



# United States Department of the Interior

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## PEP - ENVIRONMENTAL COMPLIANCE MEMORANDUM NO. ECM14-2

To: Heads of Bureaus and Offices

From: Willie R. Taylor, Director   
Office of Environmental Policy and Compliance

Subject: Central Hazardous Materials Fund (CHF) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Process for CHF Projects

The Office of Environmental Policy and Compliance (OEPC) is issuing this Environmental Compliance Memorandum under the authority provided by 381 Departmental Manual Chapter 4 to convey instructions and guidance through the Environmental Memoranda Series. This ECM establishes guidance on the CERCLA process for CHF funded sites.

The guidance includes information on authorities and roles at CHF funded projects, bureau requirements prior to requesting CHF funding, CERCLA response actions, public participation and consultation responsibilities, and managing CERCLA projects. The guidance has been reviewed by each of the bureau representatives on the CHF's Technical Review Committee (TRC). If you have any questions, please contact Ms. Hoover either by email at: [courtney\\_hoover@ios.doi.gov](mailto:courtney_hoover@ios.doi.gov), or phone 303-445-2503.

Attachment

cc: REOs

## CENTRAL HAZARDOUS MATERIALS FUND (CHF)

### COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) PROCESS FOR CHF PROJECTS

#### I. OVERVIEW

The Office of Environmental Policy and Compliance (OEPC) is issuing this Environmental Compliance Memorandum (ECM) pursuant to the authority provided in 381 Departmental Manual Chapter 4. This ECM applies to projects receiving funding from the Department's Central Hazardous Materials Fund (CHF) to undertake response action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, *et seq.*, as amended (CERCLA). The purpose of this ECM is to provide guidance to CHF site project managers in complying with the requirements and procedures of CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), codified at 40 C.F.R. Part 300.

*In addition to following this guidance at projects receiving funding from the CHF, project managers should follow any bureau-specific CERCLA guidance, and consult with the Branch of Environmental Compliance and Response in the Department's Office of the Solicitor (Solicitor's Office) for specific questions on compliance with CERCLA and the NCP.*

#### II. AUTHORITIES AND ROLES

##### a. Authorities

Section 104 of CERCLA provides broad response action authority to the President. The President has delegated this authority to the Secretary of the Interior by Executive Order 12580, *Superfund Implementation*, as amended, to address the release or threatened release of hazardous substances on or from land under the Department's jurisdiction, custody, or control (with two exceptions: emergency removal action and selection of remedial action at sites on the National Priorities List (NPL)). The Secretary has re-delegated this authority to each bureau director to respond to releases or threatened releases on or from facilities under the bureau's jurisdiction, custody or control, as specified in Departmental Manual Chapter 7 Part 207, *CERCLA Implementation*.

##### b. Lead versus Support Agency

The Department, or responsible bureau, serves as the CERCLA "lead agency" authorized to respond to releases or threatened releases, which are not emergencies, on or from land under its jurisdiction, custody or control.<sup>1</sup> The responsibilities of the lead agency include: 1) designating

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<sup>1</sup> Although the Department or responsible bureau does not have the authority to take action under CERCLA for emergency removal actions, emergency response actions may be carried out by the land managing bureau under other authorities, (e.g., in accordance with applicable local resource area hazardous materials incident contingency plans or pursuant to the bureau's general land management authorities). It is not appropriate to use CHF funding for emergency response actions because the Department does not have delegated CERCLA authority for these types of actions.

the remedial project manager (RPM) or on-scene coordinator (OSC) who is responsible for coordinating, monitoring, and directing response action at the site; 2) conducting site investigations to determine whether further response action is necessary; 3) evaluating response alternatives and designing and implementing the response action; 4) coordinating and soliciting input from support agencies; 5) ensuring meaningful public participation at specified points in the process; 6) documenting the basis for the selection of response actions through the establishment and maintenance of the site Administrative Record file; and 7) coordinating with the Solicitor's Office to identify potentially responsible parties (PRPs) who may be capable of performing response action subject to the Department's or bureau's oversight or from whom response costs may be recovered.

The Department or responsible bureau may serve in a "support agency" role at sites not under the Department's land management jurisdiction. A support agency is responsible for: 1) identifying a point of contact or coordinator to interface with the lead agency; 2) reviewing and commenting on major documents; and 3) identifying bureau-specific applicable or relevant and appropriate requirements (ARARs) that need to be attained by the implementation of the response action. At mixed ownership sites, the principles outlined in ECM 07-3, "*Statement of Principles for Collaborative Decision Making at Mixed Ownership Sites*," should be the foundation for developing agreements with EPA that define the agencies' respective responsibilities.

*This guidance is tailored to those sites where the Department or delegated bureau is the lead agency. At sites where the Department or delegated bureau serves as a support agency, it is important to understand the CERCLA process to ensure that resource management objectives specific to the Department or bureau are incorporated in the decision-making process. This guidance does not address EPA or U.S. Coast Guard led emergency response activities. Consult your bureau or local area contingency plan(s) for further information.*

### **III. BUREAU REQUIREMENTS PRIOR TO REQUESTING CHF FUNDING**

#### ***a. Preliminary Assessment/Site Inspection***

Bureaus must demonstrate that site conditions trigger the applicability of CERCLA response action authority at a particular site prior to being eligible to receive CHF funding. Specifically, there must be a release or a substantial threat of release of a hazardous substance on or from property under the Department's jurisdiction, custody, or control. In addition, in accordance with ECM 10-4, "*Nomination Guidance*," bureaus must complete a Preliminary Assessment/Site Inspection (PA/SI) or equivalent (e.g., Removal Site Evaluation) prior to receiving CHF funding for the site.

