

Public Notice

Winona Bomb Target 2 (#91) Munitions Response Site Prioritization Protocol

The U.S. Army Corps of Engineers updated the application of the Munitions Response Site Prioritization Protocol at former Winona Bomb Target 2 (#91). The Eleventh Naval District used the target for bombing and strafing training during World War II. Today, the former bomb target is under the jurisdiction of the U.S. Bureau of Land Management.

Winona Bomb Target 2 (#91) is one of many former military installations throughout the United States reviewed under the Department of Defense's Munitions Response Site Prioritization Protocol. This protocol is used to assess Formerly Used Defense Sites that may have unexploded ordnance, discarded military munitions or munitions constituents, and to guide future investigations or munitions removal activities at these sites.

The Munitions Response Site Prioritization Protocol documents for Winona Bomb Target 2 (#91) are available for public review on the Army Corps of Engineers, Los Angeles District website at www.spl.usace.army.mil/Media/PublicNotices.aspx for 30 days. The documents are also available at the Army Corps of Engineers, Los Angeles District office and may be viewed by contacting Randy Tabije, project manager.

Please send comments on the Munitions Response Site Prioritization Protocol or questions to Randy Tabije at the email or address listed below.



**US Army Corps
of Engineers®**

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Munitions Response Site Prioritization Protocol

Stakeholder Fact Sheet



Background

For decades, the Department of Defense (DoD) has used military munitions in training and testing to ensure force readiness. Munitions remaining from DoD activities may present explosive, chemical agent, human health, and environmental hazards at active installations, Base Realignment and Closure (BRAC) installations, Formerly Used Defense Sites (FUDS), or other properties no longer under DoD control. Whenever a former range or disposal site is put to another use, actions must be taken to ensure remediation of any hazards.

DoD has been responding to properties that were known or suspected to contain munitions hazards for over 30 years. In 2001, the Department established the Military Munitions Response Program (MMRP) to address the hazards posed by past military munitions-related activities. As of September 2006, DoD had identified over 3,300 sites eligible for the MMRP, referred to as munitions response sites (MRSs), that may require response actions (e.g., investigation, removal actions, and remedial actions). To efficiently and effectively expedite response actions at all MRSs, the Department must prioritize these sites based on the potential risk posed to human health and the environment.

Munitions Reponse Sites (MRSs)		
1,333 on active installations	318 on BRAC installations	1,658 on FUDS properties

The Protocol

In the FY2002 National Defense Authorization Act (10 USC 2710), Congress directed DoD to develop a protocol for assigning MRSs a relative priority for response activities. DoD convened a workgroup with personnel knowledgeable in explosive safety or environmental responses to develop the framework for prioritizing MRSs. This workgroup engaged in a collaborative process with the States, American Indian and Alaska Native Tribes, and federal agencies to develop a methodology to assign a relative priority for response activities at each MRS in DoD's inventory (the MRS inventory).

On October 5, 2005, DoD published the Munitions Response Site Prioritization Protocol (referred to as the Protocol), codified at 32 CFR 179. The Protocol requires the DoD Components to apply the prioritization methodology to determine a relative priority for munitions response actions at MRSs. The priority assigned is based on the overall conditions at each MRS.

Web Site

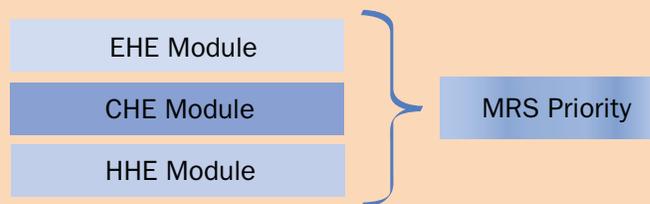


The MRS inventory is updated annually and published in the Defense Environmental Programs Annual Report to Congress:

<http://deparc.egovservices.net/deparc/do/mmrp>

The potential risk posed by past munitions activities at each MRS is captured through the Protocol's central feature, three hazard evaluation modules:

- Explosive Hazard Evaluation (EHE) Module: provides the approach for assigning a relative priority to an MRS where munitions and explosives of concern (MEC) are known or suspected to be present.
- Chemical Warfare Material Hazard Evaluation (CHE) Module: provides the approach for assigning a relative priority to an MRS where CWM hazards are known or suspected to be present.
- Health Hazard Evaluation (HHE) Module: provides the approach for evaluating the relative risk to human health and the environment potentially where munitions constituents and any incidental nonmunitions-related contaminants are known or suspected to be present.



An MRS's relative priority is determined by comparing the results of one or more hazard evaluation modules.

