

Appendix A: Readiness Modules

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MODULE 1: IDENTIFY AND SCREEN SITES (1 of 2)

When a state or tribe seeks to assume responsibility for *Module 1: Identify and Screen Sites*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into cooperative agreements (CA) with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

MODULE 1: IDENTIFY AND SCREEN SITES (2 of 2)

1. Identify potentially contaminated sites.

- A. Maintain a system for tracking newly discovered potentially contaminated sites.
- B. Maintain a system for notification of a hazardous substance release.

2. Determine which of these sites should be added to a national inventory of potentially contaminated sites (presently known as CERCLIS).¹

- A. Screen sites for inclusion in a national inventory of potentially contaminated sites. States and tribes can provide the rationale.
- B. Maintain an electronic system for tracking site identification, screening, and prioritization data.
- C. Refer sites not added to the national inventory to other programs for evaluation, when appropriate.
- D. Enter site information into a national inventory (presently known as CERCLIS)² or transmit site information to EPA for entry, as appropriate.
- E. Obtain adequate PRP information as necessary.

¹ 40 CFR §300.5 defines CERCLIS as "...the CERCLA Information System, EPA's comprehensive database and management system that inventories and tracks releases addressed or needing to be addressed by the Superfund program. CERCLIS contains the official inventory of CERCLA sites and supports EPA's site planning and tracking functions."

² See footnote 1.

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MODULE 2: IDENTIFY, SCREEN, AND PRIORITIZE SITES (1 of 2)

When a state or tribe seeks to assume responsibility for *Module 2: Identify, Screen, and Prioritize Sites*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

MODULE 2: IDENTIFY, SCREEN, AND PRIORITIZE SITES (2 of 2)

1. Identify potentially contaminated sites.

- A. Maintain a system for tracking newly discovered potentially contaminated sites.
- B. Maintain a system for notification of a hazardous substance release.

2. Determine which of these sites should be added to a national inventory of potentially contaminated sites (presently known as CERCLIS).³

- A. Screen sites for inclusion in a national inventory of potentially contaminated sites. States and tribes can provide the rationale.
- B. Maintain an electronic system for tracking site identification, screening, and prioritization data.
- C. Refer sites not added to national inventory to other programs for evaluation, when appropriate.
- D. Enter site information into a national inventory (presently known as CERCLIS)⁴ or transmit site information to EPA for entry, as appropriate.
- E. Obtain adequate PRP information as necessary.

3. Prioritize these sites among the state's or tribe's other CERCLA sites competing for funding and other resources.

- A. Prioritize sites for assessment. States and tribes can provide the rationale.

³ See footnote 1.

⁴ See footnote 1.

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MODULE 3: PRIORITIZE AND EVALUATE SITES FOR CLEANUP (1 of 2)

When a state or tribe seeks to assume responsibility for *Module 3: Prioritize and Evaluate Sites for Cleanup*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

MODULE 3: PRIORITIZE AND EVALUATE SITES FOR CLEANUP (2 of 2)

1. Prioritize these sites among the state's or tribe's other CERCLA sites competing for funding and other resources.

- A. Prioritize sites for assessment. States and tribes can provide the rationale.

2. Evaluate site comprehensively and determine what needs to be done based on what is known about the site at the time. Determine the next course of action (e.g., expedited action, design/long-term cleanup, and the associated funding/resource/scheduling requirements).

- A. Have the ability to conduct or contract the following activities, either through in-house, private sector, or other state or federal agencies, when appropriate:⁵ (1) review historical site records; (2) gain site access; (3) conduct site sampling; (4) analyze samples; (5) review and interpret environmental/analytical data; (6) evaluate hydrology/geology; (7) evaluate toxicological/health effects/ecosystem data; (8) complete report/case preparation; and (9) conduct legal/case development.

If any of the above site assessment services are to be contracted, the state or tribe must have appropriately trained personnel to provide oversight, product review, or third-party verification of the assessment.

- B. Have access to the requisite equipment to conduct the activities outlined in these criteria.
- C. Have the capability to determine the need for, or appropriateness of, other actions, which may include: (1) urgent evaluations and cleanups; (2) expedited evaluations and cleanups; (3) enforcement actions; (4) long-term actions; (5) VCPs; and (6) Brownfields programs.
- D. Have the ability to provide adequate opportunity for meaningful community involvement and notification.

