National Oil and Hazardous Substances Pollution Contingency Plan

40 CFR 300

THIS DOCUMENT CONTAINS ONLY THE SECTIONS NEEDED FOR THE API 1169 ICP EXAMS

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Subpart A—Introduction

SOURCE: 59 FR 47416, Sept. 15, 1994, unless otherwise noted.

§300.1 Purpose and objectives.

The purpose of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) is to provide the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants.

§300.2 Authority and applicability.

The NCP is required by section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499, (hereinafter CERCLA), and by section 311(d) of the Clean Water Act (CWA), 33 U.S.C. 1321(d), as amended by the Oil Pollution Act of 1990 (OPA), Pub. L. 101-380. In Executive Order (E.O.) 12777 (56 FR 54757, October 22, 1991), the President delegated to the Environmental Protection Agency (EPA) the responsibility for the amendment of the NCP. Amendments to the NCP are coordinated with members of the National Response Team (NRT) prior to publication for notice and comment. This includes coordination with the Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission in order to avoid inconsistent or duplicative requirements in the emergency planning responsibilities of those agencies. The NCP is applicable to response actions taken pursuant to the authorities under CERCLA and section 311 of the CWA, as amended.

§300.3 Scope.

- (a) The NCP applies to and is in effect for:
- (1) Discharges of oil into or on the navigable waters of the United States, on the adjoining shorelines, the waters of the contiguous zone, into waters of the exclusive economic zone, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (See sections 311(c)(1) and 502(7) of the CWA).
- (2) Releases into the environment of hazardous substances, and pollutants or contaminants which may present an imminent and substantial danger to public health or welfare of the United States.
- (b) The NCP provides for efficient, coordinated, and effective response to discharges of oil and releases of hazardous substances, pollutants, and contaminants in accordance with the authorities of CERCLA and the CWA. It provides for:
- (1) The national response organization that may be activated in response actions. It specifies responsibilities among the federal, state, and local governments and describes resources that are available for response.

- (2) The establishment of requirements for federal, regional, and area contingency plans. It also summarizes state and local emergency planning requirements under SARA Title III.
 - (3) Procedures for undertaking removal actions pursuant to section 311 of the CWA.
 - (4) Procedures for undertaking response actions pursuant to CERCLA.
- (5) Procedures for involving state governments in the initiation, development, selection, and implementation of response actions, pursuant to CERCLA.
 - (6) Listing of federal trustees for natural resources for purposes of CERCLA and the CWA.
 - (7) Procedures for the participation of other persons in response actions.
- (8) Procedures for compiling and making available an administrative record for response actions.
- (9) National procedures for the use of dispersants and other chemicals in removals under the CWA and response actions under CERCLA.
- (c) In implementing the NCP, consideration shall be given to international assistance plans and agreements, security regulations and responsibilities based on international agreements, federal statutes, and executive orders. Actions taken pursuant to the provisions of any applicable international joint contingency plans shall be consistent with the NCP, to the greatest extent possible. The Department of State shall be consulted, as appropriate, prior to taking any action which may affect its activities.
- (d) Additionally, the NCP applies to and is in effect when the Federal Response Plan and some or all its Emergency Support Functions (ESFs) are activated.

§300.4 Abbreviations.

(a) Department and Agency Title Abbreviations:

ATSDR—Agency for Toxic Substances and Disease Registry

CDC—Centers for Disease Control

DOC—Department of Commerce

DOD—Department of Defense

DOE—Department of Energy

DOI—Department of the Interior

DOJ—Department of Justice

DOL—Department of Labor

DOS—Department of State

DOT—Department of Transportation

EPA—Environmental Protection Agency

FEMA—Federal Emergency Management Agency

GSA—General Services Administration

HHS—Department of Health and Human Services

NIOSH—National Institute for Occupational Safety and Health

NOAA—National Oceanic and Atmospheric Administration

OSHA—Occupational Health and Safety Administration

RSPA—Research and Special Programs Administration

USCG—United States Coast Guard

USDA—United States Department of Agriculture

NOTE: Reference is made in the NCP to both the Nuclear Regulatory Commission and the National Response Center. In order to avoid confusion, the NCP will spell out Nuclear Regulatory Commission and use the abbreviation "NRC" only with respect to the National Response Center.

(b) Operational Abbreviations:

ACP—Area Contingency Plan

ARARs—Applicable or Relevant and Appropriate Requirements

CERCLIS—CERCLA Information System

CRC—Community Relations Coordinator

CRP—Community Relations Plan

DRAT—District Response Advisory Team

DRG—District Response Group

ERT—Environmental Response Team

ESF—Emergency Support Function

FCO—Federal Coordinating Officer

FRERP—Federal Radiological Emergency Response Plan

FRP—Federal Response Plan

FS—Feasibility Study

HRS—Hazard Ranking System

LEPC—Local Emergency Planning Committee

NCP—National Contingency Plan

NPFC—National Pollution Funds Center

NPL—National Priorities List

NRC—National Response Center

NRS—National Response System

NRT—National Response Team

NSF—National Strike Force

NSFCC—National Strike Force Coordination Center

O&M—Operation and Maintenance

OSC—On-Scene Coordinator

OSLTF—Oil Spill Liability Trust Fund

PA—Preliminary Assessment

PIAT—Public Information Assist Team

RA—Remedial Action

RCP—Regional Contingency Plan

RD—Remedial Design

RERT—Radiological Emergency Response Team

RI—Remedial Investigation

ROD—Record of Decision

RPM—Remedial Project Manager

RRC—Regional Response Center

RRT—Regional Response Team

SAC—Support Agency Coordinator

SEMS—Superfund Enterprise Management System

SERC—State Emergency Response Commission

SI—Site Inspection

SMOA—Superfund Memorandum of Agreement

SONS—Spill of National Significance

SSC—Scientific Support Coordinator

SUPSALV—United States Navy Supervisor of Salvage

USFWS—United States Fish and Wildlife Service

[59 FR 47416, Sept. 15, 1994, as amended at 79 FR 65592, Nov. 5, 2014]

§300.5 Definitions.

