

TABLE 19.—CLASSIFICATIONS WITHIN THE CHE ECOLOGICAL AND/OR CULTURAL RESOURCES DATA ELEMENT—Continued

Classification	Description	Score
No ecological or cultural resources present.	• There are no ecological resources or cultural resources present on the MRS	0

Notes:

• 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. For example, American Indians or Alaska Natives deem the MRS to be of spiritual significance or there are areas that are used by American Indians or Alaska Natives for subsistence activities (e.g., hunting, fishing). 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.

(4) CHE Module Rating

As described earlier in discussion of the CHE module, each data element provides a numeric value that contributes to the CHE module score. The sum of the nine data elements is the CHE module score.

There are seven CHE module ratings derived from the CHE module scores, as illustrated in Table 20, plus three alternatives to account for the chemical hazard potential at an MRS.

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

In addition, there are three other possible outcomes:

• *Evaluation pending.* This category is used when CWM is believed or known to be present but sufficient information is not available to conduct the evaluation.

• *No longer required.* This category is reserved for MRS that no longer require an evaluation for a potential CWM hazard because DoD has conducted a response, all response 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.

• *No known or suspected CWM Hazard.* This category is reserved for MRS that do not require evaluation under the CHE module.

C. The Relative Risk Site Evaluation (RRSE) Hazard Module

In 1994, the DoD Inter-Service Relative Risk Working Group, comprised of representatives from the DoD Components, developed the RRSE framework for use in prioritizing sites under the Installation Restoration program (IRP) category of the DERP. The RRSE framework addresses chronic health and environmental effects of many of the chemicals known to have been released into the environment from activities at DoD installations and FUDS. The RRSE was revised in 1997, to address questions, comments, and DoD initiatives that arose during the first twenty months of implementation.

DoD will use the RRSE module to evaluate the potential hazards posed by munitions constituents or CWA at a MRS relative to the hazard potential at other MRS. The grouping of MRS into *high*, *medium*, or *low* relative risk categories is not a substitute for a baseline risk assessment or health assessment, nor is it a means for selecting a remedy or placing MRS into a Response Complete/No Further Action category.

DoD has elected to apply the RRSE framework to evaluate the potential chronic health and environmental effects of munitions constituents at MRS because it has been successfully used at sites in the IRP. Using the same framework to evaluate IRP sites and MRS ensures consistency in the approach taken to evaluate chronic health and environmental effects of chemicals released to the environment.

In the RRSE module, MRS with releases of munitions constituents or CWA are grouped in *high*, *medium*, and *low* priority categories based on an

evaluation of MRS information using three factors and four media and their exposure endpoints:

- Factors:
 - Contaminant hazard factor (CHF)
 - Migration pathway factor (MPF)
 - Receptor factor (RF)
- Endpoints:
 - Groundwater, considering only a human receptor endpoint
 - Surface water, using both a human and an ecological endpoint
 - Sediments, using both a human and an ecological endpoint
 - Surface soils (*i.e.*, soils in the depth range of 0–6 inches) using a human endpoint.

Each environmental medium is evaluated using three factors that relate to the three structural components of the conceptual site model used in environmental risk assessments: source, pathway, and receptor. In the RRSE, the CHF (relationship of contaminants to comparison values) is the source term; MPF (likelihood/extent of contaminant migration) is the pathway term; and RF (likelihood of receptor exposure to contamination) is the receptor term.

Each of these three factors is rated on a scale of three values (*e.g.*, the scale for the contaminant hazard factor is *significant*, *moderate*, or *minimal*) based on up-to-date and representative MRS information. For each environmental medium, factor ratings are combined to determine the environmental medium-specific rating of *high*, *medium*, or *low*. The MRS is then placed in an overall priority category of *high*, *medium*, or *low*, based on the highest medium-specific rating.

(1) Contaminant Hazard Factor

The CHF is based on the ratio of the maximum concentration of a contaminant detected in an environmental medium to an established risk-based comparison value for the contaminant in that medium. The CHF is rated *significant*, *moderate* or *minimal*. A *significant* rating is given when the sum of ratios of the maximum concentration of a contaminant detected