burning; habitat monitors installing stakes for transect monitoring and recreational bikers and equestrian users.	A shallow intruding receptor is expected to intrude to a maximum depth of 1 foot.	A shallow intruding receptor is expected to frequently enter the area.	An intruding receptor is expected to spend between 3 and 8 hours per day in contact with the soil.
Deeper Intruding Receptor (Maximum 3 foot intrusion depth)	Deeper intruding receptors would include habitat workers and firefighters. Activities may include planting of seedlings, weed control, trail construction and maintenance, creating fuel breaks and responding to wildfires. Use of heavy equipment to restore areas of habitat that are currently impacted (roads, gullies, and rills) may also occur.	An intruding receptor is expected to intrude to a depth of 3 feet below the surface.	A deeper intruding receptor is expected to frequently enter the area.	A deeper intruding receptor is expected to spend up to 8 hours per day in contact with the soil in the area.
Construction Worker (Maximum 5-foot intrusion depth)	Construction workers would perform activities associated with construction of parking areas and restrooms, and preparation of interpretive displays. They may also be involved in the construction of new roads within the impact area. The construction worker is a likely receptor during the initial development of the area. Following the initial development, construction is not expected to be as intensive.	A construction worker is expected to intrude below the surface up to a depth of 5 feet.	A construction worker is expected to frequently enter the area.	A construction worker is expected to spend 8 hours per day in contact with the soil in the area.

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Table 4.2 Depth Below Ground Surface	
Score	**Description (a)(b)(c)(d)**
1	100% of detected MEC was removed considering the data quality for the site.
2	MEC > 5 feet bgs
3	MEC ≥ 4 feet bgs
4	MEC ≥ 3 feet bgs
5	MEC ≥ 2 feet bgs
6	MEC ≥ 1 feet bgs
7	No MEC on the surface and MEC below surface
8	Any MEC on surface

Notes:
(a) The shallowest MEC item found determines the depth below ground surface for the sector.
(b) If significant uncertainty exists about the depth of the MEC item, it may be appropriate to assign the next highest score.
(c) Depth should be based on actual field measurements of MEC items found.
(d) Detection and removal procedures meeting the DQOs for the sector based on clearly defined investigational objectives including reuse and the detection of designated MEC. If DQOs have not been established for the sector, the quality of data should be approved by the BCT to score a "1".

Table 4.3 Level of Intrusion	
Score	**Description (a)(b)**
1	Non-Intrusive: Activity on the ground surface, none below the surface
2	Minor Intrusions: Activity on ground surface and ground disturbances to a depth of one foot bgs
3	Moderate Intrusions: Ground disturbances to a depth of two feet bgs.
4	Significant Intrusions: Ground disturbances to a depth of four feet bgs
5	Highly Intrusive: ground disturbances greater than four feet bgs.

Notes:
(a) The deepest intrusion level expected for a given reuse determines the Intrusion Level of activity for the sector.
(b) If significant uncertainty exists about the depth of intrusion, it may be appropriate to assign the next highest score.

Table 4.4 Migration/Erosion Potential	
Score	**Description (a)**
1	Very Stable: MEC will not migrate. Erosion is equal to or less than the site-wide average of 3/100 inches
2	Minor Migration: Recurring and extreme natural events may cause MEC to migrate upward, potentially reaching the intrusion level, over a period of time (more than two five-year reviews). Annual Erosion is greater then the average site-wide condition but less than one inch **(b)**.
3	Significant Migration: Recurring and extreme natural events will bring MEC to the surface within the first recurring review. Annual Erosion is more than one inch **(c)**.

Notes:
(a) The Migration/Erosion Factor should consider the potential for changes in the depth of MEC due to erosion. The presence of human activities, streams, gullies, or steep slopes in an area may require a more thorough investigation of the potential for erosion.
(b) Average annual site-wide erosion potential is 3/100 inches.
(c) Significant erosion at Fort Ord is likely limited to areas disturbed by human activity, such as roads or firebreaks.

