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transfer screening in accordance with the Federal Property Management Regulations (41 CFR 101-47.303-2) based upon the uses identified in the redevelopment plan. Federal sponsoring agencies shall notify eligible applicants that any request for property must be consistent with the uses identified in the redevelopment plan. At the request of the LRA, the Military Department may conduct the official State and local public benefit screening at any time after the publication of available property described at §176.20(b).

- (b) Environmental analysis. Prior to disposal of any real property, the Military Department shall, consistent with NEPA and section 2905 of the Defense Base Closure and Realignment Act of 1990, as amended (10 U.S.C. 2687 note), complete an environmental impact analysis of all reasonable disposal alternatives. The Military Department shall consult with the LRA throughout the environmental impact analysis process to ensure both that the LRA is provided the most current environmental information available concerning the installation, and that the Military Department receives the most current information available concerning the LRA's redevelopment plans for the installation.
- (c) Disposal. Upon receipt of a notice of approval of an application from HUD under §176.35(c)(1) or §176.35(d)(2), DoD shall dispose of buildings and property in accordance with the record of decision or other decision document prepared under §176.45(b). Disposal of buildings and property to be used as homeless assistance facilities shall be to either the LRA or directly to the representative(s) of the homeless and shall be without consideration. Upon receipt of a notice from HUD under §176.40(b), DoD will dispose of the buildings and property at the installation in consultation with HUD and the LRA.
- (d) *LRA's responsibility*. The LRA shall be responsible for the implementation of and compliance with legally binding agreements under the application.
- (e) Reversions to the LRA. If a building or property reverts to the LRA under a legally binding agreement under the application, the LRA shall take appro-

priate actions to secure, to the maximum extent practicable, the utilization of the building or property by other homeless representatives to assist the homeless. An LRA may not be required to utilize the building or property to assist the homeless.

# PART 179—MUNITIONS RESPONSE SITE PRIORITIZATION PROTOCOL (MRSPP)

Sec.

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APPENDIX A TO PART 179—TABLES OF THE MUNITIONS RESPONSE SITE PRIORITIZATION PROTOCOL (MRSPP).

AUTHORITY: 10 U.S.C. 2710 et seq.

SOURCE: 70 FR 58028, Oct. 5, 2005, unless otherwise noted.

### §179.1 Purpose.

The Department of Defense (the Department) is adopting this Munitions Response Site Prioritization Protocol (MRSPP) (hereinafter referred to as the "rule") under the authority of 10 U.S.C. 2710(b). Provisions of 10 U.S.C. 2710(b) require that the Department assign to each defense site in the inventory required by 10 U.S.C. 2710(a) a relative priority for response activities based on the overall conditions at each location and taking into consideration various factors related to safety and environmental hazards.

## §179.2 Applicability and scope.

- (a) This part applies to the Office of the Secretary of Defense, the Military Departments, the Defense Agencies and the Department Field Activities, and any other Department organizational entity or instrumentality established to perform a government function (hereafter referred to collectively as the "Components").
- (b) The rule in this part shall be applied at all locations:
- (1) That are, or were, owned by, leased to, or otherwise possessed or used by the Department, and

- (2) That are known to, or suspected of, containing unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC), and
- (3) That are included in the inventory established pursuant to 10 U.S.C. 2710(a)
- (c) The rule in this part shall not be applied at the locations not included in the inventory required under 10 U.S.C. 2710(a). The locations not included in the inventory are:
- (1) Locations that are not, or were not, owned by, leased to, or otherwise possessed or used by the Department,
- (2) Locations neither known to contain, or suspected of containing, UXO, DMM, or MC,
- (3) Locations outside the United States,
- (4) Locations where the presence of military munitions results from combat operations.
- (5) Currently operating military munitions storage and manufacturing facilities.
- (6) Locations that are used for, or were permitted for, the treatment or disposal of military munitions, and
  - (7) Operational ranges.

# § 179.3 Definitions.

This part includes definitions for many terms that clarify its scope and applicability. Many of the terms relevant to this part are already defined, either in 10 U.S.C. 101, 10 U.S.C. 2710(e), or the Code of Federal Regulations. Where this is the case, the statutory and regulatory definitions are repeated here strictly for ease of reference. Citations to the U.S. Code or the Code of Federal Regulations are provided with the definition, as applicable. Unless used elsewhere in the U.S. Code or the Code of Federal Regulations, these terms are defined only for purposes of this part.

Barrier means a natural obstacle or obstacles (e.g., difficult terrain, dense vegetation, deep or fast-moving water), a man-made obstacle or obstacles (e.g., fencing), and combinations of natural and man-made obstacles.

Chemical agent (CA) means a chemical compound (to include experimental compounds) that, through its chemical properties produces lethal or other

damaging effects on human beings, is intended for use in military operations to kill, seriously injure, or incapacitate persons through its physiological effects. Excluded are research, development, testing and evaluation (RDTE) solutions; riot control agents; chemical defoliants and herbicides; smoke and other obscuration materials; flame and incendiary materials; and industrial chemicals. (This definition is based on the definition of "chemical agent and munition" in 50 U.S.C. 1521(j)(1).)

Chemical Agent (CA) Hazard is a condition where danger exists because CA is present in a concentration high enough to present potential unacceptable effects (e.g., death, injury, damage) to people, operational capability, or the environment.

Chemical Warfare Materiel (CWM) means generally configured as a munition containing a chemical compound that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM includes V- and G-series nerve agents or H-series (mustard) and L-series (lewisite) blister agents in other-than-munition configurations; and certain industrial chemicals (e.g., hydrogen cyanide (AC), cyanogen chloride (CK), or carbonyl dichloride (called phosgene or CG)) configured as a military munition. Due to their hazards, prevalence, and military-unique application, chemical agent identification sets (CAIS) are also considered CWM. CWM does not include riot control devices; chemical defoliants and herbicides; industrial chemicals (e.g., AC, CK, or CG) not configured as a munition; smoke and other obscuration-producing items; flame and incendiary-producing items; or soil, water, debris, or other media contaminated with low concentrations of chemical agents where no CA hazards exist. For the purposes of this Protocol, CWM encompasses four subcategories of specific materials:

(1) CWM, explosively configured are all munitions that contain a CA fill and any explosive component. Examples are M55 rockets with CA, the M23 VX mine, and the M360 105-mm GB artillery cartridge.

(2) CWM, nonexplosively configured are all munitions that contain a CA fill, but that do not contain any explosive

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components. Examples are any chemical munition that does not contain explosive components and VX or mustard agent spray canisters.

(3) CWM, bulk container are all non-munitions-configured containers of CA (e.g., a ton container) and CAIS K941, toxic gas set M-1 and K942, toxic gas set M-2/E11.