Upon identification of a potential release or threat of release of hazardous substances, bureaus will conduct a Preliminary Assessment ("PA") to assess whether a site poses little or no threat to human health and the environment or requires further investigation or response. The purpose of a PA is to collect readily available information about the site and its surrounding area to determine if a release or threat of release exists, to confirm that the contaminants released include "hazardous substances" as defined by CERCLA, and to evaluate whether the site may pose a threat to public health or the environment. *For more information on how to perform a PA,*

see Section 300.410 of the NCP and EPA's "Guidance for Performing Preliminary Assessments Under CERCLA," at: [http://www.epa.gov/superfund/sites/npl/hrsres/#PA\\_Guidance](http://www.epa.gov/superfund/sites/npl/hrsres/#PA_Guidance), or the "Federal Facilities Remedial Preliminary Assessment Summary Guide," at [http://www.epa.gov/fedfac/pdf/ff\\_pa\\_guide.pdf](http://www.epa.gov/fedfac/pdf/ff_pa_guide.pdf), and bureau-specific guidance if applicable.

If the bureau determines, based on the PA, that further investigation is warranted, the bureau must perform a Site Inspection ("SI"). The purpose of the SI is to augment the data collected during the PA to determine if further investigation or a CERCLA response action is appropriate. The SI is not intended to determine the full extent of the contamination and does not include a risk assessment. *For more information on the purpose of and how to perform an SI, see Section 300.410 of the NCP and EPA's "OSWER9345.1-05 Guidance for Performing Site Inspections Under CERCLA: Interim Final," at: [www.epa.gov/superfund/sites/npl/hrsres/si/sitoc.pdf](http://www.epa.gov/superfund/sites/npl/hrsres/si/sitoc.pdf), or "Federal Facilities Remedial Site Inspection Summary Guide," at: [http://www.epa.gov/fedfac/pdf/ff\\_si\\_guide.pdf](http://www.epa.gov/fedfac/pdf/ff_si_guide.pdf), and bureau-specific guidance if applicable.*

Bureaus are not required to prepare a Hazard Ranking System (HRS) score for the PA/SI. HRS scores are prepared by EPA for sites on the Federal Agency Hazardous Waste Compliance Docket. Note that HRS scoring does not determine whether a response action is necessary, nor does it affect funding given that the Superfund is to be used by USEPA for response actions on private lands. Federal land managers are expected to have other funding sources for CERCLA response on lands under their jurisdiction, custody, and control and, therefore, the HRS score is not relevant for DOI beyond identifying a site's eligibility for listing on the National Priorities List (NPL).

#### ***b. Potentially Responsible Parties and Cost Recovery***

The Departmental Manual requires that bureaus and offices "aggressively pursue potentially responsible parties (PRPs) to correct their contamination of Departmental lands and facilities or to recover costs of cleanup." 518 DM 2.4. In addition, the Departmental Manual delegates CERCLA enforcement and settlement authority to the Solicitor. 207 DM 7. As required in ECM 10-4, "Nomination Guidance," a PRP search or equivalent (e.g., a clearly established PRP exists) must have been initiated or completed before a project is eligible to be funded by the CHF. The PRP search should identify whether there are any viable responsible parties that the Department can engage to seek cost avoidance or cost recovery. The bureau project manager should request Solicitor's Office assistance in planning and overseeing PRP searches that have not been completed prior to applying for CHF funding. If the search has been completed by the bureau, a copy of the report and all underlying documentation must be provided to the Solicitor's Office for review. The Solicitor's Office is responsible, in coordination with the bureau, for developing the cost recovery and/or enforcement case for CHF-funded sites. *For more details on cost recovery requirements for CHF-funded sites, see ECM 13-2, "Central Hazardous Materials Fund Financial Management," and ECM 13-3, "Central Hazardous Materials Fund Cost Recovery Guidance." For more information on conducting a PRP search, bureau project managers should consult with the Solicitor's Office; see also EPA's "PRP Search Manual," at: <http://www.epa.gov/oecaerth/resources/publications/cleanup/superfund/prpmanual/prp-man-chap1-09.pdf>, and bureau-specific guidance if applicable.*

### ***c. Occupational Safety and Health***

CHF funded projects are required to complete a site-specific risk or hazard assessment prior to the conduct of site activities by *Department or bureau personnel* in accordance with regulations promulgated by the Occupational Safety and Health Administration (“OSHA”), 29 C.F.R. § 1910.120. This assessment is a preliminary evaluation of the existing hazards at a site to determine if any specific plans, training, equipment, monitoring, or other site-specific health and safety requirements are necessary or appropriate for the site, such as a site-specific Health and Safety Plan (HASP). This risk evaluation is in addition to a contractor’s HASP required under the NCP for intrusive field activities (e.g., sample collection or cleanup activity). The intent of the evaluation is to ensure that the land management agency has taken appropriate precautions to protect staff and visitor safety throughout the response action selection and cleanup process. *It is appropriate to use CHF funding for the above-listed occupational safety and health requirements if necessary for the site. See bureau-specific guidance for occupational health and safety requirements, and contact bureau occupational health and safety specialists or industrial hygienists for assistance. If an assessment is not completed prior to receiving CHF funding, CHF funding can be used to develop this assessment.*