Terms not defined in this section have the meaning given by CERCLA, the OPA, or the CWA.

Activation means notification by telephone or other expeditious manner or, when required, the assembly of some or all appropriate members of the RRT or NRT.

Alternative water supplies as defined by section 101(34) of CERCLA, includes, but is not limited to, drinking water and household water supplies.

Applicable requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable.

Area Committee (AC) as provided for by CWA sections 311(a)(18) and (j)(4), means the entity appointed by the President consisting of members from qualified personnel of federal, state, and local agencies with responsibilities that include preparing an area contingency plan for an area designated by the President.

Area contingency plan (ACP) as provided for by CWA sections 311(a)(19) and (j)(4), means the plan prepared by an Area Committee that is developed to be implemented in conjunction with the NCP and RCP, in part to address removal of a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President.

Bioremediation agents means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Burning agents means those additives that, through physical or chemical means, improve the combustibility of the materials to which they are applied.

CERCLA is the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986.

CERCLIS was the abbreviation for the CERCLA Information System. This system has been retired and has been replaced with SEMS, the Superfund Enterprise Management System.

Chemical agents means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the pollutant from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include sorbents.

Claim for purposes of a release under CERCLA, means a demand in writing for a sum certain; for purposes of a discharge under CWA, it means a request, made in writing for a sum certain, for compensation for damages or removal costs resulting from an incident.

Claimant as defined by section 1001 of the OPA means any person or government who presents a claim for compensation under Title I of the OPA.

Coastal waters for the purposes of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal zone as defined for the purpose of the NCP, means all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Group (DRG) as provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating, within each USCG district, and shall consist of: the combined USCG personnel and equipment, including marine firefighting equipment, of each port in the district; additional prepositioned response equipment; and a district response advisory team.

Community relations means EPA's program to inform and encourage public participation in the Superfund process and to respond to community concerns. The term "public" includes citizens directly affected by the site, other interested citizens or parties, organized groups, elected officials, and potentially responsible parties (PRPs).

Community relations coordinator means lead agency staff who work with the OSC/RPM to involve and inform the public about the Superfund process and response actions in accordance with the interactive community relations requirements set forth in the NCP.

Contiguous zone means the zone of the high seas, established by the United States under Article 24 of the Convention on the Territorial Sea and Contiguous Zone, which is contiguous to the territorial sea and which extends nine miles seaward from the outer limit of the territorial sea.

Cooperative agreement is a legal instrument EPA uses to transfer money, property, services, or anything of value to a recipient to accomplish a public purpose in which substantial EPA involvement is anticipated during the performance of the project.

Damages as defined by section 1001 of the OPA means damages specified in section 1002(b) of the Act, and includes the cost of assessing these damages.

Discharge as defined by section 311(a)(2) of the CWA, includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA, discharges resulting from circumstances identified and reviewed and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit, or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring

within the scope of relevant operating or treatment systems. For purposes of the NCP, discharge also means substantial threat of discharge.

Dispersants means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Drinking water supply as defined by section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act (42 U.S.C. 300 *et seq.*) or as drinking water by one or more individuals.

Environment as defined by section 101(8) of CERCLA, means the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 *et seq.*); and any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

Exclusive economic zone, as defined by OPA section 1001, means the zone established by Presidential Proclamation Numbered 5030, dated March 10, 1983, including the ocean waters of the areas referred to as "eastern special areas" in Article 3(1) of the Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary, signed June 1, 1990.

Facility as defined by section 101(9) of CERCLA, means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any site or area, where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel. As defined by section 1001 of the OPA, it means any structure, group of structures, equipment, or device (other than a vessel) which is used for one or more of the following purposes: Exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes.

Feasibility study (FS) means a study undertaken by the lead agency to develop and evaluate options for remedial action. The FS emphasizes data analysis and is generally performed concurrently and in an interactive fashion with the remedial investigation (RI), using data gathered during the RI. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

Federal Radiological Emergency Response Plan (FRERP) means the inter-agency agreement for coordinating the response of various agencies, under a variety of statutes, to a large radiological accident. The Lead Federal Agency (LFA), defined by the FRERP, activates the FRERP for any peacetime radiological emergency which, based upon its professional

judgment, is expected to have a significant radiological effect within the United States, its territories, possessions, or territorial waters and that could require a response by several federal agencies.

Federal Response Plan (FRP) means the agreement signed by 27 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.) and the Disaster Relief Act of 1974 (42 U.S.C. 3231 et seq.), as amended by the Stafford Disaster Relief Act of 1988.

First federal official means the first federal representative of a participating agency of the National Response Team to arrive at the scene of a discharge or a release. This official coordinates activities under the NCP and may initiate, in consultation with the OSC, any necessary actions until the arrival of the predesignated OSC. A state with primary jurisdiction over a site covered by a cooperative agreement will act in the stead of the first federal official for any incident at the site.

