

XI. Determination of Site Sequencing

DoD believes that the sequencing of MRS for implementation of response actions should be based primarily on the relative priority assigned by the Protocol, but may also consider other factors. This approach to decision making is embodied in the current Management Guidance and grew out of the recommendations of the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC). One of the main issues the Committee considered was need to set priorities due to the magnitude of the challenge of environmental restoration at Federal facilities. The Committee believed that priority setting and funding allocation must be done in a manner that stakeholders perceive fair and inclusive. The Committee developed consensus policy recommendations aimed at improving the process by which Federal facility environmental restoration decisions are made, such that these decisions reflect the priorities and concerns of all stakeholders. In the area of consideration of human health and environmental risk and other factors in Federal facility environmental restoration decision making, the Committee made the following recommendation:

Risk to human health and the environment is an important and well-established factor that should continue to be a primary consideration in Federal facility cleanup decision making, including setting environmental cleanup priorities and milestones. However:

(a) Human health and environmental risk assessments and other analytical tools used to evaluate risks to human health (including non-cancer as well as cancer health effects) and the environment all have scientific limitations and require assumptions in their development. As decision-aiding tools, risk assessments should only be used in a manner that recognizes those limitations and assumptions. Moreover, risk assessments ought not be used by any party as a basis for unilaterally setting aside legal requirements that embody public health principles and other important societal values.

(b) In addition to human health and environmental risk, other factors that warrant consideration in setting environmental cleanup priorities and milestones include:

- Cultural, social, and economic factors, including environmental justice considerations,
- Short-term and long-term ecological effects and environmental impacts in general, including damage to natural resources and lost use,
- Making land available for other uses,
- Acceptability of the action to regulators, Tribes, and public stakeholders,
- Statutory requirements and legal agreements,
- Life cycle costs,

- Pragmatic considerations, such as the ability to execute cleanup projects in a given year, and the feasibility of carrying out the activity in relation to other activities at the facility,
- Overall cost and effectiveness of a proposed activity, and
- Actual and anticipated funding availability.

The sequencing process described in this regulation builds on DoD's experience in implementing the FFERDC recommendations over the past 10 years. In addition, DoD received comments from a wide range of stakeholders supporting a decision making process that considers other factors in making sequencing decisions.

Generally, MRS that present a greater relative risk to human health, safety, or the environment will be addressed before MRS that present a lesser risk; however, in evaluating other factors as part of making sequencing decisions, DoD will consider a broad range of factors. These "risk-plus" or "other management" factors do not influence or change the prioritization results but may influence the sequence in which MRS are addressed. Specific examples of factors DoD may consider include:

- Concerns expressed by stakeholders.
- Cultural and social factors.
- Economic factors, including economic considerations pertaining to environmental justice issues, economies of scale, evaluation of total lifecycle costs, and estimated valuations of long-term liabilities.
- The reasonably anticipated future land use, especially when planning response actions, conducting evaluations of response alternatives, or establishing specific response action objectives.
- Community reuse requirements at BRAC installations.
- 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; considering alternatives to removal or treatment of contamination when existing technology cannot achieve established standards, such as maximum contaminant levels.
- The availability of technology to detect, discriminate, recover, and destroy UXO or DMM.
- 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.

- Tribal trust lands, which are lands held in trust by the United States for the benefit of any Indian Tribe or individual. The United States holds the legal title to the land and the Tribe holds the beneficial interest.
- Established program goals and initiatives.
- Short-term and long-term ecological effects and environmental impacts in general, including injuries to natural resources.

DoD uses its process for developing and updating Management Action Plans (MAP) or an equivalent document as the vehicle for making sequencing decisions. Each installation or FUDS is required to develop and maintain a MAP or its equivalent. MAPs are required to be updated on at least an annual basis. Guidance on preparing and updating the MAP is provided in the *Management Guidance*. Sequencing decisions at installations and FUDS are developed with input from stakeholders, such as the regulatory and community members of an installation's RAB, and are documented in the MAP.

During the annual update of the MAP, installation or FUDS personnel will be required to publish an announcement in a local community publication notifying the public of the following:

- (1) The existence of MRS, including a brief description of each MRS addressed, the conditions, and assigned priority,
- (2) The intention to develop or update the MAP for the MRS,
- (3) The intention to apply the Protocol to each MRS,
- (4) The specific means the public or Tribes can use to submit information about each MRS that may influence the priority assigned or the funding sequence assigned, and
- (5) The name and contact information for the designated DoD spokesperson for each MRS.

Final sequencing may also be impacted by DoD Component program management considerations. If the sequencing of any MRS is changed from the sequencing reflected in the current MAP, the DoD Component will provide information to the stakeholders documenting the reasons for the sequencing change and will request their review and comment on that decision.

In addition, DoD Components will ensure that all information influencing the sequencing of an MRS is included in the Administrative Record and the Information Repository. On a