The results of the site-specific risk or hazard assessment will be used to determine whether a HASP specific to Department or bureau staff is required for the site. Some bureaus call their bureau specific document a Site Management Plan, or a Contaminated Site Management Plan to distinguish between the bureau’s plan and the contractor’s. Though contractors develop HASPs, their plans may not cover Department and/or bureau personnel’s activities, or the full range of activities of Departmental and/or bureau personnel to be completed during the time frame for work to be completed on site. *If a Departmental or bureau-specific HASP is required, and it has not been prepared prior to requesting CHF funding, CHF funding can be used to develop the plan. See bureau-specific guidance for occupational health and safety requirements, and contact bureau occupational health and safety specialists or industrial hygienists for assistance. For information on managing health and safety issues at hazardous waste sites use the National Institute for Occupational Safety and Health’s “Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities,” at: <https://www.osha.gov/Publications/complinks/OSHG-HazWaste/4agency.html>.*

### ***d. Eligibility for CHF Funding***

Once a PA/SI has been completed documenting that a release or threat of release of a hazardous substance exists, a PRP search has been completed or commenced, and a bureau determines that additional CERCLA response action is necessary at a site, the project becomes eligible for CHF funding. Funding requests must follow the ECM 10-4, “*Nomination Guidance*,” and project managers must manage CHF funds and maintain records of costs in accordance with ECM 13-2, “*Central Hazardous Materials Fund Financial Management*,” and ECM 13-3 “*Central Hazardous Materials Fund Cost Recovery Guidance*.” The following sections detail CERCLA response actions and associated activities that may be performed using CHF funding.

## IV. CERCLA RESPONSE ACTIONS

CERCLA authorizes two types of response actions: remedial actions and removal actions. The information gathered during the PA/SI provides the basis for determining whether or not a response action is necessary and, if so, whether such action should be removal action, remedial action, or both.

### *1. Removal Actions*

Removal actions are response actions that can be selected and implemented relatively quickly to prevent, minimize, or mitigate risks to public health, welfare, or the environment associated with a release or threatened release of a hazardous substance. A removal action may be either an interim or final action at a site, and the removal action may be done in conjunction with a subsequent remedial action as discussed in *Section IV. 2. Remedial Actions*. There are a wide range of activities that can be taken under a removal action ranging from restricting access through signage, fencing, or other institutional controls, to excavating contaminated materials and consolidating them in an onsite repository or disposing of them in an appropriate offsite disposal facility. Before conducting a removal action, the lead agency must determine that a removal action is appropriate based on the criteria outlined at Section 300.415(b)(2) of the NCP.

There are three categories of removal actions that are based on the time frame in which action must be initiated in order to protect public health and the environment. Removal actions are characterized as non-time-critical removal actions when a planning period of at least six months exists before on-site activities must be initiated. Removal actions are characterized as time-critical removal actions when site risks require that on-site action be initiated within six months of determining that a removal action is necessary. Removal actions are characterized as emergency removal actions when site risks dictate that on-site activities must be initiated within hours or days of determining that a release or threatened release must be addressed to protect public health or the environment. The Department and bureaus do not have delegated CERCLA authority to conduct emergency removal actions. *Bureaus may have independent land management authority, including those in accordance with their local resource area hazardous materials incident contingency plans, to perform emergency response actions using non-CHF funding.*

The requirements for removal actions vary depending on the type of action performed. The following sections outline the significant requirements associated with conducting non-time-critical and time-critical removal actions.

#### 1.1 Non-Time-Critical Removal Actions

Upon determination that a removal action is necessary and appropriate and that site risks allow for a planning period of six months or longer before on-site activities begin, the bureau must undertake the following steps. First, the bureau must issue an Approval Memorandum documenting the decision to initiate an Engineering Evaluation/Cost Analysis (“EE/CA”). The

EE/CA Approval Memorandum should document the site-specific factors, including the specific conditions outlined in Section 300.415(b)(2) of the NCP, that support the decision to conduct a non-time-critical removal action.