Sequencing Decisions

After an MRS is prioritized, it must be sequenced for response action. The sequencing for response action is based primarily on the MRS's relative risk, reflected in its priority. As a matter of DoD policy, an MRS with higher relative risks will be addressed before an MRS with lower relative risks. Occasionally, other factors, such as environmental justice, economic development, and programmatic concerns can influence sequencing decisions.

Stakeholder Involvement

DoD offers all stakeholders opportunities to participate throughout the Protocol's application. DoD believes that if stakeholders are engaged early and often throughout the process, they will gain a better understanding of the Protocol and its application. DoD Components are required to notify stakeholders of the opportunity to participate in the application of the Protocol; publish an announcement requesting participation; consider stakeholders' input in prioritization decisions; and document stakeholder input. DoD recognizes that stakeholder involvement is an effective way to identify and address stakeholder concerns about environmental and safety issues related to MRSs.

Once an MRS's relative priority is determined, DoD Components will provide stakeholders with the opportunity to review and comment on how an MRS is sequenced for response actions. DoD believes that a proactive stakeholder involvement program will facilitate the munitions response process and help ensure the protection of human health and the environment.



Web Site

For more information on the MMRP or the Protocol please visit:

<https://www.denix.osd.mil/denix/Public/Library/Cleanup/CleanupOfc/derp/mmrp.html>

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table A**

MRS Background Information

DIRECTIONS: Record the background information below for the MRS to be evaluated. Much of this information is available from Service and DoD databases. If the MRS is located on a FUDS property, the suitable FUDS property information should be substituted. In the MRS Summary, briefly describe the UXO, DMM, or MC that are known or suspected to be present, the exposure setting (the MRS's physical environment), any other incidental nonmunitions-related contaminants (e.g., benzene, trichloroethylene) found at the MRS, and any potentially exposed human and ecological receptors. If possible, include a map of the MRS.

Winona Bombing Target No. 2

Component: USACE FUDS/SPD/Los Angeles District (SPL)

Installation/Property Name: CA9799F7553 WINONA BT 2 (#91)

Location (City, County, State): OTHER, IMPERIAL, CA

Site Name/Project Name (Project No.): Winona Bombing Target No. 2 (01)

Date Information Entered/Updated: 9/17/2014

Point of Contact (Name/Phone): Public Affairs 213-452-3920

Project Phase (check only one):

<input checked="" type="checkbox"/> PA	<input type="checkbox"/> SI	<input type="checkbox"/> RI	<input type="checkbox"/> RI/FS	<input type="checkbox"/> RD
<input type="checkbox"/> RA-C	<input type="checkbox"/> RIP	<input type="checkbox"/> RA-O	<input type="checkbox"/> RC	<input type="checkbox"/> LTM

Media Evaluated (check all that apply):

<input type="checkbox"/> Groundwater	<input type="checkbox"/> Sediment (human receptor)
<input type="checkbox"/> Surface soil	<input type="checkbox"/> Surface Water (ecological receptor)
<input type="checkbox"/> Sediment (ecological receptor)	<input type="checkbox"/> 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:	<p>The 3,111-acre Winona Bombing Target No. 2 is located in Imperial County near Salton City, California. It was used by the Navy between 1944 and 1946 as a range facility to provide low level rocket target practice, but it appears to have been used as a gunnery and practice bombing range as well. Historical records did not specifically indicate the types of ordnance used at the MRS. (2007 ASR, Sections 1.2, 5.1, and 7.1) Ranges associated with this MRS overlap ranges associated with FUDS Property J09CA0167, Winona BT 1 (#90) located to the east. Overlapping acreage is addressed under this project.</p> <p>Ordnance debris found during the ASR field visit consisted of the remains of 3-lb miniature practice bombs, practice rockets (2.25-inch and 3.5-inch), and small arms and medium caliber ammunition (.30 and .50 caliber, and 20mm). A lifting strap apparently from a 100-lb practice bomb was also found. All debris found during the ASR field visit appeared to be expended. No complete rounds of ordnance was found. No fragmentation or cratering that would indicate HE use was observed during the field inspection, though negative evidence is not irrefutable proof. Based on the amount of debris observed, the MRS was not completely cleaned up prior to its release from the War Department. Interviews with people familiar with the MRS did not expose any incidents of OE hazards being found in the past. There is no evidence of chemical warfare materials ever being stored, used or disposed of at the MRS. Therefore, the alternative rating of “No Known or Suspected CWM Hazard” is selected for the CHE module. No media sampling was conducted during the ASR; therefore, the alternative rating of “Evaluation Pending” is selected for the HHE module. (2007 ASR, Sections 7.1, 7.2, and 1.4)</p> <p>The MRS score was developed based on information from the 2007 ASR. Documentation of stakeholder coordination for the MRS score can be found on the FRMD under category 01.22.</p> <p>Documentation of public notice can be found on the FRMD, file number J09CA016801_08.13_0500.</p> <p>Throughout the MRSPP, the cited reference “2007 ASR” refers to the “Archives Search Report Winona BT 2 (#91) Final – 09 July 2007” found on the FRMD, file number J09CA016801_01.02_0500.</p>
Description of Pathways for Human and Ecological Receptors:	Pathways were not evaluated during the ASR (2007 ASR, Section 1.4).
Description of Receptors (Human and Ecological):	Receptors were not evaluated during the ASR (2007 ASR, Section 1.4).