Fund or *Trust Fund* means the Hazardous Substance Superfund established by section 9507 of the Internal Revenue Code of 1986.

Ground water as defined by section 101(12) of CERCLA, means water in a saturated zone or stratum beneath the surface of land or water.

Hazard Ranking System (HRS) means the method used by EPA to evaluate the relative potential of hazardous substance releases to cause health or safety problems, or ecological or environmental damage.

Hazardous substance as defined by section 101(14) of CERCLA, means: Any substance designated pursuant to section 311(b)(2)(A) of the CWA; any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) has been suspended by Act of Congress); any toxic pollutant listed under section 307(a) of the CWA; any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. 7521 et seq.); and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act (15 U.S.C. 2601 et seq.). The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and the term does not include natural gas, natural gas liquids, liquified natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Indian tribe as defined by section 101(36) of CERCLA, means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. "Indian tribe," as defined by OPA section 1001, means any Indian tribe, band, nation,

or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the tribe.

Inland waters, for the purposes of classifying the size of discharges, means those waters of the United States in the inland zone, waters of the Great Lakes, and specified ports and harbors on inland rivers.

Inland zone means the environment inland of the coastal zone excluding the Great Lakes and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Lead administrative trustee means a natural resource trustee who is designated on an incident-by-incident basis for the purpose of preassessment and damage assessment and chosen by the other trustees whose natural resources are affected by the incident. The lead administrative trustee facilitates effective and efficient communication during response operations between the OSC and the other natural resource trustees conducting activities associated with damage assessment, and is responsible for applying to the OSC for access to response operations resources on behalf of all trustees for initiation of a damage assessment.

Lead agency means the agency that provides the OSC/RPM to plan and implement response actions under the NCP. EPA, the USCG, another federal agency, or a state (or political subdivision of a state) operating pursuant to a contract or cooperative agreement executed pursuant to section 104(d)(1) of CERCLA, or designated pursuant to a Superfund Memorandum of Agreement (SMOA) entered into pursuant to subpart F of the NCP or other agreements may be the lead agency for a response action. In the case of a release of a hazardous substance, pollutant, or contaminant, where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of Department of Defense (DOD) or Department of Energy (DOE), then DOD or DOE will be the lead agency. Where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of a federal agency other than EPA, the USCG, DOD, or DOE, then that agency will be the lead agency for remedial actions and removal actions other than emergencies. The federal agency maintains its lead agency responsibilities whether the remedy is selected by the federal agency for non-NPL sites or by EPA and the federal agency or by EPA alone under CERCLA section 120. The lead agency will consult with the support agency, if one exists, throughout the response process.

Management of migration means actions that are taken to minimize and mitigate the migration of hazardous substances or pollutants or contaminants and the effects of such migration. Measures may include, but are not limited to, management of a plume of contamination, restoration of a drinking water aquifer, or surface water restoration.

Miscellaneous oil spill control agent is any product, other than a dispersant, sinking agent, surface washing agent, surface collecting agent, bioremediation agent, burning agent, or sorbent that can be used to enhance oil spill cleanup, removal, treatment, or mitigation.

National Pollution Funds Center (NPFC) means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Priorities List (NPL) means the list, compiled by EPA pursuant to CERCLA section 105, of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response.

National response system (NRS) is the mechanism for coordinating response actions by all levels of government in support of the OSC/RPM. The NRS is composed of the NRT, RRTs, OSC/RPM, Area Committees, and Special Teams and related support entities. The NRS is capable of expanding or contracting to accommodate the response effort required by the size or complexity of the discharge or release.

National Strike Force (NSF) is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs/RPMs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC), authorized as the National Response Unit by CWA sections 311(a)(23) and (j)(2), means the entity established by the Secretary of the department in which the USCG is operating at Elizabeth City, North Carolina with responsibilities that include administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural resources means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone defined by the Magnuson Fishery Conservation and Management Act of 1976), any state or local government, any foreign government, any Indian tribe, or, if such resources are subject to a trust restriction on alienation, any member of an Indian tribe.

Navigable waters means the waters of the United States, including the territorial seas.

(1) For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq*. and its implementing regulations, subject to the exclusions in paragraph (2) of this definition, the term "waters of the United States" means:

- (i) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
 - (ii) All interstate waters, including interstate wetlands;
 - (iii) The territorial seas;
- (iv) All impoundments of waters otherwise identified as waters of the United States under this section;
- (v) All tributaries, as defined in paragraph (3)(iii) of this definition, of waters identified in paragraphs (1)(i) through (iii) of this definition;
- (vi) All waters adjacent to a water identified in paragraphs (1)(i) through (v) of this definition, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;
- (vii) All waters in paragraphs (1)(vii)(A) through (E) of this definition where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (1)(i) through (iii) of this definition. The waters identified in each of paragraphs (1)(vii)(A) through (E) of this definition are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (1)(i) through (iii) of this definition. Waters identified in this paragraph shall not be combined with waters identified in paragraph (1)(vi) of this definition when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.
- (A) *Prairie potholes*. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.
- (B) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.
- (C) *Pocosins*. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.
- (D) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.
- (E) *Texas coastal prairie wetlands*. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

- (viii) All waters located within the 100-year floodplain of a water identified in paragraphs (1)(i) through (iii) of this definition and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (1)(i) through (v) of this definition where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (1)(i) through (iii) of this definition. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (1)(i) through (iii) of this definition or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (1)(vi) of this definition when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.
- (2) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (1)(iv) through (viii) of this definition.
- (i) Waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.
- (ii) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.
 - (iii) The following ditches:
- (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (C) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (1)(i) through (iii) of this definition.
 - (iv) The following features:
- (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
 - (C) Artificial reflecting pools or swimming pools created in dry land;
 - (D) Small ornamental waters created in dry land;