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Table 4.5 Accessibility Factor Scoring Matrix

Depth Below Ground Surface	Level of Intrusion	Migration/Erosion Potential		
		1. Very Stable	2. Minor Migration	3. Significant Migration
1. 100% of detected MEC removed considering data quality for the area.	1. Non-Intrusive (surface only)	1	1	1
	2. Minor Intrusion (<1 foot bgs)	1	1	1
	3. Moderate Intrusion (<2 feet bgs)	1	1	1
	4. Significant Intrusion (<4 feet bgs)	1	1	1
	5. Highly Intrusive (>4 feet bgs)	1	1	1
2. MEC > 5 feet bgs	1. Non-Intrusive (surface only)	1	1	1
	2. Minor Intrusion (<1 foot bgs)	1	1	1
	3. Moderate Intrusion (<2 feet bgs)	1	1	1
	4. Significant Intrusion (<4 feet bgs)	1	2	3
	5. Highly Intrusive (>4 feet bgs)	3	3	4
3. MEC > 4 feet bgs	1. Non-Intrusive (surface only)	1	1	1
	2. Minor Intrusion (<1 foot bgs)	1	1	1
	3. Moderate Intrusion (<2 feet bgs)	1	1	2
	4. Significant Intrusion (<4 feet bgs)	3	3	4
	5. Highly Intrusive (>4 feet bgs)	5	5	5
4. MEC > 3 feet bgs	1. Non-Intrusive (surface only)	1	1	1
	2. Minor Intrusion (<1 foot bgs)	1	1	2
	3. Moderate Intrusion (<2 feet bgs)	1	2	3
	4. Significant Intrusion (<4 feet bgs)	5	5	5
	5. Highly Intrusive (>4 feet bgs)	5	5	5
5. MEC > 2 feet bgs	1. Non-Intrusive (surface only)	1	1	3
	2. Minor Intrusion (<1 foot bgs)	1	2	3
	3. Moderate Intrusion (<2 feet bgs)	3	3	4
	4. Significant Intrusion (<4 feet bgs)	5	5	5
	5. Highly Intrusive (>4 feet bgs)	5	5	5
6. MEC > 1 feet bgs	1. Non-Intrusive (surface only)	1	2	3
	2. Minor Intrusion (<1 foot bgs)	3	3	4
	3. Moderate Intrusion (<2 feet bgs)	5	5	5
	4. Significant Intrusion (<4 feet bgs)	5	5	5
	5. Highly Intrusive (>4 feet bgs)	5	5	5
7. No MEC on the surface and MEC below surface	1. Non-Intrusive (surface only)	4	5	5
	2. Minor Intrusion (<1 foot bgs)	5	5	5
	3. Moderate Intrusion (<2 feet bgs)	5	5	5
	4. Significant Intrusion (<4 feet bgs)	5	5	5
	5. Highly Intrusive (>4 feet bgs)	5	5	5
8. Any MEC on the surface	1. Non-Intrusive (surface only)	5	5	5
	2. Minor Intrusion (<1 foot bgs)	5	5	5
	3. Moderate Intrusion (<2 feet bgs)	5	5	5
	4. Significant Intrusion (<4 feet bgs)	5	5	5
	5. Highly Intrusive (>4 feet bgs)	5	5	5

Accessibility Factor scores are defined as:
1. Least Potential for Accessibility.
2. Not Likely to be Accessible.
3. May be Accessible.
4. Likely to be Accessible.
5. Greatest Potential for Accessibility.

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Table 4.6 MEC Density Baseline Scoring

Score	Description*
1	100% of detected MEC removed to level of intrusion
2	Low MEC density (<0.1 items per acre)
3	Medium MEC Density (0.1 to 1 item per acre)
4	High MEC Density (>1 item per acre)

*Detection and removal procedures meeting the DQOs for the site based on clearly defined investigational objectives including reuse on the detection of designated MEC. If DQOs have not been established for the sector, the quality of data should be approved by the BCT to score a "1".