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Table 1

EHE Module: Munitions Type Data Element Table

DIRECTIONS: Below are 11 classifications of munitions and their descriptions. Circle the scores that correspond with all the munitions types known or suspected to be present at the MRS. Note: The terms practice munitions, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Sensitive	<ul style="list-style-type: none"> • UXO that are considered most 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). • Hand grenades containing energetic filler. • Bulk primary explosives. or mixtures of these with environmental media. such that the mixture poses an explosive hazard. 	<input type="checkbox"/> 30
High explosive (used or damaged)	<ul style="list-style-type: none"> • UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive." • DMM containing a high-explosive filler that have: Been damaged by burning or detonation. Deteriorated to the point of instability. 	<input type="checkbox"/> 25
Pyrotechnic (used or damaged)	<ul style="list-style-type: none"> • UXO containing a pyrotechnic filler other than white phosphorus (e.g., flares, signals, simulators, smoke grenades). • DMM containing a pyrotechnic filler other than white phosphorus (e.g., flares, signals, simulators, smoke grenades) that have: Been damaged by burning or detonation. Deteriorated to the point of instability. 	<input type="checkbox"/> 20
High explosive (unused)	<ul style="list-style-type: none"> • DMM containing a high-explosive filler that: Have not been damaged by burning or detonation. Are not deteriorated to the point of instability. 	<input type="checkbox"/> 15
Propellant	<ul style="list-style-type: none"> • UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). • 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. 	<input checked="" type="checkbox"/> 15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul style="list-style-type: none"> • DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). • DMM that are 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. 	<input type="checkbox"/> 10
Pyrotechnic (not used or damaged)	<ul style="list-style-type: none"> • DMM containing a pyrotechnic filler (i.e., red phosphorus), other than white phosphorus filler, that: Have not been damaged by burning or detonation. Are not deteriorated to the point of instability. 	<input type="checkbox"/> 10
Practice	<ul style="list-style-type: none"> • UXO that are practice munitions that are not associated with a sensitive fuze. • 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. 	<input checked="" type="checkbox"/> 5
Riot control	<ul style="list-style-type: none"> • UXO or DMM containing a riot control agent filler (e.g., tear gas). 	<input type="checkbox"/> 3
Small arms	<ul style="list-style-type: none"> • 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, demolition charges] were used or are present on the MRS is required for selection of this category.) 	<input checked="" type="checkbox"/> 2
Evidence of no munitions	<ul style="list-style-type: none"> • 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. 	<input type="checkbox"/> 0
MUNITIONS TYPE	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score - 30).	15

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

Historical records did not specifically indicate the types of ordnance used in the project area. The ordnance debris found during the 1996 Archives Search Report property visit, consisted of debris from 3-pound practice bombs, 2.25-inch and 3.5-inch practice rockets (which qualify as propellant), and small arms and medium caliber ammunition (spent .30 caliber, .50-caliber, and 20mm). A lifting strap with lugs, apparently from a 100-pound water-filled practice bomb, was also found (2007 ASR, Section 7.1).

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Table 2

EHE Module: Source of Hazard Data Element Table

DIRECTIONS: Below are 11 classifications describing sources of explosive hazards. Circle the scores that correspond with all the sources of explosive hazards known or suspected to be present at the MRS.

Note: The terms former range, practice munitions, sma(arms range, physical evidence, and historical evidence are defined in Appendix C of the Primer.

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 and associated buffer and safety zones.	<input type="checkbox"/> 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.	<input type="checkbox"/> 8
Former practice munitions range	• The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> 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.	<input type="checkbox"/> 5
Former industrial operating facilities	• The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	<input type="checkbox"/> 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.	<input type="checkbox"/> 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.	<input type="checkbox"/> 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).	<input type="checkbox"/> 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.)	<input type="checkbox"/> 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.	<input type="checkbox"/> 0
Source of Hazard	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	6

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

The MRS was designated as a rocket practice target, but it appears to have been used as a gunnery and practice bombing range as well (2007 ASR, Section 7.1).