- (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and
 - (G) Puddles.
 - (v) Groundwater, including groundwater drained through subsurface drainage systems.
- (vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.
- (vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.
 - (3) In this definition, the following terms apply:
- (i) *Adjacent*. The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (1)(i) through (v) of this definition, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (1)(i) through (v) of this definition. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (1)(i) through (v) or are located at the head of a water identified in paragraphs (1)(i) through (v) of this definition and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.
 - (ii) Neighboring. The term neighboring means:
- (A) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (1)(i) through (v) of this definition. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;
- (B) All waters located within the 100-year floodplain of a water identified in paragraphs (1)(i) through (v) of this definition and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain;
- (C) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (1)(i) or (1)(iii) of this definition, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

- (iii) Tributary and tributaries. The terms tributary and tributaries each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (1)(iv) of this definition), to a water identified in paragraphs (1)(i) through (iii) of this definition that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (2) of this definition. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (1)(i) through (iii) of this definition.
- (iv) *Wetlands*. The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
- (v) Significant nexus. The term significant nexus means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (1)(i) through (iii) of this definition. The term "in the region" means the watershed that drains to the nearest water identified in paragraphs (1)(i) through (iii) of this definition. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (1)(i) through (iii) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (3)(v)(A) through (I) of this definition. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (1)(i) through (iii) of this definition. Functions relevant to the significant nexus evaluation are the following:
 - (A) Sediment trapping,
 - (B) Nutrient recycling,
 - (C) Pollutant trapping, transformation, filtering, and transport,
 - (D) Retention and attenuation of flood waters,

- (E) Runoff storage,
- (F) Contribution of flow,
- (G) Export of organic matter,
- (H) Export of food resources, and
- (I) Provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a water identified in paragraphs (1)(i) through (iii) of this definition.
- (vi) Ordinary high water mark. The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- (vii) *High tide line*. The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Offshore facility as defined by section 101(17) of CERCLA and section 311(a)(11) of the CWA, means any facility of any kind located in, on, or under any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel.

Oil as defined by section 311(a)(1) of the CWA, means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil, as defined by section 1001 of the OPA means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act.

Oil Spill Liability Trust Fund (OSLTF) means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

On-scene coordinator (OSC) means the federal official predesignated by EPA or the USCG to coordinate and direct responses under subpart D, or the government official designated by the lead agency to coordinate and direct removal actions under subpart E of the NCP.

Onshore facility as defined by section 101(18) of CERCLA, means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land or non-navigable waters within the United States; and, as defined by section 311(a)(10) of the CWA, means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land within the United States other than submerged land.

On-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.

Operable unit means a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site.

Operation and maintenance (O&M) means measures required to maintain the effectiveness of response actions.

Person as defined by section 101(21) of CERCLA, means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States government, state, municipality, commission, political subdivision of a state, or any interstate body. As defined by section 1001 of the OPA, "person" means an individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, or any interstate body.

Pollutant or contaminant as defined by section 101(33) of CERCLA, shall include, but not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under section 101(14) (A) through (F) of CERCLA, nor does it include natural gas, liquified natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). For purposes of the NCP, the term pollutant or contaminant means any pollutant or contaminant that may present an imminent and substantial danger to public health or welfare of the United States.

Post-removal site control means those activities that are necessary to sustain the integrity of a Fund-financed removal action following its conclusion. Post-removal site control may be a removal or remedial action under CERCLA. The term includes, without being limited to, activities such as relighting gas flares, replacing filters, and collecting leachate.

Preliminary assessment (PA) under CERCLA means review of existing information and an off-site reconnaissance, if appropriate, to determine if a release may require additional investigation or action. A PA may include an on-site reconnaissance, if appropriate.

Public participation, see the definition for community relations.

Public vessel as defined by section 311(a)(4) of the CWA, means a vessel owned or bareboat-chartered and operated by the United States, or by a state or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce.

Quality assurance project plan (QAPP) is a written document, associated with all remedial site sampling activities, which presents in specific terms the organization (where applicable), objectives, functional activities, and specific quality assurance (QA) and quality control (QC) activities designed to achieve the data quality objectives of a specific project(s) or continuing operation(s). The QAPP is prepared for each specific project or continuing operation (or group of similar projects or continuing operations). The QAPP will be prepared by the responsible program office, regional office, laboratory, contractor, recipient of an assistance agreement, or other organization. For an enforcement action, potentially responsible parties may prepare a QAPP subject to lead agency approval.

Release as defined by section 101(22) of CERCLA, means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes: Any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons; emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of such Act, or, for the purposes of section 104 of CERCLA or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901 et seq.); and the normal application of fertilizer. For purposes of the NCP, release also means threat of release.

Relevant and appropriate requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the

CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.

Remedial design (RD) means the technical analysis and procedures which follow the selection of remedy for a site and result in a detailed set of plans and specifications for implementation of the remedial action.

Remedial investigation (RI) is a process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the feasibility study. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Remedial project manager (RPM) means the official designated by the lead agency to coordinate, monitor, or direct remedial or other response actions under subpart E of the NCP.