Table 4.7 MEC Density

	# Items			Density*			MEC Input Factor Score		
	MEC Hazard Type			MEC Hazard Type			MEC Hazard Type		
Depth (feet)	1	2	3	1	2	3	1	2	3
Surface	4,540	67	793	9.10	0.13	1.99	4	3	4
<1 ft.	6,868	283	1,333	25.25	1.04	4.90	4	4	4
<2 ft.	7,231	296	1,399	26.61	1.09	5.14	4	4	4
<4 ft.	7,295	301	1,414	26.81	1.11	5.19	4	4	4
All	7,296	301	1,458	26.82	1.11	5.36	4	4	4

*Assume 272 acres subsurface removal area and 499-acre surface removal.

Table 4.8 Intensity of Contact with Soil

Score	Description
1	Very Low: <1 hour/day
2	Low: <3 hours/day
3	Moderate: <6 hours/day
4	High: <9 hours/day
5	Very High: ≥9 hours/day

Notes:
Direct contact with soil can range from simply walking on the ground to digging in the soil.

Table 4.9 Frequency of Entry

Score	Description
1	Rare: It is not likely to occur (less than once per year to once per year)
2	Infrequent: Will seldom occur (less than once per season to once per month
3	Occasional: Will likely occur from time to time (more than once per month)
4	Frequent: Will occur frequently (once a week to more than once a week)

Note:
UXO-trained professionals and others covered by MEC-specific health and safety plans are not considered in the Frequency of Entry scoring.

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Table 4.10 Exposure Factor Scoring Matrix (a)

Frequency of Entry	MEC density	Intensity of Contact with Soil				
		1. Very Low: ≤1 hour/day	2. Low: ≤3 hours/day	3. Moderate: ≤6 hours/day	4: High: ≤9 hours/day	5. Very High: >9 hours/day
1. Rare	1. 100% of detected MEC removed to intrusion depth	1	1	1	1	1
	2. Low MEC Density	1	2	2	3	3
	3. Medium MEC Density	2	3	3	3	3
	4. High MEC Density	3	3	3	4	4
2. Infrequent	1. 100% of detected MEC removed to intrusion depth	1	1	1	1	1
	2. Low MEC Density	1	2	2	3	3
	3. Medium MEC Density	2	3	3	4	4
	4. High MEC Density	3	3	4	4	4
3. Occasional	1. 100% of detected MEC removed to intrusion depth	1	1	1	1	1
	2. Low MEC Density	2	2	3	3	3
	3. Medium MEC Density	3	3	4	4	4
	4. High MEC Density	3	4	5	5	5
4. Frequent	1. 100% of detected MEC removed to intrusion depth	1	1	1	1	1
	2. Low MEC Density	2	2	3	4	4
	3. Medium MEC Density	3	4	4	5	5
	4. High MEC Density	4	5	5	5	5

(a) Exposure Factor scores are defined as:
1. Least Potential for Exposure.
2. Not Likely to be Exposed.
3. May be Exposed.
4. Likely to be Exposed.
5. Greatest Potential for Exposure.

Table 4.11 MEC Hazard Classification

Score	Description (a)
0	Inert MEC, will cause no injury **(b)**
1	MEC that will cause an injury, or in extreme cases could cause major injury or death to an individual if functioned by an individual's activities **(c)**
2	MEC that will cause major injury, or in extreme cases could cause death to an individual if functioned by an individual's activities **(d)**
3	MEC that will kill an individual if detonated by an individual's activities

(a) MEC type must only be determined by UXO-trained personnel.
(b) Inert describes the condition of Munition, or component which contains no explosive, pyrotechnic, or chemical agent.
(c) An injury is defined as a flesh wound or minor burn.
(d) A major injury is defined as the loss of sight, hearing or limbs, or major burn.