⁵ It is not appropriate for contractors to perform inherently governmental functions (e.g., making cleanup and enforcement decisions and deciding on a state's/tribe's priorities).

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MODULE 4: PRIORITIZE AND EVALUATE SITES FOR CLEANUP AND FOR FEDERAL ELIGIBILITY (1 of 2)

When a state or tribe seeks to assume responsibility for *Module 4: Prioritize and Evaluate Sites for Cleanup and for Federal Eligibility*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

MODULE 4: PRIORITIZE AND EVALUATE SITES FOR CLEANUP AND FOR FEDERAL ELIGIBILITY (2 of 2)

1. Prioritize these sites among the state's or tribe's other CERCLA sites competing for funding and other resources.

- A. Prioritize sites for assessment. States and tribes can provide the rationale.

2. Evaluate site comprehensively and determine what needs to be done based on what is known about the site at the time. Determine the next course of action (e.g., expedited action, design/long-term cleanup, and the associated funding/resource/scheduling requirements).

- A. Have the ability to conduct or contract the following activities, either through in-house, private sector, or other state or federal agencies, when appropriate:⁶ (1) review historical site records; (2) gain site access; (3) conduct site sampling; (4) analyze samples; (5) review and interpret environmental/analytical data; (6) evaluate hydrology/geology; (7) evaluate toxicological/health effects/ecosystem data; (8) complete report/case preparation; and (9) conduct legal/case development.

If any of the above site assessment services are to be contracted, the state or tribe must have appropriately trained personnel to provide oversight, product review, or third-party verification of the assessment.

- B. Have access to the requisite equipment to conduct the activities outlined in these criteria.
- C. Have the capability to determine the need for, or appropriateness of, other actions, which may include: (1) urgent evaluations and cleanup; (2) expedited evaluations and cleanup; (3) enforcement actions; (4) long-term actions; (5) VCPs; and (6) Brownfields programs.
- D. Have the ability to provide adequate opportunity for meaningful community involvement and notification.

3. Have the means to evaluate sites for federal cleanup program eligibility.

- A. Have the ability to apply a national system to identify federal priority sites. If support services are to be contracted, the state or tribe will have appropriately trained personnel to provide sufficient oversight, product review, and quality control of documentation. (Current national system is the HRS.)

⁶ See footnote 5.

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MODULE 5: CONDUCT AND COMPEL URGENT EVALUATION AND CLEANUP (1 of 3)

When a state or tribe seeks to assume responsibility for *Module 5: Conduct and Compel Urgent Evaluation and Cleanup*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs. Under the current Superfund program, short-term activities are grouped into three categories: emergency, time-critical, and non-time-critical removals. Subpart O restricts funding of state-lead short-term actions to non-time-critical removals (40 CFR §35.6200). On a case-by-case basis, EPA may consider requests for a deviation from this restriction to allow a state or tribe to carry out emergency or time-critical actions (40 CFR §35.6025). The Readiness Workgroup, using generic terminology, classified short-term actions into either urgent or expedited evaluations/cleanups.

Definition

Urgent responses stabilize, reduce, or eliminate immediate threats and/or imminent hazards to human health and property or the environment quickly.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), another assumption of this Module is to provide PRPs the opportunity to undertake cleanups within appropriate time constraints. Further, urgent responses will receive priority attention from states and tribes.

MODULE 5: CONDUCT AND COMPEL URGENT EVALUATION AND CLEANUP (2 of 3)

1. **To conduct an urgent evaluation and cleanup, the state or tribe should undertake the following activities.**
 - A. Secure site access.
 - B. Identify and evaluate site contaminants.
 - C. Undertake initial evaluation to determine hazards present, including the ability to evaluate potential human health and ecological risks.
 - D. Manage and oversee contractors, if appropriate.⁷
 - E. Ensure tracking and management of hazardous substance(s).
 - F. Make field decisions as site conditions warrant.
 - G. Address ecological impacts.
 - H. Coordinate with initial site responders/fire/police, etc. (e.g., Incident Commander under the Unified Command System).
 - I. Have specialized urgent response training (e.g., expertise in responses addressing biological threats, such as ricin).
 - J. Determine response objective and response action.
 - K. Monitor/undertake follow-up evaluation to determine if response objective was achieved.
 - L. Conduct initial PRP search, if practicable, during site evaluation period.
 - M. Enter into agreements with PRPs to perform urgent evaluations and cleanups.⁸
 - N. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or urgent evaluations and cleanups).⁹

⁷ See footnote 5.