(4) CAIS are military training aids containing small quantities of various CA and other chemicals. All forms of CAIS are scored the same in this rule, except CAIS K941, toxic gas set M-1; and CAIS K942, toxic gas set M-2/E11, which are considered forms of CWM, bulk container, due to the relatively large quantities of agent contained in those types of sets.

Components means the Office of the Secretary of Defense, the Military Departments, the Defense Agencies, the Department Field Activities, and any other Department organizational entity or instrumentality established to perform a government function.

Defense site means locations that are or were owned by, leased to, or otherwise possessed or used by the Department. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions. (10 U.S.C. 2710(e)(1))

Discarded military munitions (DMM) means military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2))

Explosive hazard means a condition where danger exists because explosives are present that may react (e.g., detonate, deflagrate) in a mishap with potential unacceptable effects (e.g., death, injury, damage) to people, property, operational capability, or the environment.

Military munitions means all ammunition products and components produced for or used by the armed forces

for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, and demolition charges; and devices and components of any item thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101(e)(4)

Military range means designated land and water areas set aside, managed, and used to research, develop, test, and evaluate military munitions, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas. (40 CFR 266.201)

Munitions and explosives of concern distinguishes specific categories of military munitions that may pose unique explosives safety risks, such as UXO, as defined in 10 U.S.C. 101(e)(5); discarded military munitions, as defined in 10 U.S.C. 2710(e)(2); or munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions constituents means any materials originating from UXO, discarded military munitions, or other military munitions, including explosive and nonexplosive materials, and

emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710(e)(3))

Munitions response means response actions, including investigation, removal actions, and remedial actions, to address the explosives safety, human health, or environmental risks presented by UXO, discarded military munitions (DMM), or munitions constituents (MC), or to support a determination that no removal or remedial action is required.

Munitions response area (MRA) means any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples are former ranges and munitions burial areas. An MRA comprises one or more munitions response sites.

Munitions response site (MRS) means a discrete location within an MRA that is known to require a munitions response.

Operational range means a range that is under the jurisdiction, custody, or control of the Secretary of Defense and that is used for range activities, or although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities. (10 U.S.C. 101(e)(3))

Range means a designated land or water area that is set aside, managed, and used for range activities of the Department of Defense. The term includes firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas. The term also includes airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration. (10 U.S.C. 101(e)(1)(A) and (B))

Range activities means research, development, testing, and evaluation of military munitions, other ordnance, and weapons systems; and the training of members of the armed forces in the use and handling of military munitions, other ordnance, and weapons systems. (10 U.S.C. 101(3)(2))

Unexploded ordnance (UXO) means military munitions that:

- (1) Have been primed, fuzed, armed, or otherwise prepared for action;
- (2) Have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and
- (3) Remain unexploded, whether by malfunction, design, or any other cause. (10 U.S.C. 101(e)(5))

United States means, in a geographic sense, the states, territories, and possessions and associated navigable waters, contiguous zones, and ocean waters of which the natural resources are under the exclusive management authority of the United States. (10 U.S.C. 2710(e)(10))

# §179.4 Policy.

- (a) In assigning a relative priority for response activities, the Department generally considers those MRSs posing the greatest hazard as being the highest priority for action. The priority assigned should be based on the overall conditions at each MRS, taking into consideration various factors relating to safety and environmental hazard potential.
- (b) In addition to the priority assigned to an MRS, other considerations (e.g., availability of specific equipment, intended reuse, stakeholder interest) can affect the sequence in which munitions response actions at a specific MRS are funded.
- (c) It is Department policy to ensure that U.S. EPA, other federal agencies (as appropriate or required), state regulatory agencies, tribal governments, local restoration advisory boards or technical review committees, and local stakeholders are offered opportunities to participate in the application of the rule in this part and making sequencing recommendations.

# $\S 179.5$ Responsibilities.

Each Component shall:

(a) Apply the rule in this part to each MRS under its administrative control when sufficient data are available to populate all the data elements within any or all of the three hazard evaluation modules that comprise the rule. Upon further delineation and characterization of an MRA into more than one MRS, Components shall reapply

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the rule to all MRSs within the MRA. In such cases where data are not sufficient to populate one or two of the hazard evaluation modules (e.g., there are no constituent sampling data for the Health Hazard Evaluation [HHE] module), Components will assign a priority based on the hazard evaluation modules evaluated and reapply the rule once sufficient data are available to apply the remaining hazard evaluation modules.

- (b) Ensure that the total acreage of each MRA is evaluated using this rule (i.e., ensure the all MRSs within the MRA are evaluated).
- (c) Ensure that EPA, other federal agencies (as appropriate or required), state regulatory agencies, tribal governments, local restoration advisory boards or technical review committees, local community stakeholders, and the current landowner (if the land is outside Department control) are offered opportunities as early as possible and throughout the process to participate in the application of the rule and making sequencing recommendations.
- (1) To ensure EPA, other federal agency, state regulatory agencies, tribal governments, and local government officials are aware of the opportunity to participate in the application of the rule, the Component organization responsible for implementing a munitions response at the MRS shall notify the heads of these organizations (or their designated point of contact), as appropriate, seeking their involvement prior to beginning prioritization. Records of the notification will be placed in the Administrative Record and Information Repository for the MRS.
- (2) Prior to beginning prioritization, the Component organization responsible for implementing a munitions response at the MRS shall publish an announcement in local community publications requesting information pertinent to prioritization or sequencing decisions to ensure the local community is aware of the opportunity to participate in the application of the rule.
- (d) Establish a quality assurance panel of Component personnel to review, initially, all MRS prioritization decisions. Once the Department determines that its Components are apply-

ing the rule in a consistent manner and the rule's application leads to decisions that are representative of site conditions, the Department may establish a sampling-based approach for its Components to use for such reviews. This panel reviewing the priority assigned to an MRS shall not include any participant involved in applying the rule to that MRS. If the panel recommends a change that results in a different priority, the Component shall report, in the inventory data submitted to the Office of the Deputy Under Secretary of Defense (Installations & Environment) (ODUSD[I&E]), the rationale for this change. The Component shall also provide this rationale to the appropriate regulatory agencies and involved stakeholders for comment before finalizing the change.

- (e) Following the panel review, submit the results of applying the rule along with the other inventory data that 10 U.S.C. 2710(c) requires be made publicly available, to the ODUSD(I&E). The ODUSD(I&E) shall publish this information in the report on environmental restoration activities for that fiscal year. If sequencing decisions result in action at an MRS with a lower MRS priority ahead of an MRS with a higher MRS priority, the Component shall provide specific justification to the ODUSD(I&E).
- (f) Document in a Management Action Plan (MAP) or its equivalent all aspects of the munitions responses required at all MRSs for which that MAP is applicable. Department guidance requires that MAP be developed and maintained at an installation (or Formerly Used Defense Site [FUDS] property) level and address each site at that installation or FUDS. For the FUDS program, a statewide MAP may also be developed.
- (g) Develop sequencing decisions at installations and FUDS with input from appropriate regulators and stakeholders (e.g., community members of an installation's restoration advisory board or technical review committee), and document this development in the MAP. Final sequencing may be impacted by Component program management considerations. If the sequencing of any MRS is changed from the sequencing reflected in the current MAP.

the Component shall provide information to the appropriate regulators and stakeholders documenting the reasons for the sequencing change, and shall request their review and comment on that decision.