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Table 3

EHE Module: Location of Munitions Data Element Table

DIRECTIONS: Below are eight classifications of munitions locations and their descriptions. Circle the scores that correspond with all the locations where munitions are known or suspected to be present at the MRS.

Note: The terms confirmed, surface, subsurface, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Confirmed surface	<ul style="list-style-type: none"> Physical evidence indicates that there are UXO or DMM on the surface of the MRS. Historical evidence (i.e., a confirmed report such as an explosive ordnance disposal [EGO], police, or fire department report that an incident or accident that involved UXO or DMM occurred) indicates there are UXO or DMM on the surface of the MRS. 	<input type="checkbox"/> 25
Confirmed subsurface, active	<ul style="list-style-type: none"> 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 heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. 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 heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. 	<input type="checkbox"/> 20
Confirmed subsurface, stable	<ul style="list-style-type: none"> 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. 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. 	<input type="checkbox"/> 15
Suspected (physical evidence)	<ul style="list-style-type: none"> There is physical evidence (e.g., munitions debris such as 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. 	<input checked="" type="checkbox"/> 10
Suspected (historical evidence)	<ul style="list-style-type: none"> There is historical evidence indicating that UXO or DMM may be present at the MRS. 	<input type="checkbox"/> 5
Subsurface, physical constraint	<ul style="list-style-type: none"> 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. 	<input type="checkbox"/> 2
Small arms (regardless of location)	<ul style="list-style-type: none"> 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). 	<input checked="" type="checkbox"/> 1
Evidence of no munitions	<ul style="list-style-type: none"> 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. 	<input type="checkbox"/> 0
Location of Munitions	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).	10

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

Ordnance debris found during the ASR field visit consisted of the remains of 3-lb miniature practice bombs, practice rockets (2.25-inch and 3.5-inch), and small arms and medium caliber ammunition (.30 and .50 caliber, and 20mm). A lifting strap apparently from a 100-lb practice bomb was also found. (2007 ASR, Section 7.1).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 4
EHE Module: Ease of Access Data Element Table**

DIRECTIONS: Below are four classifications of barrier types that can surround an MRS and their descriptions. The barrier type is directly related to the ease of public access to the MRS. Circle the score that corresponds with the ease of access to the MRS.

Note: The term barrier is defined in Appendix C of the Primer.

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).	<input checked="" type="checkbox"/> 10
Barrier to MRS access is incomplete	• There is a barrier preventing access to parts of the MRS, but not the entire MRS.	<input type="checkbox"/> 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.	<input type="checkbox"/> 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.	<input type="checkbox"/> 0
Ease of Access	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).	10

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

The property is in a remote desert area but is open range without barriers (2007 ASR, Appendix M, Risk Assessment Procedures for Military Munitions Response Projects, Part II E.).

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Table 5

EHE Module: Status of Property Data Element Table

DIRECTIONS: Below are three classifications of the status of a property within the Department of Defense (DoD) and their descriptions. Circle the score that corresponds with the status of property at the MRS.

Classification	Description	Score
Non-DoD control	<ul style="list-style-type: none"> • 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 Non-DoD control federal agencies. • The MRS is at a location that is owned by DoD, but that DoD has leased to another entity and for which DoD does not control access 24 hours per day. 	<input checked="" type="checkbox"/> 5
Scheduled for transfer from DoD control	<ul style="list-style-type: none"> • 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 Protocol is applied. 	<input type="checkbox"/> 3
DoD control	<ul style="list-style-type: none"> • 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. 	<input type="checkbox"/> 0
STATUS OF PROPERTY	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	5

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

The project area is owned by the Federal Government and is under the jurisdiction of the Department of the Interior, Bureau of Land Management (2007 ASR, Section 5.4).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 6**

EHE Module: Population Density Data Element Table

DIRECTIONS: Below are three classifications for population density and their descriptions.

Determine the population density per square mile that most closely corresponds with the population of the MRS, including the area within a two-mile radius of the MRS's perimeter. Circle the most appropriate score.

Note: Use the U.S. Census Bureau tract data available to capture the highest population density within a two-mile radius of the perimeter of the MRS.