Remedy or remedial action (RA) means those actions consistent with permanent remedy taken instead of, or in addition to, removal action in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, on-site treatment or incineration, provision of alternative water supplies, any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment and, where appropriate, post-removal site control activities. The term includes the costs of permanent relocation of residents and businesses and community facilities (including the cost of providing "alternative land of equivalent value" to an Indian tribe pursuant to CERCLA section 126(b)) where EPA determines that, alone or in combination with other measures, such relocation is more cost-effective than, and environmentally preferable to, the transportation, storage, treatment, destruction, or secure disposition off-site of such hazardous substances, or may otherwise be necessary to protect the public health or welfare; the term includes off-site transport and off-site storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials. For the purpose of the NCP, the term also includes enforcement activities related thereto.

Remove or removal as defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare of the United States (including, but not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove a discharge. As defined by section 101(23) of

CERCLA, remove or removal means the cleanup or removal of released hazardous substances from the environment; such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment; such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare of the United States or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under section 104(b) of CERCLA, post-removal site control, where appropriate, and any emergency assistance which may be provided under the Disaster Relief Act of 1974. For the purpose of the NCP, the term also includes enforcement activities related thereto.

Removal costs as defined by section 1001 of the OPA means the costs of removal that are incurred after a discharge of oil has occurred, or in any case in which there is a substantial threat of a discharge of oil, the costs to prevent, minimize, or mitigate oil pollution from such an incident.

Respond or response as defined by section 101(25) of CERCLA, means remove, removal, remedy, or remedial action, including enforcement activities related thereto.

Responsible party as defined by section 1001 of the OPA, means the following:

- (1) Vessels—In the case of a vessel, any person owning, operating, or demise chartering the vessel.
- (2) Onshore Facilities—In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a federal agency, state, municipality, commission, or political subdivision of a state, or any interstate body, that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.
- (3) Offshore Facilities—In the case of an offshore facility (other than a pipeline or a deepwater port licensed under the Deepwater Port Act of 1974 (33 U.S.C. 1501 *et seq.*)), the lessee or permittee of the area in which the facility is located or the holder of a right of use and easement granted under applicable state law or the Outer Continental Shelf Lands Act (43 U.S.C. 1301-1356) for the area in which the facility is located (if the holder is a different person than the lessee or permittee), except a federal agency, state, municipality, commission, or political subdivision of a state, or any interstate body, that as owner transfers possession and right to use the property to another person by lease, assignment, or permit.
- (4) Deepwater Ports—In the case of a deepwater port licensed under the Deepwater Port Act of 1974 (33 U.S.C. 1501-1524), the licensee.
 - (5) Pipelines—In the case of a pipeline, any person owning or operating the pipeline.

(6) Abandonment—In the case of an abandoned vessel, onshore facility, deepwater port, pipeline, or offshore facility, the person who would have been responsible parties immediately prior to the abandonment of the vessel or facility.

SARA is the Superfund Amendments and Reauthorization Act of 1986. In addition to certain free-standing provisions of law, it includes amendments to CERCLA, the Solid Waste Disposal Act, and the Internal Revenue Code. Among the free-standing provisions of law is Title III of SARA, also known as the "Emergency Planning and Community Right-to-Know Act of 1986" and Title IV of SARA, also known as the "Radon Gas and Indoor Air Quality Research Act of 1986." Title V of SARA amending the Internal Revenue Code is also known as the "Superfund Revenue Act of 1986."

SEMS is the abbreviation for the Superfund Enterprise Management System. SEMS is EPA's comprehensive data management system that inventories and tracks information about releases addressed or needing to be addressed by the CERCLA Superfund program. SEMS consolidates legacy systems including CERCLIS into a single integrated platform. SEMS contains information for potential and confirmed hazardous waste sites addressed under the Superfund remedial and removal programs. SEMS includes sites in the active site inventory and archived sites. The active site inventory includes sites on the NPL, and sites not on the NPL where site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. Archived sites include non-NPL sites that were formerly in the active site inventory which have no further site assessment, removal, remedial, enforcement, cost recovery or oversight needed under the Federal Superfund program based on available information. New information may warrant return of an archive site to the active inventory. Inclusion of a specific site or area in SEMS does not represent a determination of any party's liability, nor does it represent a finding that any response action is necessary."

Sinking agents means those additives applied to oil discharges to sink floating pollutants below the water surface.

Site inspection (SI) means an on-site investigation to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

Size classes of discharges refers to the following size classes of oil discharges which are provided as guidance to the OSC and serve as the criteria for the actions delineated in subpart D. They are not meant to imply associated degrees of hazard to public health or welfare of the United States, nor are they a measure of environmental injury. Any oil discharge that poses a substantial threat to public health or welfare of the United States or the environment or results in significant public concern shall be classified as a major discharge regardless of the following quantitative measures:

(1) Minor discharge means a discharge to the inland waters of less than 1,000 gallons of oil or a discharge to the coastal waters of less than 10,000 gallons of oil.

- (2) Medium discharge means a discharge of 1,000 to 10,000 gallons of oil to the inland waters or a discharge of 10,000 to 100,000 gallons of oil to the coastal waters.
- (3) Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters or more than 100,000 gallons of oil to the coastal waters.

Size classes of releases refers to the following size classifications which are provided as guidance to the OSC for meeting pollution reporting requirements in subpart B. The final determination of the appropriate classification of a release will be made by the OSC based on consideration of the particular release (e.g., size, location, impact, etc.):

- (1) Minor release means a release of a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health or welfare of the United States or the environment.
- (2) Medium release means a release not meeting the criteria for classification as a minor or major release.
- (3) Major release means a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health or welfare of the United States or the environment or results in significant public concern.