⁸ For the purposes of this matrix, any enforcement authorities used by the state or tribe under the current program should be state enforcement authorities. PRP response actions should be conducted under state or tribal oversight.

⁹ See footnote 8.

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MODULE 5: CONDUCT AND COMPEL URGENT EVALUATION AND CLEANUP (3 of 3)

- O. Compel PRPs to perform urgent evaluations and cleanups (e.g., legal orders, fines).¹⁰
- P. Manage and oversee PRPs.
- Q. Take over PRP-lead urgent evaluations and cleanups (includes access to and availability of legal resources, dollars).
- R. Assess or seek penalties for non-compliance with cleanup orders.¹¹
- S. Recover costs associated with conducting urgent evaluations and cleanups.
- T. Determine if additional work is necessary.

¹⁰ See footnote 8.

¹¹ See footnote 8.

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MODULE 6: CONDUCT AND COMPEL EXPEDITED EVALUATION

(1 of 2)

When a state or tribe seeks to assume responsibility for *Module 6: Conduct and Compel Expedited Evaluation*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs. Under the current Superfund program, short-term activities are grouped into three categories: emergency, time-critical, and non-time-critical removals. Subpart O restricts funding of state-lead short-term actions to non-time-critical removals (40 CFR §35.6200). On a case-by-case basis, EPA may consider requests for a deviation from this restriction to allow a state or tribe to carry out emergency or time-critical actions (40 CFR §35.6025). The Readiness Workgroup, using generic terminology, classified short actions into either urgent or expedited evaluations/cleanups.

Definition

Expedited actions provide risk reduction and can include containment and reduction of direct exposure to risk. Site conditions are such that planning time is limited before a response action needs to be taken to mitigate threats posed by the site. In general, expedited actions will be based upon considerations of current land use, but may also consider future land use. Such actions may be interim actions or may constitute the final cleanups. Expedited actions can be conducted by states, tribes, or private parties.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), the preference is that PRPs will still be leading the majority of the cleanup work.

MODULE 6: CONDUCT AND COMPEL EXPEDITED EVALUATION (2 of 2)

- 1. To conduct an expedited evaluation, the state or tribe should undertake the following activities.**
 - A. Secure site access.
 - B. Undertake initial site evaluation to determine hazards present.
 - C. Evaluate site for health and ecological risks.
 - D. Identify and evaluate site contaminants.
 - E. Compare/rank the site with others in the state's or tribe's jurisdiction and place site in the funding queue, if appropriate. Determine the urgency of site actions.
 - F. Enter into agreements with PRPs to perform expedited evaluations.¹²
 - G. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or expedited site evaluations).¹³
 - H. Compel PRPs to perform expedited site evaluations (e.g., legal orders).¹⁴
 - I. Assess or seek penalties for non-compliance with orders for expedited site evaluations.¹⁵
 - J. Take over PRP-lead expedited site evaluations (includes access and availability of legal resources, dollars).
 - K. Manage and oversee PRPs.
 - L. Determine if additional work is necessary.
 - M. Recover costs associated with conducting expedited site evaluations.

¹² See footnote 8.

¹³ See footnote 8.

¹⁴ See footnote 8.

¹⁵ See footnote 8.

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MODULE 7: CONDUCT AND COMPEL EXPEDITED CLEANUP

(1 of 3)

When a state or tribe seeks to assume responsibility for *Module 7: Conduct and Compel Expedited Cleanup*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

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Definition

Expedited actions provide risk reduction and can include containment and reduction of direct exposure to risk. Site conditions are such that planning time is limited before a response action needs to be taken to mitigate threats posed by the site. In general, expedited actions will be based upon considerations of current land use, but may also consider future land use. Such actions may be interim actions or may constitute the final cleanups. Expedited actions can be conducted by states, tribes, or private parties.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), the preference is that PRPs will still be leading the majority of the cleanup work.