Classification	Description	Score
> 500 persons per square mile	• There are more than 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	<input type="checkbox"/> 5
100-500 persons per square mile	• There are 100 to 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	<input type="checkbox"/> 3
< 100 persons per square mile	• There are fewer than 100 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	<input checked="" type="checkbox"/> 1
POPULATION DENSITY	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

The population density for Imperial County is 41.8 persons per square mile according to the 2010 census (<http://quickfacts.census.gov/qfd/states/06/06025.html>).

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Table 7**

EHE Module: Population Near Hazard Data Element Table

DIRECTIONS: Below are six classifications describing the number of inhabited structures near the MRS. The number of inhabited buildings relates to the potential population near the MRS. Determine the number of inhabited structures within two miles of the MRS boundary and circle the score that corresponds with the number of inhabited structures.

Note: The term inhabited structures is defined in Appendix C of the Primer.

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.	<input type="checkbox"/> 5
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.	<input type="checkbox"/> 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.	<input type="checkbox"/> 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.	<input type="checkbox"/> 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.	<input type="checkbox"/> 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.	<input checked="" type="checkbox"/> 0
POPULATION NEAR HAZARD	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

The nearest inhabited building is over two miles from the MRS (2007 ASR, Appendix M, Risk Assessment Procedures for Military Munitions Response Projects, Part II B.).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 8**

EHE Module: Types of Activities/Structures Data Element Table

DIRECTIONS: Below are five classifications of activities and/or inhabited structures and their descriptions. Review the types of activities that occur and/or structures that are present within two miles of the MRS and circle the scores that correspond with all the activities/structure classifications at the MRS.

Note: The term inhabited structure is defined in Appendix C of the Primer.

Classification	Description	Score
Residential, educational, commercial, or subsistence	• 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.	<input type="checkbox"/> 5
Parks and recreational areas	• 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.	<input type="checkbox"/> 4
Agricultural, 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 agriculture or forestry.	<input type="checkbox"/> 3
Industrial or warehousing	• 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.	<input type="checkbox"/> 2
No known or recurring activities	• There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	<input checked="" type="checkbox"/> 1
TYPES OF ACTIVITIES/STRUCTURES	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	1

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

The MRS is undeveloped desert land (2007 ASR, Section 3.1.3).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 9**

EHE Module: Ecological and/or Cultural Resources Data Element Table

DIRECTIONS: Below are four classifications of ecological and/or cultural resources and their descriptions. Review the types of resources present and circle the score that corresponds with the ecological and/or cultural resources present on the MRS.

Note: The terms ecological resources and cultural resources are defined in Appendix C of the Primer.

Classification	Description	Score
Ecological and cultural resources present	• There are both ecological and cultural resources present on the MRS.	<input type="checkbox"/> 5
Ecological resources present	• There are ecological resources present on the MRS.	<input type="checkbox"/> 3
Cultural resources present	• There are cultural resources present on the MRS.	<input type="checkbox"/> 3
No ecological or cultural resources present	• There are no ecological resources or cultural resources present on the MRS.	<input checked="" type="checkbox"/> 0
ECOLOGICAL AND/OR CULTURAL RESOURCES	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).	0

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

According to the U.S. Fish and Wildlife Service and the California Department of Fish and Game Natural Diversity Database, there are federal and state-listed endangered species in the vicinity of the project area. (<http://www.dfg.ca.gov/biogeodata/cnddb/> and ASR Sec 3.5) However, it is unknown if they are located within the MRS boundary.

The possible presence of cultural resources on the MRS was not addressed in the ASR and is unknown.

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing
Target No. 2
Table 10**

Determining the EHE Module Rating

<p>DIRECTIONS: 1. From Tables 1-9, record the data element scores in the Score boxes to the right. 2. Add the Score boxes for each of the three factors and record this number in the Value boxes to the right. 3. Add the three Value boxes and record this number in the EHE Module Total box below. 4. Circle the appropriate range for the EHE Module Total below. 5. Circle the EHE Module Rating that corresponds to the range selected and record this value in the EHE Module Rating box found at the bottom of the table.</p> <p>Note: An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.</p>		Source	Score	Value
	Explosive Hazard Factor Data Elements			
	Munitions Type	Table 1	15	21
	Source of Hazard	Table 2	6	
	Accessibility Factor Data Elements			
	Location of Munitions	Table 3	10	25
	Ease of Access	Table 4	10	
	Status of Property	Table 5	5	
	Receptor Factor Data Elements			
	Population Density	Table 6	1	2
	Population Near Hazard	Table 7	0	
	Types of Activities/Structures	Table 8	1	
	Ecological and/or Cultural Resources	Table 9	0	
	EHE Module Total			48
	EHE Module Total	EHE Module Rating		
	92 to 100	A		
	82 to 91	B		
	71 to 81	C		
	60 to 70	D		
	48 to 59	E		
38 to 47	F			
less than 38	G			
Alternative Module Ratings	<input type="checkbox"/> Evaluation Pending			
	<input type="checkbox"/> No Longer Required			
	<input type="checkbox"/> No Known or Suspected Explosive Hazard			
EHE Module Rating	E			

EHE Module Description (4000 characters max):

J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2

Table 11

CHE Module: CWM Configuration Data Element Table

DIRECTIONS: Below are seven classifications of CWM configuration and their descriptions. Circle the scores that correspond with all the CWM configurations known or suspected to be present at the MRS.