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Table 4.12 Overall MEC Risk Scoring Matrix (a)

MEC Type	Accessibility	Exposure				
		1. Least Potential for Exposure	2. Not Likely to be Exposed	3. May be Exposed	4. Likely to be Exposed	5. Greatest Potential for Exposure
O. Inert MEC	1. Least potential for Accessibility	A	A	A	A	A
	2. Not Likely to be Accessible	A	A	A	A	A
	3. May be Accessible	A	A	A	A	A
	4. Likely to be Accessible	A	A	A	A	A
	5. Greatest Potential for Accessibility	A	A	A	A	A
1. MEC that will cause injury	1. Least potential for Accessibility	A	A	A	B	B
	2. Not Likely to be Accessible	A	B	B	B	B
	3. May be Accessible	A	B	B	C	C
	4. Likely to be Accessible	B	B	C	D	D
	5. Greatest Potential for Accessibility	B	C	D	D	D
2. MEC that will cause major injury	1. Least potential for Accessibility	A	A	B	B	B
	2. Not Likely to be Accessible	A	B	B	C	C
	3. May be Accessible	A	B	C	D	D
	4. Likely to be Accessible	B	C	D	D	E
	5. Greatest Potential for Accessibility	B	C	D	E	E
3. MEC that will kill	1. Least potential for Accessibility	A	B	B	C	C
	2. Not Likely to be Accessible	B	B	C	D	D
	3. May be Accessible	B	C	D	E	E
	4. Likely to be Accessible	C	C	D	E	E
	5. Greatest Potential for Accessibility	C	D	E	E	E

Notes: (a) The Overall MEC Risk scores are defined as:

A. Lowest risk
B. Low risk
C. Medium risk
D. High risk
E. Highest risk

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Table 4.13 MEC Risk Assessment Analysis Results
Baseline Risk Analysis

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor Score	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor Score	Overall MEC Risk Score
Trespasser	1	8	1	3	5	4	3	3	5	D
	2	8	1	3	5	3	3	3	4	E
	3	8	1	3	5	4	3	3	5	E
Surface only Receptor	1	8	1	1	5	4	4	4	5	D
	2	8	1	1	5	3	4	4	5	E
	3	8	1	1	5	4	4	4	5	E
Intruding to 1 ft Receptor	1	8	1	2	5	4	4	4	5	D
	2	8	1	2	5	4	4	4	5	E
	3	8	1	2	5	4	4	4	5	E
Intruding to 3 ft Receptor	1	8	1	4	5	4	4	4	5	D
	2	8	1	4	5	4	4	4	5	E
	3	8	1	4	5	4	4	4	5	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	8	1	5	5	4	4	4	5	E
	3	8	1	5	5	4	4	4	5	E

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Table 4.14 MEC Baseline Risk Analysis for a Trespasser			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Trespasser**		
Analysis	**Baseline**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present on the surface and the level of intrusion of a trespasser is moderate and expected to be to 2 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a trespasser is occasional and the Intensity of Contact with Soil is moderate: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type **3**	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline was collected according to the project work plan.

Table 4.15 MEC Baseline Risk Analysis for a Surface Only Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Surface Only Receptor**		
Analysis	**Baseline**		
MEC Risk Score	**E**	Accessibility 5	• Although the level of intrusion of a surface only receptor is non-intrusive and expected to limited to the ground surface, MEC items in the Impact Area MRA are present on the surface. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion
		Exposure 5	• The Frequency of Entry for a surface only receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type **3**	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline was collected according to the project work plan.

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Table 4.16 MEC Baseline Risk Analysis for a Shallow Intruding Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Shallow Intruding Receptor (Intruding to 1 foot bgs)**		
Analysis	**Baseline**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present on the surface and the level of intrusion of a shallow intruding receptor is minor and expected to be to 1 foot bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a shallow intruding receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline was collected according to the project work plan.

Table 4.17 MEC Baseline Risk Analysis for a Deeper Intruding Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Deeper Intruding Receptor (Intruding to 3 feet bgs)**		
Analysis	**Baseline**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present on the surface and the level of intrusion of a deeper intruding receptor is significant and expected to be to 3 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a deeper intruding receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline was collected according to the project work plan.

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Table 4.18 MEC Baseline Risk Analysis for a Construction Worker			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Construction Worker**		
Analysis	**Baseline**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present on the surface and the level of intrusion of a construction worker is high and expected to be to greater than 4 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a construction worker is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type **3**	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline was collected according to the project work plan.