- (h) Ensure that information provided by regulators and stakeholders that may influence the priority assigned to an MRS or sequencing decision concerning an MRS is included in the Administrative Record and the Information Repository.
- (i) Review each MRS priority at least annually and update the priority as necessary to reflect new information. Reapplication of the rule is required under any of the following circumstances:
- (1) Upon completion of a response action that changes site conditions in a manner that could affect the evaluation under this rule.
- (2) To update or validate a previous evaluation at an MRS when new information is available.
- (3) To update or validate the priority assigned where that priority has been previously assigned based on evaluation of only one or two of the three hazard evaluation modules.
- (4) Upon further delineation and characterization of an MRA into MRSs.
- (5) To categorize any MRS previously classified as "evaluation pending."

# §179.6 Procedures.

The rule in this part comprises the following three hazard evaluation modules

- (a) Explosive Hazard Evaluation (EHE) module.
- (1) The EHE module provides a single, consistent, Department-wide approach for the evaluation of explosive hazards. This module is used when there is a known or suspected presence of an explosive hazard. The EHE module is composed of three factors, each of which has two to four data elements that are intended to assess the specific conditions at an MRS. These factors are:
- (i) Explosive hazard, which has the data elements Munitions Type and Source of Hazard and constitutes 40 percent of the EHE module score. (See appendix A to this part, tables 1 and 2.)

- (ii) Accessibility, which has the data elements Location of Munitions, Ease of Access, and Status of Property and constitutes 40 percent of the EHE module score. (See appendix A, tables 3, 4, and 5.)
- (iii) Receptors, which has the data elements *Population Density*, *Population Near Hazard*, *Types of Activities/Structures*, and *Ecological and/or Cultural Resources* and constitutes 20 percent of the EHE module score. (See appendix A, tables 6, 7, 8, and 9.)
- (2) Based on MRS-specific information, each data element is assigned a numeric score, and the sum of these score is the EHE module score. The EHE module score results in an MRS being placed into one of the following ratings. (See appendix A, table 10.)
- (i) EHE Rating A (Highest) is assigned to MRSs with an EHE module score from 92 to 100.
- (ii) EHE Rating B is assigned to MRSs with an EHE module score from 82 to 91
- (iii) EHE Rating C is assigned to MRSs with an EHE module score from 71 to 81.
- (iv)  $EHE\ Rating\ D$  is assigned to MRSs with an EHE module score from 60 to 70.
- (v) EHE Rating E is assigned to MRSs with an EHE module score from 48 to 59.
- (vi) EHE Rating F is assigned to MRSs with an EHE module score from 38 to 47.
- (vii) EHE Rating G (Lowest) is assigned to MRSs with an EHE module score less than 38.
- (3) There are also three other possible outcomes for the EHE module:
- (i) Evaluation pending. This category is used when there are known or suspected UXO or DMM, but sufficient information is not available to populate the nine data elements of the EHE module.
- (ii) No longer required. This category is reserved for MRSs that no longer require an assigned priority because the Department has conducted a response, all objectives set out in the decision document for the MRS have been achieved, and no further action, except for long-term management and recurring reviews, is required.

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- (iii) No known or suspected explosive hazard. This category is reserved for MRSs that do not require evaluation under the EHE module.
- (4) The EHE module rating shall be considered with the CHE and HHE module ratings to determine the MRS priority.
- (5) MRSs lacking information for determining an EHE module rating shall be programmed for additional study and evaluated as soon as sufficient data are available. Until an EHE module rating is assessed, MRSs shall be rated as "evaluation pending" for the EHE module.
- (b) Chemical Warfare Materiel Hazard Evaluation (CHE) module. (1) The CHE module provides an evaluation of the chemical hazards associated with the physiological effects of CWM. The CHE module is used only when CWM are known or suspected of being present at an MRS. Like the EHE module, the CHE module has three factors, each of which has two to four data elements that are intended to assess the conditions at an MRS.
- (i) CWM hazard, which has the data elements CWM Configuration and Sources of CWM and constitutes 40 percent of the CHE score. (See appendix A to this part, tables 11 and 12.)
- (ii) Accessibility, which focuses on the potential for receptors to encounter the CWM known or suspected to be present on an MRS. This factor consists of three data elements, Location of CWM, Ease of Access, and Status of Property, and constitutes 40 percent of the CHE score. (See appendix A, tables 13, 14, and 15.)
- (iii) Receptor, which focuses on the human and ecological populations that may be impacted by the presence of CWM. It has the data elements Population Density, Population Near Hazard, Types of Activities/Structures, and Ecological and/or Cultural Resources and constitutes 20 percent of the CHE score. (See appendix A, tables 16, 17, 18, and 19.)
- (2) Similar to the EHE module, each data element is assigned a numeric score, and the sum of these scores (i.e., the CHE module score) is used to determine the CHE rating. The CHE module score results in an MRS being placed

- into one of the following ratings. (See appendix A, table 20.)
- (i) CHE Rating A (Highest) is assigned to MRSs with a CHE score from 92 to 100.
- (ii) CHE Rating B is assigned to MRSs with a CHE score from 82 to 91.
- (iii) CHE Rating C is assigned to MRSs with a CHE score from 71 to 81.
- (iv) CHE Rating D is assigned to MRSs with a CHE score from 60 to 70.
- (v)  $CHE\ Rating\ E$  is assigned to MRSs with a CHE score from 48 to 59.
- (vi) CHE Rating F is assigned to MRSs with a CHE score from 38 to 47.
- (vii)  $\it{CHE}$   $\it{Rating}$   $\it{G}$  ( $\it{Lowest}$ ) is assigned to MRSs with a CHE score less than 38.
- (3) There are also three other potential outcomes for the CHE module:
- (i) Evaluation pending. This category is used when there are known or suspected CWM, but sufficient information is not available to populate the nine data elements of the CHE module.
- (ii) No longer required. This category is reserved for MRSs that no longer require an assigned priority because the Department has conducted a response, all objectives set out in the decision document for the MRS have been achieved, and no further action, except for long-term management and recurring reviews, is required.
- (iii) No known or suspected CWM hazard. This category is reserved for MRSs that do not require evaluation under the CHE module.
- (4) The CHE rating shall be considered with the EHE module and HHE module ratings to determine the MRS priority.
- (5) MRSs lacking information for assessing a CHE module rating shall be programmed for additional study and evaluated as soon as sufficient data are available. Until a CHE module rating is assigned, the MRS shall be rated as "evaluation pending" for the CHE module.
- (c) Health Hazard Evaluation (HHE) module.
- (1) The HHE provides a consistent Department-wide approach for evaluating the relative risk to human health and the environment posed by MC. The HHE builds on the RRSE framework that is used in the Installation Restoration Program (IRP) and has been

modified to address the unique requirements of MRSs. The HHE module shall be used for evaluating the potential hazards posed by MC and other chemical contaminants. The HHE module is intended to evaluate MC at sites. Any incidental nonmunitions-related contaminants may be addressed incidental to a munitions response under the MMRP.