Note: The terms CWMIUXO, CWMJDMM, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
CWM, that are either UXO, or explosively configured damaged DMM	The CWM known or suspected of being present at the MRS are: <ul style="list-style-type: none"> • CWM that are UXO (i.e., CWM/UXO) • Explosively configured CWM that are DMM (i.e., CWMIDMM) that have been damaged. 	<input type="checkbox"/> 30
CWM mixed with UXO	<ul style="list-style-type: none"> • The CWM known or suspected of being present at the MRS are undamaged CWM/DMM or CWM not configured as a munition that are commingled with conventional munitions that are UXO. 	<input type="checkbox"/> 25
CWM, explosive configuration that are undamaged DMM	<ul style="list-style-type: none"> • The CWM known or suspected of being present at the MRS are explosively configured CWM/DMM that have not been damaged. 	<input type="checkbox"/> 20
CWMIDMM, not explosively configured or CWM, bulk container	The CWM known or suspected of being present at the MRS are: <ul style="list-style-type: none"> • Nonexplosively configured CWM/DMM either damaged or undamaged • Bulk CWM (e.g., ton container). 	<input type="checkbox"/> 15
CAIS K941 and CAIS K942	<ul style="list-style-type: none"> • The CWM/DMM known or suspected of being present at the MRS are CAIS K941-toxic gas set M-1 or CAIS K942-toxic gas set M21E11. 	<input type="checkbox"/> 12
CAIS (chemical agent identification sets)	<ul style="list-style-type: none"> • CAIS, other than CAIS K941 and K942, are known or suspected of being present at the MRS. 	<input type="checkbox"/> 10
Evidence of no CWM	<ul style="list-style-type: none"> • Following investigation, the physical evidence indicates that CWM are not present at the MRS, or the historical evidence indicates that CWM are not present at the MRS. 	<input checked="" type="checkbox"/> 0
CWM CONFIGURATION	DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).	0

DIRECTIONS: Document any MRS-specific data used in selecting the Munitions Type classifications in the space provided.

There is no evidence of chemical warfare materials ever being stored, used or disposed of at the MRS (2007 ASR, Section 7.2). Therefore, Tables 12-19 are intentionally omitted in accordance with Army Guidance.

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing
Target No. 2
Table 20
Determining the CHE Module Rating**

<p>DIRECTIONS: 1. From Tables 11-19, record the data element scores in the Score boxes to the right. 2. Add the Score boxes for each of the three factors and record this number in the Value boxes to the right. 3. Add the three Value boxes and record this number in the CHE Module Total box below. 4. Circle the appropriate range for the CHE Module Total below. 5. Circle the CHE Module Rating that corresponds to the range selected and record this value in the CHE Module Rating box found at the bottom of the table.</p> <p>Note: An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.</p>		Source	Score	Value	
	CWM Hazard Factor Data Elements				
	CWM Configuration	Table 11			
	Sources of CWM	Table 12			
	Accessibility Factor Data Elements				
	Location of CWM	Table 13			
	Ease of Access	Table 14			
	Status of Property	Table 15			
	Receptor Factor Data Elements				
	Population Density	Table 16			
	Population Near Hazard	Table 17			
	Types of Activities/Structures	Table 18			
	Ecological and/or Cultural Resources	Table 19			
	CHE Module Total				
	CHE Module Total		CHE Module Rating		
	92 to 100		A		
	82 to 91		B		
	71 to 81		C		
	60 to 70		D		
	48 to 59		E		
38 to 47		F			
less than 38		G			
Alternative Module Ratings		<input type="checkbox"/> Evaluation Pending			
		<input type="checkbox"/> No Longer Required			
		<input checked="" type="checkbox"/> No Known or Suspected CWM Hazard			
CHE Module Rating		No Known or Suspected CWM Hazard			

CHE Module Description (4000 characters max):

J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2

Table 21

HHE Module: Groundwater Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's groundwater and their comparison values from Appendix B of the Primer in the table below. Additional contaminants can be recorded on Table 2. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional groundwater contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard present in the groundwater, select the box at the bottom of the table.