Upon issuing the EE/CA Approval Memorandum, the bureau should initiate and complete the EE/CA. The objectives of the EE/CA are to: characterize the nature and extent of contamination at the site; identify ARARs; develop removal action objectives; identify and analyze potential removal alternatives; conduct a comparative evaluation of the alternatives; and recommend a removal action alternative. In order to characterize the extent of contamination, the EE/CA will require the development of a health and safety plan and a sampling and analysis plan (with appropriate development of Data Quality Objectives (DQO), which includes a field sampling plan and a quality assurance project plan (40 C.F.R. §300.415(b)(4)). Risk assessor data needs must always be addressed in the DQOs. The potential alternatives must be evaluated based on their effectiveness in addressing short term and long term risks, the technical feasibility of implementation, and the cost. Long-term management requirements called post-removal site controls should also be considered in determining the appropriate alternative. *See Section IV. 1.4 Long-Term Considerations for Removal Actions for more details.*

In evaluating the effectiveness of removal action alternatives, the primary consideration should be the degree to which an alternative protects human health and the environment. Non-time-critical removal action alternatives should also be evaluated for their ability to comply with “applicable or relevant and appropriate requirements” (ARARs), which are Federal, or more stringent State, standards, requirements, criteria, or limitations determined to be legally applicable *or* relevant and appropriate to the circumstances at a given site (CERCLA Section 121(d)(2)(A)). While any *remedial action* selected must satisfy all ARARs adopted by the bureau for the site, removal actions must only satisfy ARARs “to the extent practicable considering the exigencies of the situation” (40 C.F.R. §300.415(j)). Under circumstances where the non-time-critical removal action is expected to be the final cleanup conducted at a site, the bureau should select a removal action that satisfies all adopted ARARs. Where the bureau expects to conduct a subsequent remedial action at the site, attainment of ARARs can be deferred to the implementation of the remedial action. *Project managers must consult with the Solicitor’s Office to determine what standards should be adopted as ARARs at their site.* Likewise, a streamlined risk evaluation should only be used if the removal action is an interim response within a larger remedial action. If the removal action is expected to be the final cleanup conducted at the site, then a Baseline Human Health Risk Assessment (HHRA), Screening-Level Ecological Risk Assessment (SLERA) and, if needed, a Baseline Ecological Risk Assessment (BERA) must be performed. *For more information on ARARs, see EPA’s guidance, OSWER Directive 9234.1-01, “CERCLA Compliance With Other Laws Manual: Part I” at: <http://www.epa.gov/superfund/policy/remedy/pdfs/540g-89006-s.pdf>, and OSWER Directive 9234.1-02, “CERCLA Compliance With Other Laws Manual: Part II” at: <http://www.epa.gov/superfund/policy/remedy/pdfs/540g-89009-s.pdf>.*

Upon completion of the EE/CA Report, the bureau should issue an Action Memorandum to select the removal alternative to be implemented. The Action Memorandum serves as the decision document for removal actions and provides information on the need for the removal action, a description of the proposed action and cleanup levels, and the rationale for why the

proposed action was selected. The Action Memorandum should also document the extent to which ARARs will be attained by the removal action and the anticipated project schedule.

Action Memoranda are signed at a level designated by each bureau. Once the Action Memorandum is signed, the non-time-critical removal action can be implemented. *For information about the signature process within a specific bureau, contact the bureau's Technical Review Committee Representative. For more information on preparing an Action Memorandum, see EPA's "Superfund Removal Guidance for Preparing Action Memoranda," at: [http://www.epa.gov/oem/docs/oil/ncp/Superfund\\_removal\\_guide\\_for\\_preparing\\_action\\_memo.pdf](http://www.epa.gov/oem/docs/oil/ncp/Superfund_removal_guide_for_preparing_action_memo.pdf), and bureau-specific guidance if applicable.*

*For more information on conducting non-time-critical removal actions, see EPA's "Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA" at: <http://www.epa.gov/superfund/policy/remedy/pdfs/540f-94009-s.pdf>, and bureau-specific guidance if applicable.*

An administrative record (AR) must be developed for each non-time-critical removal action selected (as well as other response actions selected) to document the basis for the decision. The AR must be established no later than when the EE/CA Approval Memorandum is signed. *Project Managers must consult with the Solicitor's Office to determine which records are appropriate and required for a site's administrative record. For more information on Administrative Record Requirements for time-critical removal actions, see Section V. "Documenting the Basis for Decisions" of this guidance, and ECM 13-4, "Comprehensive Environmental Response, Compensation, and Liability Act Administrative Records for Central Hazardous Material Fund Sites," and any bureau-specific guidance.*

The bureau must provide for meaningful community involvement in the selection of non-time-critical removal actions, as specified by the NCP (40 C.F.R. §300.415(n)(4) and §300.820(a)). *See Section VI. Public Participation for more information on community involvement requirements.*

### 1.2 Time-Critical Removal Actions

Time-critical removal actions are performed when the bureau determines that site risks dictate that the removal action must be initiated within six months of the decision to undertake a removal action. Because of the shortened time frame prior to initiating the removal action, an EE/CA is not required. Nevertheless, the bureau must still document that a removal action is appropriate, based on an evaluation of the NCP factors outlined at 40 C.F.R. §300.415(b)(2). To do so, the bureau must issue an Action Memorandum that: describes the site conditions upon which the decision to implement the time-critical removal action is based; describes the removal action to be taken; and identifies the steps, if any, the bureau expects to take after the removal action has been implemented including any long-term management needs that should be considered. *See Section IV 1.4 Long-Term Considerations for Removal Actions*

*Please refer to Section IV 1.1 Non-Time-Critical Removal Actions for more on Action Memorandums.*

To document the basis for the decisions, an administrative record must be established for time-critical removal actions within 60 days of the initiation of on-site removal activities. *Project Managers must consult with the Solicitor's Office to determine which records are appropriate and required for a site's administrative record. For more information on Administrative Record Requirements for time-critical removal actions, see Section V. "Documenting the Basis for Decisions" of this guidance, and ECM 13-4, "Comprehensive Environmental Response, Compensation, and Liability Act Administrative Records for Central Hazardous Material Fund Sites," and any bureau-specific guidance.*