- (2) The module has three factors:
- (i) Contamination Hazard Factor (CHF), which indicates MC, and any nonmunitions-related incidental contaminants present; this factor contributes a level of High (H), Middle (M), or Low (L) based on Significant, Moderate, or Minimal contaminants present, respectively. (See appendix A to this part, table 21.)
- (ii) Receptor Factor (RF), which indicates the receptors; this factor contributes a level of H, M, or L based on Identified, Potential, or Limited receptors, respectively. (See appendix A, table 21.)
- (iii) Migration Pathway Factor (MPF), which indicates environmental migration pathways, and contributes a level of H, M, or L based on Evident, Potential or Confined pathways, respectively. (See appendix A, table 21.)
- (3) The H, M, and L levels for the CHF, RF, and MPF are combined in a matrix to obtain composite three-letter combination levels that integrate considerations of all three factors. (See appendix A, table 22.)
- (4) The three-letter combination levels are organized by frequency, and the resulting frequencies result in seven HHE ratings. (See appendix A, table 23.)
- (i) HHE Rating A (Highest) is assigned to MRSs with an HHE combination level of high for all three factors.
- (ii) HHE Rating B is assigned to MRSs with a combination level of high for CHF and RF and medium for MPF (HHM).
- (iii) HHE Rating C is assigned to MRSs with a combination level of high for the CHF and RF and low for MPF (HHL), or high for CHF and medium for the RF and MPF (HMM).
- (iv) HHE Rating D is assigned to MRSs with a combination level of high for the CHF, medium for the RF, and low for the MPF (HML), or medium for all three factors (MMM).

- (v) HHE Rating E is assigned to MRSs with a combination level of high for the CHF and low for the RF and MPF (HLL), or medium for the CHF and RF and low for the MPF (MML).
- (vi) HHE Rating F is assigned to MRSs with a combination level of medium for the CHF and low for the RF and MPF (MLL).
- (vii) HHE Rating G (Lowest) is assigned to MRSs with a combination level of low for all three factors (LLL).
- (5) The HHE three-letter combinations are replaced by the seven HHE ratings. (See appendix A, table 24.)
- (6) There are also three other potential outcomes for the HHE module:
- (i) Evaluation pending. This category is used when there are known or suspected MC, and any incidental non-munitions-related contaminants present, but sufficient information is not available to determine the HHE module rating.
- (ii) No longer required. This category is reserved for MRSs that no longer require an assigned MRS priority because the Department has conducted a response, all objectives set out in the decision document for the MRS have been achieved, and no further action, except for long-term management and recurring reviews, is required.
- (iii) No known or suspected munitions constituent hazard. This rating is reserved for MRSs that do not require evaluation under the HHE module.
- (7) The HHE module rating shall be considered with the EHE and CHE module ratings to determine the MRS priority.
- (8) MRSs lacking information sufficient for assessing an HHE module rating shall be programmed for additional study and evaluated as soon as sufficient data are available. Until an HHR module rating is assigned, the MRS shall be classified as "evaluation pending" for the HHE module.
- (d) Determining the MRS priority. (1) An MRS priority is determined based on integrating the ratings from the EHE, CHE, and HHE modules. Until all three hazard evaluation modules have been evaluated, the MRS priority shall be based on the results of the modules completed.

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- (2) Each MRS is assigned to one of eight MRS priorities based on the ratings of the three hazard evaluation modules, where Priority 1 indicates the highest potential hazard and Priority 8 the lowest potential hazard. Under the rule in this part, only MRSs with CWM can be assigned to Priority 1 and no MRS with CWM can be assigned to Priority 8. (See appendix A to this part, table 25.)
- (3) An "evaluation pending" rating is used to indicate that an MRS requires further evaluation. This designation is only used when none of the three modules has a numerical rating (i.e., 1 through 8) and at least one module is rated "evaluation pending." The Department shall develop program metrics focused on reducing the number of MRSs with a status of "evaluating pending" for any of the three modules. (See appendix A, table 25.)
- (4) A "no longer required" rating is used to indicate that an MRS no longer requires prioritization. The MRS will receive this rating when none of the three modules has a numerical (i.e., 1 through 8) or an "evaluation pending" designation, and at least one of the modules is rated "no longer required."
- (5) A rating of "no known or suspected hazard" is used to indicate that an MRS has no known or expected hazard. This designation is used only when the hazard evaluation modules are rated as "no known or suspected explosive hazard," "no known or suspected CWM hazard," and "no known or suspected MC hazard." (See appendix A, table 25.)

# §179.7 Sequencing.

(a) Sequencing considerations. The sequencing of MRSs for action shall be based primarily on the MRS priority determined through applying the rule in this part. Generally, an MRS that presents a greater relative risk to human health, safety, or the environment will be addressed before an MRS that presents a lesser relative risk. Other factors, however, may warrant consideration when determining the sequencing for specific MRSs. In evaluating other factors in sequencing decisions, the Department will consider a broad range of issues. These other, or risk-plus factors, do not influence or

- change the MRS priority, but may influence the sequencing for action. Examples of factors that the Department may consider are:
- (1) Concerns expressed by regulators or stakeholders.
- (2) Cultural and social factors.
- (3) Economic factors, including economic considerations pertaining to environmental justice issues, economies of scale, evaluation of total life cycle costs, and estimated valuations of long-term liabilities.
- (4) Findings of health, safety, or ecological risk assessments or evaluations based on MRS-specific data.
- (5) Reasonably anticipated future land use, especially when planning response actions, conducting evaluations of response alternatives, or establishing specific response action objectives.
- (6) A community's reuse requirements at Base Realignment and Closure (BRAC) installations.
- (7) Specialized considerations of tribal trust lands (held in trust by the United States for the benefit of any tribe or individual). The United States holds the legal title to the land and the tribe holds the beneficial interest.
- (8) Implementation and execution considerations (e.g., funding availability; the availability of the necessary equipment and people to implement a particular action; examination of alternatives to responses that entail significant capital investments, a lengthy period of operation, or costly maintenance; alternatives to removal or treatment of contamination when existing technology cannot achieve established standards [e.g., maximum contaminant levels]).
- (9) Mission-driven requirements.
- (10) The availability of appropriate technology (e.g., technology to detect, discriminate, recover, and destroy UXO).
- (11) Implementing standing commitments, including those in formal agreements with regulatory agencies, requirements for continuation of remedial action operations until response objectives are met, other long-term management activities, and program administration.
- (12) Established program goals and initiatives.