Contaminant	Maximum Concentration (µg/L)	Comparison Value (µg/L)	Ratios
CHF Scale	CHF Value	Sum The Ratios	0
CHF > 100	H (High)	$\text{CHF} = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	DIRECTIONS: Record the CHF Value from above in the box to the right (maximum value = H).	
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Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater migratory pathway at the MRS.

Classification	Description	Value
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.	<input type="checkbox"/> H
Potential	Contamination in groundwater 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.	<input type="checkbox"/> 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 the presence of geological structures or physical controls).	<input type="checkbox"/> L

MIGRATORY PATHWAY FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater receptors at the MRS.

Classification	Description	Value
Identified	There is a threatened water supply well downgradient 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).	<input type="checkbox"/> H
Potential	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, IIA, or IIB aquifer).	<input type="checkbox"/> 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).	<input type="checkbox"/> L

RECEPTOR FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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No Known or Suspected Groundwater MC Hazard

DIRECTIONS: Document any MRS-specific data used in selecting the groundwater contaminants in the space provided.

Groundwater was not sampled (2007 ASR, Section 1.4).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 22**

HHE Module: Surface Water - Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the surface water, select the box at the bottom of the table.

Contaminant	Maximum Concentration (µg/L)	Comparison Value (µg/L)	Ratios
CHF Scale	CHF Value	Sum The Ratios	0
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	DIRECTIONS: Record the CHF Value from above in the box to the right (maximum value = H).	
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Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	<input type="checkbox"/> H
Potential	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.	<input type="checkbox"/> M
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 the presence of geological structures or physical controls).	<input type="checkbox"/> L

MIGRATORY PATHWAY FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	<input type="checkbox"/> H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	<input type="checkbox"/> M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	<input type="checkbox"/> L

RECEPTOR FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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No Known or Suspected Surface Water (Human Endpoint) MC Hazard

DIRECTIONS: Document any MRS-specific data used in selecting the surface water contaminants in the space provided.

Surface water was not sampled (2007 ASR, Section 1.4).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 23**

HHE Module: Sediment - Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CAF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	CHF Value	Sum The Ratios	0
CHF > 100	H (High)	$\text{CHF} = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	DIRECTIONS: Record the CHF Value from above in the box to the right (maximum value = H).	
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Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely the sediment migratory pathway an the MRS.

Classification	Description	Value
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.	<input type="checkbox"/> H
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.	<input type="checkbox"/> M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point exposure (possibly due to the presence of geological structures or physical controls).	<input type="checkbox"/> L

MIGRATORY PATHWAY FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move,	<input type="checkbox"/> H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	<input type="checkbox"/> M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	<input type="checkbox"/> L

RECEPTOR FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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No Known or Suspected Sediment (Human Endpoint) MC Hazard

DIRECTIONS: Document any MRS-specific data used in selecting the surface water contaminants in the space provided.

Sediment was not sampled (2007 ASR, Section 1.4).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 24**

HHE Module: Surface Water - Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the surface water, select the box at the bottom of the table.

Contaminant	Maximum Concentration (µg/L)	Comparison Value (µg/L)	Ratios
CHF Scale	CHF Value	Sum The Ratios	0
CHF > 100	H (High)	$\text{CHF} = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	DIRECTIONS: Record the CHF Value from above in the box to the right (maximum value = H).	
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Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	<input type="checkbox"/> H
Potential	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.	<input type="checkbox"/> M
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 the presence of geological structures or physical controls).	<input type="checkbox"/> L

MIGRATORY PATHWAY FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	<input type="checkbox"/> H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	<input type="checkbox"/> M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	<input type="checkbox"/> L

RECEPTOR FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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No Known or Suspected Surface Water (Human Endpoint) MC Hazard

DIRECTIONS: Document any MRS-specific data used in selecting the surface water contaminants in the space provided.

Surface water was not sampled (2007 ASR, Section 1.4).

**J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 25**

HHE Module: Sediment - Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CAF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	CHF Value	Sum The Ratios	0
CHF > 100	H (High)	$\text{CHF} = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	DIRECTIONS: Record the CHF Value from above in the box to the right (maximum value = H).	
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Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely the sediment migratory pathway an the MRS.

Classification	Description	Value
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.	<input type="checkbox"/> H
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.	<input type="checkbox"/> M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point exposure (possibly due to the presence of geological structures or physical controls).	<input type="checkbox"/> L

MIGRATORY PATHWAY FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move,	<input type="checkbox"/> H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	<input type="checkbox"/> M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	<input type="checkbox"/> L

RECEPTOR FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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No Known or Suspected Sediment (Human Endpoint) MC Hazard

DIRECTIONS: Document any MRS-specific data used in selecting the surface water contaminants in the space provided.