The bureau must provide for meaningful community involvement in the implementation of time-critical removal actions, as specified by the NCP (40 C.F.R. §300.415(n)(2) and (3) and §300.820(b)). *See Section VI. Public Participation for more information on community involvement requirements.*

#### 1.4 Long-Term Considerations for Removal Actions

As mentioned above, there are a wide variety of alternatives that can be implemented as removal actions. Prior to selecting a removal action that leaves hazardous substances on site in concentrations or quantities that require long-term management controls or use or access restrictions to maintain the protectiveness of the response, the bureau should identify such controls or restrictions and the estimated costs that would be incurred to maintain them. Five-Year Reviews ("5YR") are not required at sites where a removal action has been implemented, unlike remedial action sites where remaining on-site hazardous substances, pollutants, or contaminants exceed levels that allow for "unlimited use and unrestricted exposure" as specified in 40 C.F.R. §300.430(f)(4)(ii). *See Section 2.4 Long-Term Protectiveness of the Remedial Action for more information on 5YRs.* Nevertheless, although a 5YR is not required at removal action sites, bureaus should maintain an inventory comprising each CHF site at which waste remains on site which is subject to institutional and engineering controls or other access or use restriction. Bureaus should develop a plan to ensure that the controls are maintained to ensure the long-term protectiveness of the removal action.

## **2. Remedial Actions**

Remedial actions generally are final actions taken to eliminate unacceptable risks to human health or the environment resulting from releases or threatened releases of hazardous substances. Remedial actions may be taken instead of, or in addition to, removal actions. Generally, remedial actions take longer and are appropriate when site conditions are sufficiently complex to warrant a more comprehensive site investigation and evaluation of alternatives than conducted through an EE/CA. For example, remedial actions may be more appropriate when a site covers a larger geographic area, or has more than one medium (soil, surface or groundwater, air) affected by contamination.

Unlike removal actions, there are not multiple categories of remedial actions. All remedial responses have two main phases: 1) a Remedial Investigation/Feasibility Study ("RI/FS"); and 2) a Remedial Design/Remedial Action. The following sections outline the requirements for these phases of remedial action.

## 2.1 Remedial Investigation/Feasibility Studies

Prior to selecting a remedial action, the bureau must prepare a remedial investigation (“RI”) report and a feasibility study (“FS”) following the PA/SI.

The RI is a more in-depth investigation than the SI. The purpose of the RI is to fully characterize the nature and extent of the contamination at the site in order to assess risks, evaluate ARARs, and develop potential remedial alternatives. This process includes but is not limited to identification of actual or potential pathways for exposure, characteristics of the hazardous substances (e.g., toxicity, concentrations), the vertical and horizontal extent of the contamination, and the risks associated with actual or potential exposure to contamination of the site. The data collected in the RI must be informed by the data needs identified by risk assessors, as well as data needed to evaluate remedial action alternatives in the FS, all of which are described in the DQO process that precedes the investigation. The DQO process ensures that the appropriate quality and quantity of data are collected in the RI. *For more information on the RI/FS, see EPA’s “Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA Interim Final,” and bureau-specific guidance if applicable.*

The bureau must establish the AR for selection of a remedial action no later than when the RI is initiated, and it must publish a public notice of availability prior to the initiation of RI field activities. *For more details on the Administrative Record, see Section V. “Documenting the Basis for Decisions” of this guidance, and ECM 13-4 “Comprehensive Environmental Response, Compensation, and Liability Act Administrative Records for Central Hazardous Material Fund Sites,” and bureau-specific guidance. The bureau Project Manager must consult with the Solicitor’s Office to determine which records are appropriate and required for a site’s administrative record.*

### 2.1.1 RI/FS - Scoping

The first phase of the RI/FS process is the scoping/planning phase that the bureau undertakes. During the scoping/planning phase, the bureau should conduct the following activities: 1) collect and analyze existing data; 2) determine the preliminary site boundaries and/or initial operable units; 3) begin the process of identifying potential ARARs; 4) identify initial DQOs; and 5) prepare project plans. *See Section IV. 1.1 Non-Time-Critical Removal Actions, for a discussion and resources available on ARARs. For more information on developing DQOs, see EPA’s “Data Quality Objectives Process for Hazardous Waste Site Investigations” at: <http://www.epa.gov/quality/qs-docs/g4hw-final.pdf>, or bureau-specific guidance if applicable.*

An RI work plan documents the decisions made during the scoping phase and outlines tasks to be completed during the RI/FS. The following generally should be included in the work plan: 1) site management strategy; 2) remedial action goals; 3) sequence of actions and investigations; and 4) background on the site, including physical characteristics and previous site activities.