MODULE 7: CONDUCT AND COMPEL EXPEDITED CLEANUP (2 of 3)

1. To conduct an expedited cleanup, the state or tribe should undertake the following activities, when appropriate.

- A. Develop appropriate engineering documents.
- B. Determine site cleanup levels.
- C. Issue the appropriate decision document that includes appropriate supporting documentation.
- D. Implement short-term action per engineering documents.
- E. Manage and oversee contractors, if appropriate.¹⁶
- F. Ensure tracking and management of hazardous substance(s).
- G. Make field decisions as site conditions warrant.
- H. Notify appropriate Natural Resources Trustees.
- I. Address ecological impacts.
- J. Undertake follow-up evaluation, which may include sampling to determine whether cleanup levels were achieved, and/or an evaluation of site risks as necessary.
- K. Assure ability to obtain site access agreements/real estate easements as required.
- L. Conduct PRP search during site evaluation period.
- M. Draft and send PRP notice letters in a timely fashion.
- N. Enter into agreements with PRPs to perform expedited cleanups.¹⁷
- O. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or expedited cleanups).¹⁸

¹⁶ See footnote 5.

¹⁷ See footnote 8.

¹⁸ See footnote 8.

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MODULE 7: CONDUCT AND COMPEL EXPEDITED CLEANUP (3 of 3)

- P. Compel PRPs to perform expedited cleanups and post-cleanup site monitoring and evaluation (e.g., legal orders).¹⁹
- Q. Assess or seek penalties for non-compliance with orders for expedited cleanups.²⁰
- R. Take over PRP-lead expedited cleanups (includes access to and availability of legal resources, dollars).
- S. Manage and oversee PRPs.
- T. Recover costs associated with conducting expedited cleanups.
- U. Determine if additional work is necessary.
- V. Have the legal authority, infrastructure, and resources to acquire property or property interests to enable, for example, site access.²¹
- X. If federal dollars or CERCLA enforcement authorities are used to conduct temporary relocations, the Uniform Relocation Act (URA) and the implementing regulations should be followed as guidance in furnishing relocation benefits.

¹⁹ See footnote 8.

²⁰ See footnote 8.

²¹ Under CERCLA §104(j), EPA cannot acquire property without an assurance from the state in which the property is located that the state will accept transfer of the property following completion of the remedial action (or earlier if agreed to in writing by EPA and the state). CERCLA §104(j)(3) exempts any state which acquires property in this manner from CERCLA liability. The liability provision provided under CERCLA §104(j)(3) may not apply when a state acquires property directly; however, a state or tribe which directly acquires property may still have a third-party defense from CERCLA liability as long as all conditions for this type of defense are met pursuant to CERCLA §107(b)(3) and §101(35)(A).

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MODULE 8: CHARACTERIZE, OR COMPEL THE CHARACTERIZATION OF, THE SITE FOR LONG-TERM ACTION (1 of 2)

When a state or tribe seeks to assume responsibility for *Module 8: Characterize, or Compel the Characterization of, the Site for Long-term Action*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

Definition

Long-term actions are technically complex and take a long time to study and/or remediate. They also consider risks reduced as a result of expedited activities (where applicable) and consider future land use.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), the preference is that PRPs will still be leading the majority of the cleanup work.

MODULE 8: CHARACTERIZE, OR COMPEL THE CHARACTERIZATION OF, THE SITE FOR LONG-TERM ACTION (2 of 2)

1. Fully characterize the site for long-term cleanup action.

- A. Possess the technical expertise and ability to characterize the nature, extent and risk of contamination, and assess sites adequately for development of cleanup alternatives.
- B. Have access to the equipment necessary to conduct sampling and field screening and analysis for site characterization.
- C. Have access to laboratory analysis necessary to support toxicity evaluation in the risk assessment (e.g., leaching test, toxicity testing).