Sorbents means essentially inert and insoluble materials that are used to remove oil and hazardous substances from water through adsorption, in which the oil or hazardous substance is attracted to the sorbent surface and then adheres to it; absorption, in which the oil or hazardous substance penetrates the pores of the sorbent material; or a combination of the two. Sorbents are generally manufactured in particulate form for spreading over an oil slick or as sheets, rolls, pillows, or booms. The sorbent material may consist of, but is not limited to, the following materials:

(1) Organic products—
(i) Peat moss or straw;
(ii) Cellulose fibers or cork;
(iii) Corn cobs;
(iv) Chicken, duck, or other bird feathers
(2) Mineral compounds—
(i) Volcanic ash or perlite;
(ii) Vermiculite or zeolite.

- (3) Synthetic products—
- (i) Polypropylene;
- (ii) Polyethylene;
- (iii) Polyurethane;
- (iv) Polyester.

Source control action is the construction or installation and start-up of those actions necessary to prevent the continued release of hazardous substances or pollutants or contaminants (primarily from a source on top of or within the ground, or in buildings or other structures) into the environment.

Source control maintenance measures are those measures intended to maintain the effectiveness of source control actions once such actions are operating and functioning properly, such as the maintenance of landfill caps and leachate collection systems.

Specified ports and harbors means those ports and harbor areas on inland rivers, and land areas immediately adjacent to those waters, where the USCG acts as predesignated on-scene coordinator. Precise locations are determined by EPA/USCG regional agreements and identified in federal Regional Contingency Plans and Area Contingency Plans.

Spill of national significance (SONS) means a spill that due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge.

State means the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction. For purposes of the NCP, the term includes Indian tribes as defined in the NCP except where specifically noted. Section 126 of CERCLA provides that the governing body of an Indian tribe shall be afforded substantially the same treatment as a state with respect to certain provisions of CERCLA. Section 300.515(b) of the NCP describes the requirements pertaining to Indian tribes that wish to be treated as states under CERCLA.

Superfund Memorandum of Agreement (SMOA) means a nonbinding, written document executed by an EPA Regional Administrator and the head of a state agency that may establish the nature and extent of EPA and state interaction during the removal, pre-remedial, remedial, and/or enforcement response process. The SMOA is not a site-specific document although attachments may address specific sites. The SMOA generally defines the role and responsibilities of both the lead and the support agencies.

Superfund state contract is a joint, legally binding agreement between EPA and a state to obtain the necessary assurances before a federal-lead remedial action can begin at a site. In the case of a political subdivision-lead remedial response, a three-party Superfund state contract among EPA, the state, and political subdivision thereof, is required before a political subdivision takes the lead for any phase of remedial response to ensure state involvement pursuant to section 121(f)(1) of CERCLA. The Superfund state contract may be amended to provide the state's CERCLA section 104 assurances before a political subdivision can take the lead for remedial action.

Support agency means the agency or agencies that provide the support agency coordinator to furnish necessary data to the lead agency, review response data and documents, and provide other assistance as requested by the OSC or RPM. EPA, the USCG, another federal agency, or a state may be support agencies for a response action if operating pursuant to a contract executed under section 104(d)(1) of CERCLA or designated pursuant to a Superfund Memorandum of Agreement entered into pursuant to subpart F of the NCP or other agreement. The support agency may also concur on decision documents.

Support agency coordinator (SAC) means the official designated by the support agency, as appropriate, to interact and coordinate with the lead agency in response actions under subpart E of this part.

Surface collecting agents means those chemical agents that form a surface film to control the layer thickness of oil.

Surface washing agent is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tank vessel as defined by section 1001 of the OPA means a vessel that is constructed or adapted to carry, or that carries oil or hazardous material in bulk as cargo or cargo residue, and that:

- (1) is a vessel of the United States;
- (2) operates on the navigable waters; or
- (3) transfers oil or hazardous material in a place subject to the jurisdiction of the United States.

Threat of discharge or release, see definitions for discharge and release.

Threat of release, see definition for release.

Treatment technology means any unit operation or series of unit operations that alters the composition of a hazardous substance or pollutant or contaminant through chemical, biological, or physical means so as to reduce toxicity, mobility, or volume of the contaminated materials

being treated. Treatment technologies are an alternative to land disposal of hazardous wastes without treatment.

Trustee means an official of a federal natural resources management agency designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 107(f) of CERCLA or section 1006 of the OPA.

United States when used in relation to section 311(a)(5) of the CWA, means the states, the District of Columbia, the Commonwealth of Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, the United States Virgin Islands, and the Pacific Island Governments. United States, when used in relation to section 101(27) of CERCLA and section 1001(36) of the OPA, includes the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction.

Vessel as defined by section 101(28) of CERCLA, means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water; and, as defined by section 311(a)(3) of the CWA, means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel.

Volunteer means any individual accepted to perform services by the lead agency which has authority to accept volunteer services (examples: See 16 U.S.C. 742f(c)). A volunteer is subject to the provisions of the authorizing statute and the NCP.

Worst case discharge as defined by section 311(a)(24) of the CWA, means, in the case of a vessel, a discharge in adverse weather conditions of its entire cargo, and, in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions.

59 FR 47416, Sept. 15, 1994, as amended at 60 FR 16054, Mar. 29, 1995;79 FR 65592, Nov. 5, 2014; 80 FR 37119, June 29, 2015]

§300.6 Use of number and gender.

As used in this regulation, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

§300.7 Computation of time.