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- (13) Short-term and long-term ecological effects and environmental impacts in general, including injuries to natural resources.
- (b) Procedures and documentation for sequencing decisions. (1) Each installation or FUDS is required to develop and maintain a Management Action Plan (MAP) or its equivalent. Sequencing decisions, which will be documented in the MAP at military installations and FUDS, shall be developed with input from appropriate regulators and stakeholders (e.g., community members of an installation's restoration advisory board or technical review committee). If the sequencing of an MRS is changed from the sequencing reflected in the current MAP, information documenting the reasons for the sequencing change will be provided for inclusion in the MAP. Notice of the change in the sequencing shall be provided to those regulators and stakeholders that provided input to the sequencing process.
- (2) In addition to the information on prioritization, the Components shall ensure that information provided by regulators and stakeholders that may influence the sequencing of an MRS is included in the Administrative Record and the Information Repository.
- (3) Components shall report the results of sequencing to ODUSD(I&E) (or successor organizations). ODUSD(I&E) shall compile the sequencing results reported by each Component and publish the sequencing in the report on environmental restoration activities for that fiscal year. If sequencing decisions result in action at an MRS with a lower MRS priority ahead of an MRS with a higher priority, specific justification shall be provided to the ODUSD(I&E).

APPENDIX A TO PART 179—TABLES OF THE MUNITIONS RESPONSE SITE PRIORITIZATION PROTOCOL

The tables in this Appendix are solely for use in implementing 32 CFR part 179.

Clas	Table 1 sifications Within the EHE Module <i>Munitions Type</i> Data Element	
Classification	Description	Score
Sensitive	<ul> <li>All UXO that are considered likely to function upon any interaction with exposed persons (e.g., submunitions, 40mm high-explosive [HE] grenades, white phosphorus [WP] munitions, high-explosive antitank [HEAT] munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions).</li> <li>All hand grenades containing energetic filler.</li> <li>Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.</li> </ul>	30
High explosive (used or damaged)	<ul> <li>All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."</li> <li>All DMM containing a high-explosive filler that have:         <ul> <li>Been damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul> </li> </ul>	25
Pyrotechnic (used or damaged)	<ul> <li>All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).</li> <li>All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:         <ul> <li>Been damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul> </li> </ul>	20
High explosive (unused)	All DMM containing a high explosive filler that:	15
Propellant	<ul> <li>All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., rocket motor).</li> <li>All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., rocket motor) that are:         <ul> <li>Damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul> </li> </ul>	15
Bulk secondary high explosives, pyrotechnics, or propellant	<ul> <li>All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., rocket motor), that are deteriorated.</li> <li>Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.</li> </ul>	10

Table 1 Classifications Within the EHE Module <i>Munitions Type</i> Data Element		
Classification	Description	Score
Pyrotechnic (not used or damaged)	<ul> <li>All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:         <ul> <li>Have not been damaged by burning or detonation</li> <li>Are not deteriorated to the point of instability.</li> </ul> </li> </ul>	10
Practice	<ul> <li>All UXO that are practice munitions that are not associated with a sensitive fuze.</li> <li>All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:         <ul> <li>Been damaged by burning or detonation</li> <li>Deteriorated to the point of instability.</li> </ul> </li> </ul>	5
Riot control	All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	<ul> <li>All used munitions or DMM that are categorized as small arms ammunition. [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets, demolition charges) were used or are present on the MRS is required for selection of this category.]</li> </ul>	2
Evidence of no munitions	Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0

- Former (as in "former military range") means the MRS is a location that was (1) closed by a
  formal decision made by the Component with administrative control over the location, or (2)
  put to a use incompatible with the presence of UXO, DMM, or MC.
- Historical evidence means the investigation: (1) found written documents or records, (2)
  documented interviews of persons with knowledge of site conditions, or (3) found and verified
  other forms of information.
- Physical evidence means: (1) recorded observations from on-site investigations, such as
  finding intact UXO or DMM, or munitions debris (e.g., fragments, penetrators, projectiles,
  shell casings, links, fins); (2) the results of field or laboratory sampling and analysis
  procedures; or (3) the results of geophysical investigations.
- Practice munitions means munitions that contain an inert filler (e.g., wax, sand, concrete), a
  spotting charge (i.e., a small charge of red phosphorus, photoflash powder, or black powder
  used to indicate the point of impact), and a fuze.
- The term *small arms ammunition* means ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns.

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Classific Classification	Table 2 cations Within the EHE Module Source of Hazard Data Element  Description	Score
Former range	<ul> <li>The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.</li> </ul>	10
Former munitions treatment (i.e., OB/OD) unit	<ul> <li>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.</li> </ul>	8
Former practice munitions range	The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	<ul> <li>The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.</li> </ul>	4
Former missile or air defense artillery emplacements	The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	<ul> <li>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).</li> </ul>	2
Former small arms range	The MRS is a former military range where only small arms ammunition was used. [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.]	1
Evidence of no munitions	<ul> <li>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.</li> </ul>	0

- Former (as in "former military range") means the MRS is a location that was (1) closed by a
  formal decision made by the Component with administrative control over the location, or (2)
  put to a use incompatible with the presence of UXO, DMM, or MC.
- Historical evidence means the investigation: (1) found written documents or records, (2) documented interviews of persons with knowledge of site conditions, or (3) found and verified other forms of information.
- Physical evidence means: (1) recorded observations from on-site investigations, such as
  finding intact UXO or DMM, or munitions debris (e.g., fragments, penetrators, projectiles,
  shell casings, links, fins); (2) the results of field or laboratory sampling and analysis
  procedures; or (3) the results of geophysical investigations.
- Practice munitions means munitions that contain an inert filler (e.g., wax, sand, concrete), a
  spotting charge (i.e., a small charge of red phosphorus, photoflash powder, or black powder
  used to indicate the point of impact), and a fuze.
- The term *small arms ammunition* means ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or below, or for shotguns.