The RI work plan should address how the following plans will be prepared or specify that these plans will be addressed as separate documents and prepared at the same time:

- A sampling and analysis plan (“SAP”) that details the process for obtaining data, and includes a quality assurance project plan (“QAPP”) and field sampling plan (“FSP”). The purpose of the SAP is to ensure that sample collection activities are performed in accordance with technically accepted protocols and meet and expand upon the DQOs established during the scoping/planning phase.
- A site-specific HASP prepared by contractors who will be performing work on the site. A site-specific HASP may also be required for work being performed by Department or bureau employees. *See Section III. C. Occupational Safety and Health for more information.*
- A site-specific community involvement plan (“CIP”) that details community relations activities and how objectives will be met. *For more information on community involvement, see Section VI. Public Participation.*
- The RI Work Plan may be subsumed by the SAP as long as the SAP contains all of the elements of a work plan.

*For more information on scoping the RI/FS, see EPA’s OSWER Directive 9355.3-01FS1 “Getting Ready: Scoping the RI/FS” at: <http://www.epa.gov/superfund/policy/remedy/pdfs/93-55301fs1-s.pdf>.*

### 2.1.2 RI - Site Characterization and Treatability Studies

The site characterization phase of the RI builds upon the activities performed in the PA/SI. During site characterization, the bureau will: 1) conduct field investigations; 2) analyze samples collected during these investigations; 3) determine the nature and extent of the contamination; 4) conduct a baseline risk assessment to identify current and potential risks to human health and the environment; 5) continue to identify potential ARARs; and 6) evaluate additional data needs.

*For more information on performing risk assessments, see EPA’s “Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A) Interim Final” at: [http://www.epa.gov/oswer/riskassessment/ragsa/pdf/rags\\_a.pdf](http://www.epa.gov/oswer/riskassessment/ragsa/pdf/rags_a.pdf), and “Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments - Interim Final” at: <http://www.epa.gov/oswer/riskassessment/ecorisk/ecorisk.htm>.*

The bureau should begin to evaluate the need for and scope of treatability studies during the scoping phase. Generally, a literature search is completed during the scoping phase to determine whether potential technologies may be practical alternatives to treat the site’s waste. Treatability studies further evaluate the alternatives if potential technologies are not capable of being adequately evaluated based on currently available information. *For more information on treatability studies, see EPA’s “Guide to Conducting Treatability Studies under CERCLA” at: <http://www.epa.gov/superfund/policy/remedy/pdfs/540r-92071a-s.pdf>, and “Treatability Studies Under CERCLA: an Overview” at: <http://www.epa.gov/superfund/policy/remedy/pdfs/93-80302fs-s.pdf>.*

The bureau will develop an RI report to document the results and work accomplished during the RI. *For more information on site characterization and treatability studies, see the EPA's "The Remedial Investigation, Site Characterization and Treatability Studies" at: <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=600016JW.txt>*

### 2.1.3 FS - Developing and Screening Alternatives and Detailed Analysis

The analysis of alternatives for the remedial action is called the feasibility study ("FS"). The first phase of the FS is developing and screening remedial action alternatives although often the development of alternatives begins during the scoping phase when potential response scenarios may first be identified. During the development and screening of alternatives phase of the FS, the bureau will need to: 1) establish and refine remedial action objectives; 2) develop general response actions; and 3) identify and screen potential technologies. *For more information on developing and screening of remedial action alternatives, see EPA's OSWER Directive 9355.3-01FS3 "The Feasibility Study, Development and Screening of Remedial Action Alternatives" at: <http://www.epa.gov/superfund/policy/remedy/pdfs/93-55301fs3-s.pdf>.*

During the detailed analysis phase of the FS, the bureau will evaluate and compare alternatives against the following nine remedy selection criteria outlined in the NCP: 1) overall protection of human health and the environment; 2) compliance with ARARs; 3) long-term effectiveness and permanence; 4) reduction of toxicity, mobility, or volume; 5) short-term effectiveness; 6) implementability; 7) cost; 8) State acceptance; and 9) community acceptance. 40 C.F.R. §300.430(e)(9). In order to be eligible for selection, a remedial alternative must be found to protect against unacceptable risks (Criterion 1 - protectiveness) and to comply with site ARARs (Criterion 2 - attainment of ARARs), which are known as "threshold criteria." Criteria 3 through 7 are considered "balancing criteria," and tradeoffs among these criteria are evaluated to determine the best alternative for the site. Criteria 8 and 9 are considered "modifying criteria" because new information or feedback from the State or community may modify the preferred remedial action alternative. *For more information on the detailed analysis of remedial action alternatives, see EPA's OSWER Directive 9355.3-01FS4 "The Feasibility Study: Detailed Analysis of Remedial Action Alternatives" at: <http://www.epa.gov/superfund/policy/remedy/pdfs/93-55301fs4-s.pdf>.*

### 2.2 Selection of the Remedy

The process for selecting the remedy begins when the bureau identifies its preferred alternative from among those evaluated in the FS. The preferred alternative is documented in a Proposed Plan that is issued for public comment. The Proposed Plan: 1) summarizes the conclusions of the RI/FS; 2) briefly describes the remedial action alternatives that were considered; 3) identifies and explains the rationale for the preferred alternative's selection; 4) identifies the time and location of public meetings at which the public may offer verbal comments on the preferred alternative; and 5) identifies how the public can provide input into the remedy selection process. The Proposed Plan should also identify the location of the Administrative Record file and invite the public to review the file.