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Table 4.19 MEC Risk Assessment Analysis Results
Surface Removal

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor Score	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor Score	Overall MEC Risk Score
Trespasser	1	7	1	3	5	4	3	3	5	D
	2	7	1	3	5	3	3	3	5	E
	3	7	1	3	5	4	3	3	5	E
Surface Only Receptor	1	7	1	1	4	1	4	4	1	B
	2	7	1	1	4	1	4	4	1	B
	3	7	1	1	4	1	4	4	1	C
Shallow Intruding Receptor	1	7	1	2	5	4	4	4	5	D
	2	7	1	2	5	3	4	4	5	E
	3	7	1	2	5	4	4	4	5	E
Deeper Intruding Receptor	1	7	1	4	5	4	4	4	5	D
	2	7	1	4	5	3	4	4	5	E
	3	7	1	4	5	4	4	4	5	E
Construction Worker	1	7	1	5	5	4	4	4	5	D
	2	7	1	5	5	3	4	4	5	E
	3	7	1	5	5	4	4	4	5	E

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Table 4.20 MEC Surface Removal After Action Risk Analysis for a Trespasser			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Trespasser**		
Analysis	**Surface Removal**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present below the surface and the level of intrusion of a trespasser is moderate and expected to be to 2 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a trespasser is occasional and the Intensity of Contact with Soil is moderate: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. Surface removals will be conducted to meet DQOs identified in the remedial work plan.

Table 4.21 MEC Surface Removal After Action Analysis for a Surface Only Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Surface Only Receptor**		
Analysis	**Surface Removal**		
MEC Risk Score	**C**	Accessibility 4	• The level of intrusion of a surface only receptor is non-intrusive and expected to limited to the ground surface, MEC items in the Impact Area MRA are present below the surface, but have been removed from the surface. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion
		Exposure 1	• The Frequency of Entry for a surface only receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the MRS-15BLM area are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. Surface removals will be conducted to meet DQOs identified in the remedial work plan.

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Table 4.22 MEC Surface Removal After Action Risk Analysis for a Shallow Intruding Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Shallow Intruding Receptor (Intruding to 1 foot bgs)**		
Analysis	**Surface Removal**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present below the surface and the level of intrusion of a shallow intruding receptor is minor and expected to be to 1 foot bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a shallow intruding receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type **3**	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. Surface removals will be conducted to meet DQOs identified in the remedial work plan.

Table 4.23 MEC Surface Removal After Action Risk Analysis for a Deeper Intruding Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Deeper Intruding Receptor (Intruding to 3 feet bgs)**		
Analysis	**Surface Removal**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present below the surface and the level of intrusion of a deeper intruding receptor is significant and expected to be to 3 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a deeper intruding receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type **3**	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. Surface removals will be conducted to meet DQOs identified in the remedial work plan.

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Table 4.24 MEC Surface Removal After Action Risk Analysis for a Construction Worker			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Construction Worker**		
Analysis	**Surface Removal**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present below the surface and the level of intrusion of a construction worker is high and expected to be to greater than 4 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 5	• The Frequency of Entry for a construction worker is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type **3**	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. Surface removals will be conducted to meet DQOs identified in the remedial work plan.

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Table 4.25 MEC Risk Assessment Analysis Results
Removal to Depth

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor Score	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor Score	Overall MEC Risk Score
Trespasser	1	6	1	3	5	4	3	3	5	D
	2	6	1	3	5	3	3	3	4	D
	3	6	1	3	5	3	3	3	4	E
Surface only Receptor	1	1	1	1	1	1	4	4	1	A
	2	1	1	1	1	1	4	4	1	A
	3	1	1	1	1	1	4	4	1	A
Intruding to 1 ft Receptor	1	1	1	2	1	1	4	4	1	A
	2	1	1	2	1	1	4	4	1	A
	3	1	1	2	1	1	4	4	1	A
Intruding to 3 ft Receptor	1	6	1	4	5	4	4	4	5	D
	2	6	1	4	5	3	4	4	5	E
	3	6	1	4	5	3	4	4	5	E
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	3	4	4	5	E
	3	6	1	5	5	3	4	4	5	E

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Table 4.26 MEC Removal to Depth After Action Risk Analysis for a Trespasser			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Trespasser**		
Analysis	**Removal to Depth**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are assumed to be present below 1 ft and the level of intrusion of a trespasser is moderate and expected to be to 2 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 3	• The Frequency of Entry for a trespasser is occasional and the Intensity of Contact with Soil is moderate: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. MEC removal is expected to be conducted in a manner that will meet DQOs established for the investigations.