In computing any period of time prescribed or allowed in these rules of practice, except as otherwise provided, the day of the event from which the designated period begins to run shall not be included. Saturdays, Sundays, and federal legal holidays shall be included. When a stated time expires on a Saturday, Sunday, or legal holiday, the stated time period shall be extended to include the next business day.

Subpart E—Hazardous Substance Response

SOURCE: 55 FR 8839, Mar. 8, 1990, unless otherwise noted.

§300.400 General.

- (a) This subpart establishes methods and criteria for determining the appropriate extent of response authorized by CERCLA and CWA section 311(c):
 - (1) When there is a release of a hazardous substance into the environment; or
- (2) When there is a release into the environment of any pollutant or contaminant that may present an imminent and substantial danger to the public health or welfare of the United States.
- (b) *Limitations on response*. Unless the lead agency determines that a release constitutes a public health or environmental emergency and no other person with the authority and capability to respond will do so in a timely manner, a removal or remedial action under section 104 of CERCLA shall not be undertaken in response to a release:
- (1) Of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found;
- (2) From products that are part of the structure of, and result in exposure within, residential buildings or business or community structures; or
- (3) Into public or private drinking water supplies due to deterioration of the system through ordinary use.
- (c) *Fund-financed action*. In determining the need for and in planning or undertaking Fund-financed action, the lead agency shall, to the extent practicable:
 - (1) Engage in prompt response;
 - (2) Provide for state participation in response actions, as described in subpart F of this part;
 - (3) Conserve Fund monies by encouraging private party response;
 - (4) Be sensitive to local community concerns;
 - (5) Consider using treatment technologies;
- (6) Involve the Regional Response Team (RRT) in both removal and remedial response actions at appropriate decision-making stages;
 - (7) Encourage the involvement and sharing of technology by industry and other experts; and

- (8) Encourage the involvement of organizations to coordinate responsible party actions, foster site response, and provide technical advice to the public, federal and state governments, and industry.
- (d) *Entry and access*. (1) For purposes of determining the need for response, or choosing or taking a response action, or otherwise enforcing the provisions of CERCLA, EPA, or the appropriate federal agency, and a state or political subdivision operating pursuant to a contract or cooperative agreement under CERCLA section 104(d)(1), has the authority to enter any vessel, facility, establishment or other place, property, or location described in paragraph (d)(2) of this section and conduct, complete, operate, and maintain any response actions authorized by CERCLA or these regulations.
- (2)(i) Under the authorities described in paragraph (d)(1) of this section, EPA, or the appropriate federal agency, and a state or political subdivision operating pursuant to a contract or cooperative agreement under CERCLA section 104(d)(1), may enter:
- (A) Any vessel, facility, establishment, or other place or property where any hazardous substance or pollutant or contaminant may be or has been generated, stored, treated, disposed of, or transported from;
- (B) Any vessel, facility, establishment, or other place or property from which, or to which, a hazardous substance or pollutant or contaminant has been, or may have been, released or where such release is or may be threatened;
- (C) Any vessel, facility, establishment, or other place or property where entry is necessary to determine the need for response or the appropriate response or to effectuate a response action; or
- (D) Any vessel, facility, establishment, or other place, property, or location adjacent to those vessels, facilities, establishments, places, or properties described in paragraphs (d)(2)(i)(A), (B), or (C) of this section.
- (ii) Once a determination has been made that there is a reasonable basis to believe that there has been or may be a release, EPA, or the appropriate federal agency, and a state or political subdivision operating pursuant to a contract or cooperative agreement under CERCLA section 104(d)(1), is authorized to enter all vessels, facilities, establishments, places, properties, or locations specified in paragraph (d)(2)(i) of this section, at which the release is believed to be, and all other vessels, facilities, establishments, places, properties, or locations identified in paragraph (d)(2)(i) of this section that are related to the response or are necessary to enter in responding to that release.
- (3) The lead agency may designate as its representative solely for the purpose of access, among others, one or more potentially responsible parties, including representatives, employees, agents, and contractors of such parties. EPA, or the appropriate federal agency, may exercise the authority contained in section 104(e) of CERCLA to obtain access for its designated representative. A potentially responsible party may only be designated as a representative of the

lead agency where that potentially responsible party has agreed to conduct response activities pursuant to an administrative order or consent decree.

- (4)(i) If consent is not granted under the authorities described in paragraph (d)(1) of this section, or if consent is conditioned in any manner, EPA, or the appropriate federal agency, may issue an order pursuant to section 104(e)(5) of CERCLA directing compliance with the request for access made under §300.400(d)(1). EPA or the appropriate federal agency may ask the Attorney General to commence a civil action to compel compliance with either a request for access or an order directing compliance.
- (ii) EPA reserves the right to proceed, where appropriate, under applicable authority other than CERCLA section 104(e).
- (iii) The administrative order may direct compliance with a request to enter or inspect any vessel, facility, establishment, place, property, or location described in paragraph (d)(2) of this section.
 - (iv) Each order shall contain:
- (A) A determination by EPA, or the appropriate federal agency, that it is reasonable to believe that there may be or has been a release or threat of a release of a hazardous substance or pollutant or contaminant and a statement of the facts upon which the determination is based;
- (B) A description, in light of CERCLA response authorities, of the purpose and estimated scope and duration of the entry, including a description of the specific anticipated activities to be conducted pursuant to the order;
- (C) A provision advising the person who failed to consent that an officer or employee of the agency that issued the order will be available to confer with respondent prior to effective date of the order; and
- (D) A provision advising the person who failed to consent that a court may impose a penalty of up to \$25,000 per day for unreasonable failure to comply with the order.
- (v) Orders shall be served upon the person or responsible party who failed to consent prior to their effective date. Force shall not be used to compel compliance with an order.
 - (vi) Orders may not be issued for any criminal investigations.
- (e) *Permit requirements*. (1) No federal, state, or local permits are required for on-site response actions conducted pursuant to CERCLA sections 104, 106, 120, 121, or 122. The term *on-site* means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.
 - (2) Permits, if required, shall be obtained for all response activities conducted off-site.