2. State or tribe should have the legal authority to:

- A. Enter into agreements with PRPs to perform investigations.²²
- B. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or investigations).²³
- C. Compel PRPs to perform investigations (e.g., legal orders).²⁴
- D. Assess or seek penalties for non-compliance with orders for investigations.²⁵
- E. Take over PRP-lead investigations (includes access to and availability of legal resources, dollars).
- F. Manage and oversee PRPs.
- G. Recover costs associated with investigations.
- H. Create and maintain document history to support long-term actions for administrative and judicial purposes.

²² See footnote 8.

²³ See footnote 8.

²⁴ See footnote 8.

²⁵ See footnote 8.

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MODULE 9: IDENTIFY, EVALUATE, SELECT, AND COMPEL LONG-TERM CLEANUP ACTIONS (1 OF 3)

When a state or tribe seeks to assume responsibility for *Module 9: Identify, Evaluate, Select, and Compel Long-term Cleanup Actions*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

Definition

Long-term actions are technically complex and take a long time to study and/or remediate. They also consider risks reduced as a result of short-term activities (where applicable) and consider future land use as well.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), the preference is that PRPs will still be leading the majority of the cleanup work.

MODULE 9: IDENTIFY, EVALUATE, SELECT, AND COMPEL LONG-TERM CLEANUP ACTIONS (2 OF 3)

1. Identify and evaluate potential cleanup actions.

- A. Develop cleanup goals that are protective of human health and the environment.
- B. Identify and evaluate cleanup alternatives, and determine which are reasonably likely to achieve the cleanup goals established, considering the hazardous materials present, media contaminated, site characteristics, technical implementability, and cost effectiveness.
- C. Identify a cleanup plan alternative which achieves the cleanup goals that are cost effective and protective of human health and the environment over the long term.
- D. Have access to the equipment necessary to conduct treatability studies as appropriate.

2. Select cleanup action.

- A. Have the ability to conduct analyses that compare the most appropriate cleanup alternatives.
- B. Have the ability to select an implementable cleanup plan that is projected to be cost effective and protective of human health and the environment over the long term.

3. State or tribe should have the legal authority to:

- A. Enter into agreements with PRPs to perform identification and evaluation of alternatives.²⁶
- B. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or identification and evaluation of alternatives).²⁷
- C. Compel PRPs to perform identification and evaluation of alternatives (e.g., legal orders).²⁸
- D. Assess or seek penalties for non-compliance with identification and evaluation of alternatives.²⁹
- E. Take over PRP-lead identification and evaluation of alternatives (includes access to and availability of legal resources, dollars).
- F. Manage and oversee PRPs.

²⁶ See footnote 8.

²⁷ See footnote 8.

²⁸ See footnote 8.

²⁹ See footnote 8.

**MODULE 9: IDENTIFY, EVALUATE, SELECT, AND COMPEL
LONG-TERM CLEANUP ACTIONS (3 OF 3)**

- G. Recover costs associated with identification and evaluation of alternatives.
- H. Create and maintain document history to support long-term actions for administrative and judicial purposes.

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MODULE 10: DESIGN, IMPLEMENT, AND COMPEL LONG-TERM CLEANUP (1 of 3)

When a state or tribe seeks to assume responsibility for *Module 10: Design, Implement, and Compel Long-term Cleanup*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

Definition

Long-term actions are technically complex and take a long time to study and/or remediate. They also consider risks reduced as a result of short-term activities (where applicable) and consider future land use as well.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), the preference is that PRPs will still be leading the majority of the cleanup work.

MODULE 10: DESIGN, IMPLEMENT, AND COMPEL LONG-TERM CLEANUP (2 of 3)

1. Design and implement site cleanup.

- A. Have a design or cleanup strategy that is technically sound and that is consistent with the cleanup goals.
- B. Have the ability to implement the site cleanup per the design or cleanup strategy. (A state or tribe may not proceed with a Fund-financed remedial action unless EPA has first concurred in and adopted the remedy selection decision (40 CFR §300.515(e)(ii)).
- C. Have the ability to make field decisions as site conditions warrant while maintaining the overall integrity of the cleanup.
- D. Have access to any construction equipment necessary to implement cleanup.
- E. Have access to the equipment necessary to conduct treatability studies as appropriate.
- F. Have the ability to implement a legal control or administrative means (e.g., institutional controls) of limiting exposure to hazardous materials to levels consistent with cleanup goals, and reduce future risk at a site from changes in site use.
- G. Have the legal authority, infrastructure, and resources to acquire properties or property interests to enable, for example, permanent relocations and site access.³⁰