The Proposed Plan is a public participation document that must be made available in the

information repository at or near the site and is to be added to the AR and noticed in a local paper of general circulation prior to the initiation of the public comment period. *For more details on public participation, see Section VI. Public Participation.*

The Record of Decision (“ROD”) documents the decision selecting a remedial action for the site. It documents the rationale for the selection and establishes performance measures to be accomplished through the remedial action. The Assistant Secretary for Policy, Management, and Budget is the only authorized signatory for RODs issued by the Department or one of the bureaus. In elevating a ROD for signature by the Assistant Secretary, the bureau must follow ECM 10-3, “*Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Record of Decision Surname Process.*”

If, after a ROD is signed, the bureau determines that site conditions have changed or new site information is identified that requires changes to the selected remedy, the bureau must determine the appropriate action. There are three types of post-ROD changes: insignificant or minor changes; significant changes; and fundamental changes. The documentation required to document changes to the selected remedy necessary to address post-ROD changes is dependent upon the type of change. The post-ROD documentation falls into three categories: 1) a memorandum to file for insignificant or minor changes; 2) an “explanation of significant differences” (“ESD”) for significant changes; or 3) a ROD amendment for fundamental changes.

*For more information on preparing proposed plans, RODs, ROD amendments, and other remedy decision documents, see EPA’s OSWER Directive 9200.1-23P “A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents” at: [http://www.epa.gov/superfund/policy/remedy/rods/pdfs/guide\\_decision\\_documents\\_071999.pdf](http://www.epa.gov/superfund/policy/remedy/rods/pdfs/guide_decision_documents_071999.pdf), and EPA’s “Toolkit for preparing CERCLA Records of Decision” at: <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100CF14.txt>.*

### 2.3 Remedial Design/Remedial Action

The Remedial Design/Remedial Action phase involves designing and implementing the remedy selected in the ROD through construction. Throughout the remedial design and remedial action, the bureau must ensure that work that is performed is done in accordance with the requirements outlined in the ROD, as well as the terms of applicable settlement agreements (e.g., Consent Decrees).

The remedial design is an engineering phase following the selection of the remedy. During this phase, work plans, technical specifications, and drawings are developed based on the remedy defined in the ROD. During the remedial design, cost estimates for the construction of the remedy are further developed beyond those created during the FS.

Upon approval of the remedial design, the remedial action implementation begins. During the performance of the remedial action, oversight of field implementation is necessary to ensure compliance with plans and specifications. This may be performed in-house or through a specific oversight contracting mechanism.

Once the remedial action is completed the site will enter a period of operation and maintenance to ensure that the remedy remains protective of human health and the environment.

#### 2.4 Long-Term Protectiveness of the Remedial Action

Remedial actions generally have long-term management considerations similar to removal actions. Regardless of the type of action, institutional and engineering controls that are part of the remedy must be maintained. For more information on planning and maintaining controls, see *Section V.1.4 Long-Term Considerations for Removal Actions*.

##### *Operation and Maintenance*

Operation and maintenance (“O&M”) begins after the remedy has achieved the remedial action objectives and goals outlined in the ROD, and the remedy is determined to be operational and functional, except for groundwater or surface water restoration activities outlined in 40 C.F.R. § 300.435(f)(4). There may be multiple remedies included in the ROD with their own unique O&M requirements. The purpose of O&M is to ensure that the remedy remains protective of human health and the environment, including the maintenance of engineering and institutional controls.

An O&M plan should be developed that outlines what the bureau will do to maintain the effectiveness of the remedy. Some types of O&M activities include groundwater or air monitoring; also, the bureau may be required to ensure that access restrictions or other institutional controls remain in place and are enforced. The bureau must implement all necessary O&M activities to ensure the long-term protectiveness of the remedy.

*For more information on operations and maintenance, see EPA’s OSWER 9200.1-37FS “Operation and Maintenance in the Superfund Program” at: <http://www.epa.gov/superfund/policy/pdfs/sheet.pdf>, and OSWER Directive 9355.4-38 “Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation” at: <http://www.epa.gov/superfund/policy/pdfs/dir9355.pdf>.*

##### *Five-Year Reviews*

At sites where a remedial action leaves hazardous substances on site at levels that do not allow for unlimited use and unrestricted exposure the bureau must conduct a review of the remedy every five years (“5YR”) to ensure that the remedy remains protective. Typical remedial actions that require 5YRs include on-site repositories, groundwater treatment systems, and waste stabilization sites. The date that starts a 5YR period is called a “trigger date,” and it is the date on which the first remedial action was initiated that left hazardous substances, pollutants, or contaminants at levels that do not allow for unlimited use and unrestricted exposure. The bureau is responsible for conducting 5YRs.

5YRs require a period of data review and analysis, site inspections, and community involvement. The bureau must plan ahead to ensure that 5YRs are completed within five years of the trigger date and every five years thereafter. The period of time necessary to complete the review is

dependent on the complexity of the site, the level of community involvement and potentially other factors.