01:(:	Table 3	Data
Classifications	: Within the EHE Module <i>Information on the Location of Munitions</i> Element	Data
Classification	Description	Score
Confirmed surface	<ul> <li>Physical evidence indicates that there are UXO or DMM on the surface of the MRS.</li> <li>Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.</li> </ul>	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> <li>Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.</li> </ul>	15
Suspected (physical evidence)	There is physical evidence (e.g., munitions debris, such 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.	10
Suspected (historical evidence)	There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2

Classifications	Table 3 Within the EHE Module <i>Information on the Location of Munitions</i> Element	Data
Classification	Description	Score
Small arms (regardless of location)	The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability. [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.]	1
Evidence of no munitions	Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0

- Historical evidence means the investigation: (1) found written documents or records, (2)
  documented interviews of persons with knowledge of site conditions, or (3) found and verified
  other forms of information.
- Physical evidence means: (1) recorded observations from on-site investigations, such as
  finding intact UXO or DMM, or munitions debris (e.g., fragments, penetrators, projectiles,
  shell casings, links, fins); (2) the results of field or laboratory sampling and analysis
  procedures; or (3) the results of geophysical investigations.
- In the subsurface means the munition (i.e., a DMM or UXO) is (1) entirely beneath the ground surface, or (2) fully submerged in a water body.
- On the surface means the munition (i.e., a DMM or UXO) is (1) entirely or partially exposed
  above the ground surface (i.e., above the soil layer), or (2) entirely or partially exposed above
  the surface of a water body (e.g., as a result of tidal activity).
- The term small arms ammunition means ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns.

Clas Classification	Table 4 ssifications Within the EHE Module <i>Ease of Access</i> Data Element Description	Score
No barrier	There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete, but not monitored	There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
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Notes:

 Barrier means a natural obstacle or obstacles (e.g., difficult terrain, dense vegetation, deep or fast-moving water), a man-made obstacle or obstacles (e.g., fencing), or a combination of natural and man-made obstacles.

	Table 5	
Classifications Within the EHE Status of Property Data Element		
Classification	Description	Score
Non-DoD control	<ul> <li>The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by the Department. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.</li> </ul>	5
Scheduled for transfer from DoD control	The MRS is on land or is a water body that is owned, leased, or otherwise possessed by the Department, and the Department plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	The MRS is on land or is a water body that is owned, leased, or otherwise possessed by the Department. With respect to property that is leased or otherwise possessed, the Department must control access to the MRS 24 hours per day, every day of the calendar year.	0

Table 6 Classifications Within the EHE Module <i>Population Density</i> Data Element			
Classification	Definition	Score	
> 500 persons per square mile	There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5	
100 to 500 persons per square mile	<ul> <li>There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.</li> </ul>	3	
< 100 persons per square mile	<ul> <li>There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.</li> </ul>	1	

 If an MRS is in more than one county, the Component will use the largest population value among those counties. If the MRS is within or borders a city or town, the population density for that city or town, instead of the county population density, is used.

Table 7 Classifications Within the EHE Module <i>Population Near Hazard</i> Data Element		
Classification	Description	Score
26 or more 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.	5
16 to 25	There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15	There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10	There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5	There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0	There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0

### Notes

 The term inhabited structures means permanent or temporary structures, other than military munitions-related structures, that are routinely occupied by one or more persons for any portion of a day.

Table 8 Classifications Within the EHE Module <i>Types of Activities/Structures</i> Data Element		
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.	5
Parks and recreational areas	<ul> <li>Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.</li> </ul>	4
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.	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.	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.	1

# Notes:

 The term inhabited structures means permanent or temporary structures, other than Department-related structures, that are routinely occupied by one or more persons for any portion of a day.

Table 9 Classifications Within the EHE Module Ecological and/or Cultural Resources Data Element			
Classification	Description	Score	
Ecological and cultural resources present	There are both ecological and cultural resources present on the MRS.	5	
Ecological resources present	There are ecological resources present on the MRS.	3	
Cultural resources present	There are cultural resources present on the MRS.	3	
No ecological or cultural resources present	There are no ecological resources or cultural resources present on the MRS.	0	

- Ecological resources means that (1) a threatened or endangered species (designated under the Endangered Species Act [ESA]) is present on the MRS; or (2) the MRS is designated under the ESA as critical habitat for a threatened or endangered species; or (3) there are identified sensitive ecosystems such as wetlands or breeding grounds present on the MRS.
- Cultural resources means there are recognized cultural, traditional, spiritual, religious, or
  historical features (e.g., structures, artifacts, symbolism) on the MRS. Requirements for
  determining if a particular feature is a cultural resource are found in the National Historic
  Preservation Act, Native American Graves Protection and Repatriation Act, Archeological
  Resources Protection Act, Executive Order 13007, and the American Indian Religious
  Freedom Act. As examples: American Indians or Alaska Natives deem an MRS to be of
  religious significance; there are areas used by American Indians or Alaska Natives for
  subsistence activities (e.g., hunting, fishing).

Table 10  Determining the EHE Rating from the EHE Module Score		
Overall EHE Module Score	EHE Rating	
The MRS has an overall EHE module score from 92 to 100.	EHE Rating A	
The MRS has an overall EHE module score from 82 to 91.	EHE Rating B	
The MRS has an overall EHE module score from 71 to 81.	EHE Rating C	
The MRS has an overall EHE module score from 60 to 70.	EHE Rating D	
The MRS has an overall EHE module score from 48 to 59.	. EHE Rating E	
The MRS has an overall EHE module score from 38 to 47.	EHE Rating F	
The MRS has an overall EHE module score less than 38.	EHE Rating G	
Alternative Module Ratings	Evaluation Pending	
	No Longer Required	
	No Known or Suspected Explosive Hazard	

Classification	Table 11 s Within the CHE Module <i>CWM Configuration</i> Data Element		
Classification Description			
CWM, explosive configuration, either UXO or damaged DMM	The CWM known or suspected of being present at the MRS is:  Explosively configured CWM that are UXO (i.e., CWM/UXO).  Explosively configured CWM that are DMM (i.e., CWM/DMM) that have been damaged.	30	
CWM mixed with UXO	<ul> <li>The CWM known or suspected of being present at the MRS are explosively configured CWM/DMM that have not been damaged, or nonexplosively configured CWM/DMM, or CWM not configured as a munition, that are commingled with conventional munitions that are UXO.</li> </ul>	25	
CWM, explosive configuration that are DMM (undamaged)	The CWM known or suspected of being present at the MRS are explosively configured CWM/DMM that have not been damaged.	20	
CWM, not explosively configured or CWM, bulk container	The CWM known or suspected of being present at the MRS is:  Nonexplosively configured CWM/DMM.  Bulk CWM/DMM (e.g., ton container).	15	
CAIS K941 and CAIS K942	The CWM/DMM known or suspected of being present at the MRS is CAIS K941-toxic gas set M-1 or CAIS K942-toxic gas set M-2/E11.	12	
CAIS (chemical agent identification sets)	Only CAIS, other than CAIS K941 and K942, are known or suspected of being present at the MRS.	10	
Evidence of no CWM	<ul> <li>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.</li> </ul>	0	

- The term CWM/UXO means CWM that are UXO.
- The notation CWM/DMM means CWM that are DMM, to include CAIS K941, toxic gas set M-1; and K942, toxic gas set M-2/E11.
- The term CAIS/DMM means CAIS, other than CAIS K941 and K942.
- Historical evidence means the investigation: (1) found written documents or records, (2) documented
  interviews of persons with knowledge of site conditions, or (3) found and verified other forms of
  information.
- Physical evidence means: (1) recorded observations from on-site investigations, such as finding
  intact UXO or DMM, or munitions debris (e.g., fragments, penetrators, projectiles, shell casings, links,
  fins); (2) the results of field or laboratory sampling and analysis procedures; or (3) the results of
  geophysical investigations.