Sediment was not sampled (2007 ASR, Section 1.4).

J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2

Table 26

HHE Module: Surface Soil Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface soil and their comparison values from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration of the comparison value. Determine the CAF by adding the contaminant ratios together including any additional surface soil contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard present in the surface soil select the box at the bottom of the table.

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	CHF Value	Sum The Ratios	0
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	DIRECTIONS: Record the CHF Value from above in the box to the right (maximum value = H).	
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Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface soil is present at, moving toward, or has moved to a point of exposure.	<input type="checkbox"/> H
Potential	Contamination in surface 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.	<input type="checkbox"/> M
Confined	Information indicates a low potential for contaminant migration from the source via the surface soil to a potential point of exposure (possibly due to the presence of geological structures or physical controls).	<input type="checkbox"/> L

MIGRATORY PATHWAY FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface soil to which contamination has moved or can move.	<input type="checkbox"/> H
Potential	Potential for receptors to have access to surface soil to which contamination has moved or can move.	<input type="checkbox"/> M
Limited	Little or no potential for receptors to have access to surface soil to which contamination has moved or can move.	<input type="checkbox"/> L

RECEPTOR FACTOR	DIRECTIONS: Record the single highest value from above in the box to the right (maximum value = H).	
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No Known or Suspected Surface Soil MC Hazard

DIRECTIONS: Document any MRS-specific data used in selecting the surface soil contaminants in the space provided.

Surface soil was not sampled (2007 ASR, Section 1.4).

J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2

Table 28 Determining the HHE Module Rating

DIRECTIONS: 1. Record the letter values (H, M, L) for the Contaminant Hazard, Migration Pathway, and Receptor Factors for the media (from Tables 21-26) in the corresponding boxes below. 2. Record the media's three-letter combinations in the Three-letter Combination boxes below (three-letter combinations are arranged from Hs to Ms to Ls). 3. Using the HHE Ratings provided below, determine each media's rating (A-G) and record the letter in the corresponding Media Rating box below.

Media (Source)	Contaminant Hazard Factor Value	Migratory Pathway Factor Value	Receptor Factor Value	Three-Letter Combination (Hs-Ms-Ls)	Media Rating (A-G)	
Groundwater (Table 21)						
Surface Water/Human Endpoint (Table 22)						
Sediment/Human Endpoint (Table 23)						
Surface Water/Ecological Endpoint (Table 24)						
Sediment/Ecological Endpoint (Table 25)						
Surface Soil (Table 26)						
<p>DIRECTIONS (cont.): 4. Select the single highest Media Rating (A is highest; G is lowest) and enter the letter in the HHE Module Rating box.</p> <p>Note: An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more media, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.</p>	HHE MODULE RATING			Evaluation Pending		
	HHE Ratings (for reference only)					
	Combination			Rating		
	HHH			A		
	HHM			B		
	HHL			C		
	HMM			D		
	HML			E		
	MMM			F		
	HLL			G		
	MML			G		
	MLL			G		
LLL			G			
Alternative Module Ratings			<input checked="" type="checkbox"/> Evaluation Pending <input type="checkbox"/> No Longer Required <input type="checkbox"/> No Known or Suspected MC Hazard			

HHE Module Description (4000 characters max):

J09CA0168 WINONA BT 2 (#91) - 01 - MMRP - Winona Bombing Target No. 2
Table 29
MRS Priority

DIRECTIONS: In the chart below, circle the letter rating for each module recorded in Table 10 (EHE), Table 20 (CHE), and Table 28 (HHE). Circle the corresponding numerical priority for each module. If information to determine the module rating is not available, choose the appropriate alternative module rating. The MRS Priority is the single highest priority; record this relative priority in the MRS Priority or Alternative MRS Rating at the bottom of the table.

Note: An MRS assigned Priority 1 has the highest relative priority; an MRS assigned Priority 8 has the lowest relative priority. Only an MRS with CWM known or suspected to be present can be assigned Priority 1; an MRS that has CWM known or suspected to be present cannot be assigned Priority 8.

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	3	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Evaluation Pending		Evaluation Pending		Evaluation Pending	
No Longer Required		No Longer Required		No Longer Required	
No Known or Suspected Explosive Hazard		No Known or Suspected CWM Hazard		No Known or Suspected MC Hazard	
MRS Priority or Alternative MRS Rating				6	