*For more information on 5YRs, see the U.S. EPA's OSWER 9355.7-03B-P "Comprehensive Five-Year Review Guidance" at: Comprehensive Five-Year Review Guidance, and U.S. EPA's OSWER Directive 9355.7-18 "Recommended Evaluation of Institutional Controls: Supplement to the 'Comprehensive Five-Year Review Guidance' at: <http://www.epa.gov/superfund/policy/ic/guide/641333.pdf>.*

## **V. PUBLIC PARTICIPATION & CONSULTATION RESPONSIBILITIES**

The bureau is responsible for fulfilling the NCP's public participation requirements during specific time frames for both removal and remedial actions. The following sections highlight the major requirements for public participation. *For more information on public participation, see EPA's "Superfund Community Involvement Handbook" at: [http://www.epa.gov/superfund/community/cag/pdfs/ci\\_handbook.pdf](http://www.epa.gov/superfund/community/cag/pdfs/ci_handbook.pdf) and bureau-specific guidance if applicable.*

### *Community Involvement Plans*

Community Involvement Plans ("CIP") are required for time-critical removal actions (where on-site activities are expected to continue beyond 120 days from the initiation of the removal action), for non-time-critical removal actions, and for remedial actions (40 C.F.R §§ 300.415(n) and 300.430(c)). The CIP is developed based on interviews with community representatives and other relevant information. Its purpose is to outline specific community involvement activities that the bureau expects to undertake in order to ensure the public is given appropriate opportunities for involvement in site response action selection and implementation activities.

- For time-critical actions lasting more than 120 days and non-time-critical removal actions, the bureau must develop a site-specific CIP within 120 days of the start of on-site removal activity
- For remedial actions, the bureau must develop a site-specific CIP prior to beginning the field work for the remedial investigation

The bureau must review the CIP before the Remedial Design phase to determine whether it should be revised to provide for additional community relations activities when appropriate. There may be other times throughout the process where it may be appropriate to review and revise your CIP. *Bureau project managers must consult with the Solicitor's Office on a project's CIP and compliance with community involvement requirements.*

### *Administrative Record*

Projects receiving funding from the CHF must follow the guidance on administrative records in ECM 13-4, "Comprehensive Environmental Response, Compensation, and Liability Act Administrative Records for Central Hazardous Material Fund Sites."

The bureau must establish an AR at every site at which it is the lead agency conducting a response action pursuant to CERCLA and the NCP. The AR contains the documents or other information that the Department or bureau considered or relied upon in selecting a response action, and it documents the community involvement process for a site. *For more information on specific NCP and CHF requirements in regard to Administrative Records, see ECM 13-4, and bureau-specific guidance if applicable.*

#### *Public Inspection and Comment*

The bureau must notify the public that the AR is available for public inspection during the following timeframes:

- Time-critical Removal Action: Within 60 days of initiation of on-site removal activity (40 C.F.R. § 300.415(n)(2)(i); 40 C.F.R. § 300.820(b)(1)).
- Non-time-critical Removal Action: When the EE/CA is completed and made available for public comment (40 C.F.R. § 300.820(a)(1)).
- Remedial Action: At the initiation of the remedial investigation (40 C.F.R. § 300.815(a)) and when the Proposed Plan is available for public review and comment (40 C.F.R. § 300.430(f)(3)(i)(A)).

*The bureau must provide a public comment period of not less than 30 days from when the above documents have been made available.*

After the completion of public comment period, a responsiveness summary must be prepared with written responses to significant comments. The responsiveness summary must be made available to the public in the site's administrative record.

#### *Fact Sheets*

The bureau must develop a fact sheet for remedial actions once the final Remedial Design has been completed and, if appropriate, provide a public briefing prior to beginning remedial action. 40 C.F.R. § 300.435(c)(3).

#### *Consultation Responsibilities*

Throughout the CERCLA process, the bureau may be responsible for consulting with one or more entities. Consultation may occur with tribes, State Historic Preservation Officers (SHPOs; i.e., National Historic Preservation Act Section 106 consultation), U.S. Fish and Wildlife Service (i.e., Endangered Species Act Section 7 consultation). It is important to discuss the project with the Solicitor's Office, and/or your bureau's cultural and biological resource experts to determine what consultation is appropriate for the project, along with how to ensure proper consultation. *For further details on tribal consultation, please see the Department of the Interior Manual (DOI DM Part 512) and the Department's Tribal Consultation Policy, and bureau-specific*

*guidance if applicable.*

## **VI. MANAGING CERCLA PROJECTS**

During the various scoping phases of removal and remedial actions, the bureau's project manager should develop a project management plan to facilitate the project's completion and update the plan as it moves through the various phases. The project management plan should include, but not be limited to: 1) an overview of the project team and various stakeholders who are, or should be, included in the process (e.g., State environmental agencies); 2) roles and responsibilities and lines of communication; 3) project constraints; 4) contracting strategies for specific major phases, such as the EE/CA, RI/FS, or Remedial Design/Remedial Action; and 5) schedules.

Project management plans vary in detail depending on the complexity of the site and the stage of the project. For example, if a project is in a study or implementation phase, it would require a more robust project management plan than one in O&M. Project management plans should be working documents that are updated to account for changes in scope, schedules, personnel, and other changes that could affect the project's management. They can be in any format that the project manager or team determines to be the most useful for managing the project, projecting out-year resource needs and detailing schedules for coordination with Federal and State regulatory agencies, and community involvement. Project management plans should be maintained as confidential documents, particularly in cost recovery/cost avoidance cases.