2. State or tribe should have the legal authority to:

- A. Enter into agreements with PRPs to design and implement cleanup.³¹
- B. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or design and implementation of cleanup).³²
- C. Compel PRPs to design and implement cleanup (e.g., legal orders).³³
- D. Assess or seek penalties for non-compliance with design and implementation of cleanup orders.³⁴
- E. Take over PRP-lead design and implementation of cleanups (includes access to and availability of legal resources, dollars).

³⁰ See footnote 21.

³¹ See footnote 8.

³² See footnote 8.

³³ See footnote 8.

³⁴ See footnote 8.

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MODULE 10: DESIGN, IMPLEMENT, AND COMPEL LONG-TERM CLEANUP (3 of 3)

- F. Manage and oversee PRPs.
- G. Recover costs associated with the design and implementation of cleanups.
- H. Create and maintain document history to support long-term actions for administrative and judicial purposes.

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MODULE 11: CONDUCT AND COMPEL POST-CLEANUP MONITORING AND EVALUATION (1 of 2)

When a state or tribe seeks to assume responsibility for *Module 12: Conduct and Compel Post-cleanup Monitoring and Evaluation*, then the state or tribe should demonstrate capability (including legal authority) to carry out each activity in this Module. In situations where the state or tribe cannot demonstrate capability, then it may be possible for a state or tribe to reach an arrangement with its EPA region to divide work, as long as all of the Module's activities are addressed. The state, tribe, and EPA region have a shared responsibility to ensure that all of the program activities are completed.

Unless otherwise indicated, EPA may fund each activity described in this Module under the current statute, regulations, and program. CERCLA §104(d) authorizes EPA to enter into CAs with states and Indian tribes to carry out activities authorized by CERCLA §104. 40 CFR Part 35, Subpart O, codifies the requirements for Superfund CAs.

Definition

Long-term actions are technically complex and take a long time to study and/or remediate. They also consider risks reduced as a result of short-term activities (where applicable) and consider future land use as well.

Assumptions

In addition to the Readiness Workgroup's assumptions (see pages 2 and 3, *Chapter 1: Readiness Recommendations*), the preference is that PRPs will still be leading the majority of the cleanup work.

MODULE 11: CONDUCT AND COMPEL POST-CLEANUP MONITORING AND EVALUATION (2 of 2)

1. Post-cleanup site monitoring and evaluation goals.

- A. Have the ability to conduct appropriate operation and maintenance (O&M) activities to ensure effectiveness of long-term actions. (For Fund-financed remedial actions, states and tribes are responsible for funding and conducting all O&M activities (CERCLA §104(c)(3)).
- B. Have the ability to determine when the cleanup goals as stated in the cleanup plan have been met.
- C. Have access to any construction equipment necessary to implement post-cleanup site monitoring and evaluation. (For Fund-financed remedial actions, states and tribes are responsible for funding and conducting all O&M activities (CERCLA §104(c)(3)).

2. State or tribe should have the legal authority to:

- A. Enter into agreements with PRPs to perform post-cleanup site monitoring and evaluation.³⁵
- B. Issue administrative orders or obtain judicial documents (e.g., warrants, requests for information, administrative orders for access or performing post-cleanup site monitoring and evaluation).
- C. Compel PRPs to perform post-cleanup site monitoring and evaluation (e.g., legal orders).³⁶
- D. Assess or seek penalties for non-compliance with post-cleanup site monitoring and evaluation orders.³⁷
- E. Take over PRP-lead post-cleanup site monitoring and evaluation (including access to and availability of legal resources, dollars).³⁸
- F. Recover costs associated with post-cleanup site monitoring and evaluation.
- G. Manage and oversee PRPs.
- H. Create and maintain document history to support long-term actions for administrative or judicial purposes.

³⁵ See footnote 8.

³⁶ See footnote 8.

³⁷ See footnote 8.

³⁸ See footnote 8.

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