Table 4.27 MEC Removal to Depth After Action Analysis for a Surface Only Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Surface Only Receptor**		
Analysis	**Surface Removal**		
MEC Risk Score	**A**	Accessibility 1	• The level of intrusion of a surface only receptor is non-intrusive and expected to limited to the ground surface, All MEC items encountered to 1 ft the Impact Area MRA are removed. MEC may still be present below 1 ft. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion
		Exposure 1	• The Frequency of Entry for a surface only receptor is frequent and the Intensity of Contact with Soil is high: however, the MEC density score is assigned a "1" according to the protocol. Therefore, the potential exposure is low.
		MEC Type 3	The types of MEC expected in the MRS-15BLM area are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. MEC removal is expected to be conducted in a manner that will meet DQOs established for the investigations.

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Table 4.28 MEC Removal to Depth After Action Risk Analysis for a Shallow Intruding Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Shallow Intruding Receptor (Intruding to 1 foot bgs)**		
Analysis	**Surface Removal**		
MEC Risk Score	**A**	Accessibility 1	• All MEC items encountered to 1 ft the Impact Area MRA are removed. MEC may still be present below 1 ft and the level of intrusion of a shallow intruding receptor is minor and expected to be to 1 foot bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 1	• The Frequency of Entry for a shallow intruding receptor is frequent and the Intensity of Contact with Soil is high: however, the MEC density score is assigned a "1" according to the protocol. Therefore, the potential exposure is low.
		MEC Type 3	The types of MEC expected in the MRS-15BLM area are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. MEC removal is expected to be conducted in a manner that will meet DQOs established for the investigations.

Table 4.29 MEC Removal to Depth After Action Risk Analysis for a Deeper Intruding Receptor			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Deeper Intruding Receptor (Intruding to 3 feet bgs)**		
Analysis	**Surface Removal**		
MEC Risk Score	**E**	Accessibility 5	• MEC items in the Impact Area MRA are present on the surface and the level of intrusion of a deeper intruding receptor is significant and expected to be to 3 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 4	• The Frequency of Entry for a deeper intruding receptor is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. MEC removal is expected to be conducted in a manner that will meet DQOs established for the investigations.

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Table 4.30 MEC Removal to Depth After Action Risk Analysis for a Construction Worker			
Sector	**Impact Area MRA**		
Proposed Property Reuse	**Habitat Management**		
Receptor Type	**Construction Worker**		
Analysis	**Surface Removal**		
MEC Risk Score	**E**	Accessibility 5	• All MEC items encountered to 1 ft the Impact Area MRA are removed. MEC may still be present below 1 ft and the level of intrusion of a construction worker is high and expected to be to greater than 4 feet bgs. • The area is on gently sloping terrain and is not expected to be significantly affected by erosion.
		Exposure 4	• The Frequency of Entry for a construction worker is frequent and the Intensity of Contact with Soil is high: therefore, the potential exposure is high because the expected MEC density is high for MEC types 1 and 3 and medium for MEC type 2.
		MEC Type 3	The types of MEC expected in the Impact Area MRA are high explosive mortar projectiles, anti-tank rockets, white phosphorus grenades and other high explosive projectiles which could kill an individual if functioned by an individual's activities. All items at Fort Ord are assumed to be fuzed (if not inert) and portable.
		Data Quality	The data used in preparing the Baseline Analysis was collected according to the project work plan. MEC removal is expected to be conducted in a manner that will meet DQOs established for the investigations.

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