Classifications Classification	Table 12 Within the CHE Module Sources of CWM Data Element Description	Score
Live-fire involving CWM	The MRS is a former military range that supported live- fire of explosively configured CWM and the CWM/UXO are known or suspected of being present on the surface or in the subsurface.  The MRS is a former military range that supported live- fire with conventional munitions, and CWM/DMM are on the surface or in the subsurface commingled with conventional munitions that are UXO.	10
Damaged CWM/DMM surface or subsurface	There are damaged CWM/DMM on the surface or in the subsurface at the MRS.	10
Undamaged CWM/DMM surface	There are undamaged CWM/DMM on the surface at the MRS.	10
CAIS/DMM surface	There are CAIS/DMM on the surface.	10
Undamaged CWM/DMM, subsurface	There are undamaged CWM/DMM in the subsurface at the MRS.	5
CAIS/DMM subsurface	There are CAIS/DMM in the subsurface at the MRS.	5
Former CA or CWM Production Facilities	The MRS is a facility that formerly engaged in production of CA or CWM, and CWM/DMM is suspected of being present on the surface or in the subsurface.	
Former Research, Development, Testing, and Evaluation (RDT&E) facility using CWM	The MRS is at a facility that formerly was involved in non-live-fire RDT&E activities (including static testing) involving CWM, and there are CWM/DMM suspected of being present on the surface or in the subsurface.	3
Former Training Facility using CWM or CAIS	The MRS is a location that formerly was involved in training activities involving CWM and/or CAIS (e.g., training in recognition of CWA, decontamination training) and CWM/DMM or CAIS/DMM are suspected of being present on the surface or in the subsurface.	2
Former Storage or Transfer points of CWM	The MRS is a former storage facility or transfer point (e.g., intermodal transfer) for CWM.	1
Evidence of no CWM	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.	0

- The term CWM/UXO means CWM that are UXO.
- The notation CWM/DMM means CWM that are DMM, to include CAIS K941, toxic gas set M-1; and K942, toxic gas set M-2/E11.
- The term CAIS/DMM means CAIS, other than CAIS K941 and K942.
- Historical evidence means the investigation: (1) found written documents or records, (2) documented interviews of persons with knowledge of site conditions, or (3) found and verified other forms of information.
- Physical evidence means: (1) recorded observations from on-site investigations, such as
  finding intact UXO or DMM, or munitions debris (e.g., fragments, penetrators, projectiles,
  shell casings, links, fins); (2) the results of field or laboratory sampling and analysis
  procedures; or (3) the results of geophysical investigations.
- In the subsurface means the CWM (i.e., a DMM or UXO) is (1) entirely beneath the ground surface, or (2) fully submerged in a water body.
- On the surface means the CWM (i.e., a DMM or UXO) is (1) entirely or partially exposed
  above the ground surface (i.e., above the soil layer), or (2) entirely or partially exposed above
  the surface of a water body (e.g., as a result of tidal activity).

Classifications W	Table 13 Vithin the CHE Module <i>Information on the Location of CWM</i> Data E Description	Element Score
Confirmed surface	<ul> <li>Physical evidence indicates that there are CWM on the surface of the MRS.</li> <li>Historical evidence (e.g., a confirmed incident report or accident report) indicates there are CWM on the surface of the MRS.</li> </ul>	25
Confirmed subsurface, active	<ul> <li>Physical evidence indicates the presence of CWM in the subsurface of the MRS and the geological conditions at the MRS are likely to cause CWM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose CWM.</li> <li>Historical evidence indicates that CWM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause CWM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose CWM.</li> </ul>	20
Confirmed subsurface, stable	<ul> <li>Physical evidence indicates the presence of CWM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause CWM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause CWM to be exposed.</li> <li>Historical evidence indicates that CWM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause CWM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause CWM to be exposed.</li> </ul>	15
Suspected (physical evidence)	There is physical evidence, other than the documented presence of CWM, indicating that CWM may be present at the MRS.	10
Suspected (historical evidence)	There is historical evidence indicating that CWM may be present at the MRS.	5
Subsurface, physical constraint	There is physical or historical evidence indicating that CWM 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 CWM.	2

Classifications V	Table 13 Within the CHE Module <i>Information on the Location of CWM</i> Data B	Element
Classification Description So		
Evidence of no CWM	Following investigation of the MRS, there is physical evidence that there is no CWM present or there is historical evidence indicating that no CWM are present.	0

#### Notes:

- Historical evidence means the investigation: (1) found written documents or records, (2) documented interviews of persons with knowledge of site conditions, or (3) found and verified other forms of information.
- Physical evidence means: (1) recorded observations from on-site investigations, such as
  finding intact UXO or DMM, or munitions debris (e.g., fragments, penetrators, projectiles,
  shell casings, links, fins); (2) the results of field or laboratory sampling and analysis
  procedures; or (3) the results of geophysical investigations.
- In the subsurface means the CWM (i.e., a DMM or UXO) is (1) entirely beneath the ground surface, or (2) fully submerged in a water body.
- On the surface means the CWM (i.e., a DMM or UXO) is (1) entirely or partially exposed
  above the ground surface (i.e., above the soil layer), or (2) entirely or partially exposed above
  the surface of a water body (e.g., as a result of tidal activity).

Clas	Table 14 ssifications Within the CHE Module <i>Ease of Access</i> Data Element	
Classification	Description	Score
No barrier	<ul> <li>There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).</li> </ul>	10
Barrier to MRS access is incomplete	There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete, but not monitored	There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	There is a barrier preventing access to all parts of the MRS, and there is active continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0

# Notes:

Barrier means a natural obstacle or obstacles (e.g., difficult terrain, dense vegetation, deep or fast
moving water), a man-made obstacle or obstacles (e.g., fencing), or a combination of natural and
man-made obstacles.

	Table 15 ations Within the CHE Module <i>Status of Property</i> Data Element	
Classification	Description	Score
Non-DoD control	<ul> <li>The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by the Department. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.</li> </ul>	5
Scheduled for transfer from DoD control	<ul> <li>The MRS is on land or is a water body that is owned, leased, or otherwise possessed by the Department, and the Department plans to transfer that land or water body to control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.</li> </ul>	3
DoD control	The MRS is on land or is a water body that is owned, leased, or otherwise possessed by the Department. With respect to property that is leased or otherwise possessed, the Department controls access to the property 24 hours per day, every day of the calendar year.	0

the county in which	Definition an 500 persons per square mile in	Score
the county in which	an 500 persons per square mile in	
mile U.S. Census Bure	h the MRS is located, based on	5
	500 persons per square mile in the e MRS is located, based on U.S. ata.	3
	nan 100 persons per square mile in h the MRS is located, based on au data.	1,

If an MRS is in more than one county, the Component will use the largest population value among those counties. If the MRS is within or borders a city or town, the population density for that city or town, instead of the county population density, is used.

Table 17 Classifications Within the CHE Module <i>Population Near Hazard</i> Data Element				
Classification	Classification Description			
26 or more 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.	5		
16 to 25	There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4		
11 to 15	There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3		
6 to 10	There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2		
1 to 5	There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1		
0	There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0		

# Notes:

 The term inhabited structures means permanent or temporary structures, other than military munitions-related structures, that are routinely occupied by one or more persons for any portion of a day.

Table 18  Classifications Within the CHE Module Types of Activities/Structures Data Element				
Classification	Description	Score		
Residential, educational, commercial, or subsistence	<ul> <li>Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.</li> </ul>	5		
Parks and recreational areas	<ul> <li>Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.</li> </ul>	4		
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.	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.	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.	1		

 The term inhabited structures means permanent or temporary structures, other than Department-related structures, that are routinely occupied by one or more persons for any portion of a day.

Table 19 Classifications Within the CHE Module <i>Ecological and/or Cultural Resources</i> Data Element				
Classification	Description	Score		
Ecological and cultural resources present	There are both ecological and cultural resources present on the MRS.	5		
Ecological resources present	There are ecological resources present on the MRS.	3		
Cultural resources present	There are cultural resources present on the MRS.	3		
No ecological or cultural resources present	There are no ecological resources or cultural resources present on the MRS.	0		

- Ecological resources means that: (1) a threatened or endangered species (designated under the Endangered Species Act [ESA]) is present on the MRS; or (2) the MRS is designated under the ESA as critical habitat for a threatened or endangered species; or (3) there are identified sensitive ecosystems such as wetlands or breeding grounds present on the MRS.
- Cultural resources means there are recognized cultural, spiritual, traditional, religious, or
  historical features (e.g., structures, artifacts, symbolism) on the MRS. Requirements for
  determining if a particular feature is a cultural resource are found in the National Historic
  Preservation Act, Native American Graves Protection and Repatriation Act, Archeological
  Resources Protection Act, Executive Order 13007, and the American Indian Religious
  Freedom Act. As examples: American Indians or Alaska Natives deem an MRS to be of
  spiritual significance; there are areas that are used by American Indians or Alaska Natives for
  subsistence activities (e.g., hunting, fishing).

Table 20				
Determining the CHE Rating from the CHE Module Score				
Overall CHE Module Score	CHE Rating			
The MRS has an overall CHE module score from 92 to 100.	CHE Rating A			
The MRS has an overall CHE module score from 82 to 91.	CHE Rating B			
The MRS has an overall CHE module score from 71 to 81.	CHE Rating C			
The MRS has an overall CHE module score from 60 to 70.	CHE Rating D			
The MRS has an overall CHE module score from 48 to 59.	CHE Rating E			
The MRS has an overall CHE module score from 38 to 47.	CHE Rating F			
The MRS has an overall CHE module score less than 38.	CHE Rating G			
Alternative Module Ratings	Evaluation Pending			
	No Longer Required			
	No Known or Suspected CWM Hazard			

			able 21 actor Levels	,	
Contaminant	Hazard Factor	Recepto	or Factor	Migration Pa	thway Factor
Significant	High (H)	Identified	High (H)	Evident	High (H)
Moderate	Middle (M)	Potential	Middle (M)	Potential	Middle (M)
Minimal	Low (L)	Limited	Low (L)	Confined	Low (L)

Table 22 HHE Three-letter Combination Levels								
Contaminant Hazard Factor	Receptor Factor	Migration Pathway						
		Evident	Potential	Confined				
Significant	Identified	ннн	ннм	HHL				
	Potential	ннм	нмм	HML				
	Limited	HHL	HML	HLL				
Moderate	ldentified	ннм	нмм	HML				
	Potential	НММ	MMM	MML				
	Limited	HML	MML	MLL				
Minimal	Identified	HHL	HML	HLL				
	Potential	HML	MML	MLL				
	Limited	HLL	MLL	LLL				

Table 23 HHE Module Ratings					
Combination	Rating				
ННН	A				
ннм	В				
HHL	C				
НММ					
HML	D				
MMM					
HLL	E				
MML					
MLL	F				
LLL	G				
	Evaluation Pending				
Alternative Module Ratings	No Longer Required				
	No Known or Suspected MC Hazard				

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Table 24 HHE Module Rating								
Contaminant Hazard Factor	Receptor Factor	Migration Pathway						
		Evident	Potential	Confined				
Significant	Identified	Α	В	С				
	Potential	В	С	D				
	Limited	С	D	E				
Moderate	Identified	В	С	D				
	Potential	С	D	E				
	Limited	D	E	F				
Minimal	Identified	С	D	E				
	Potential	D	E	F				
	Limited	E	F	G				

Table 25 MRS Priority Based on Highest Hazard Evaluation Module Rating							
EHE Module Rating	Priority	CHE Module Rating Priority					
		Hazard Evaluation A (Highest)	1	HHE Module Rating	Priority		
Hazard Evaluation A (Highest)	2	Hazard Evaluation B	2	Hazard Evaluation A (Highest)	2		
Hazard Evaluation B	3	Hazard Evaluation C	3	Hazard Evaluation B	3		
Hazard Evaluation C	4	Hazard Evaluation D	4	Hazard Evaluation C	4		
Hazard Evaluation D	5	Hazard Evaluation E	5	Hazard Evaluation D	5		
Hazard Evaluation E	6	Hazard Evaluation F	6	Hazard Evaluation E	6		
Hazard Evaluation F	7	Hazard Evaluation G (Lowest)	7	Hazard Evaluation F	7		
Hazard Evaluation G (Lowest)	8			Hazard Evaluation G (Lowest) Low	8		
Evaluation Pending		Evaluation Pending		Evaluation Pending			
No Longer Required		No Longer Required		No Longer Required			
No Known or Suspect Explosive Hazard	ed	No Known or Suspecte Hazard	ected CWM No Known or Suspected MC Hazard		ted MC		