- (f) *Health assessments*. Health assessments shall be performed by ATSDR at facilities on or proposed to be listed on the NPL and may be performed at other releases or facilities in response to petitions made to ATSDR. Where available, these health assessments may be used by the lead agency to assist in determining whether response actions should be taken and/or to identify the need for additional studies to assist in the assessment of potential human health effects associated with releases or potential releases of hazardous substances.
- (g) *Identification of applicable or relevant and appropriate requirements*. (1) The lead and support agencies shall identify requirements applicable to the release or remedial action contemplated based upon an objective determination of whether the requirement specifically addresses a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site.
- (2) If, based upon paragraph (g)(1) of this section, it is determined that a requirement is not applicable to a specific release, the requirement may still be relevant and appropriate to the circumstances of the release. In evaluating relevance and appropriateness, the factors in paragraphs (g)(2)(i) through (viii) of this section shall be examined, where pertinent, to determine whether a requirement addresses problems or situations sufficiently similar to the circumstances of the release or remedial action contemplated, and whether the requirement is well-suited to the site, and therefore is both relevant and appropriate. The pertinence of each of the following factors will depend, in part, on whether a requirement addresses a chemical, location, or action. The following comparisons shall be made, where pertinent, to determine relevance and appropriateness:
 - (i) The purpose of the requirement and the purpose of the CERCLA action;
- (ii) The medium regulated or affected by the requirement and the medium contaminated or affected at the CERCLA site;
- (iii) The substances regulated by the requirement and the substances found at the CERCLA site:
- (iv) The actions or activities regulated by the requirement and the remedial action contemplated at the CERCLA site;
- (v) Any variances, waivers, or exemptions of the requirement and their availability for the circumstances at the CERCLA site;
- (vi) The type of place regulated and the type of place affected by the release or CERCLA action;
- (vii) The type and size of structure or facility regulated and the type and size of structure or facility affected by the release or contemplated by the CERCLA action;
- (viii) Any consideration of use or potential use of affected resources in the requirement and the use or potential use of the affected resource at the CERCLA site.

- (3) In addition to applicable or relevant and appropriate requirements, the lead and support agencies may, as appropriate, identify other advisories, criteria, or guidance to be considered for a particular release. The "to be considered" (TBC) category consists of advisories, criteria, or guidance that were developed by EPA, other federal agencies, or states that may be useful in developing CERCLA remedies.
- (4) Only those state standards that are promulgated, are identified by the state in a timely manner, and are more stringent than federal requirements may be applicable or relevant and appropriate. For purposes of identification and notification of promulgated state standards, the term *promulgated* means that the standards are of general applicability and are legally enforceable.
- (5) The lead agency and support agency shall identify their specific requirements that are applicable or relevant and appropriate for a particular site. These agencies shall notify each other, in a timely manner as described in §300.515(d), of the requirements they have determined to be applicable or relevant and appropriate. When identifying a requirement as an ARAR, the lead agency and support agency shall include a citation to the statute or regulation from which the requirement is derived.
- (6) Notification of ARARs shall be according to procedures and timeframes specified in §300.515 (d)(2) and (h)(2).
- (h) *Oversight*. The lead agency may provide oversight for actions taken by potentially responsible parties to ensure that a response is conducted consistent with this part. The lead agency may also monitor the actions of third parties preauthorized under subpart H of this part. EPA will provide oversight when the response is pursuant to an EPA order or federal consent decree.
- (i) *Other*. (1) This subpart does not establish any preconditions to enforcement action by either the federal or state governments to compel response actions by potentially responsible parties.
- (2) While much of this subpart is oriented toward federally funded response actions, this subpart may be used as guidance concerning methods and criteria for response actions by other parties under other funding mechanisms. Except as provided in subpart H of this part, nothing in this part is intended to limit the rights of any person to seek recovery of response costs from responsible parties pursuant to CERCLA section 107.
- (3) Activities by the federal and state governments in implementing this subpart are discretionary governmental functions. This subpart does not create in any private party a right to federal response or enforcement action. This subpart does not create any duty of the federal government to take any response action at any particular time.

[55 FR 8839, Mar. 8, 1990, as amended at 59 FR 47447, Sept. 15, 1994]

§300.405 Discovery or notification.

- (a) A release may be discovered through:
- (1) A report submitted in accordance with section 103(a) of CERCLA, *i.e.*, reportable quantities codified at 40 CFR part 302;
 - (2) A report submitted to EPA in accordance with section 103(c) of CERCLA;
- (3) Investigation by government authorities conducted in accordance with section 104(e) of CERCLA or other statutory authority;
 - (4) Notification of a release by a federal or state permit holder when required by its permit;
- (5) Inventory or survey efforts or random or incidental observation reported by government agencies or the public;
- (6) Submission of a citizen petition to EPA or the appropriate federal facility requesting a preliminary assessment, in accordance with section 105(d) of CERCLA;
 - (7) A report submitted in accordance with section 311(b)(5) of the CWA; and
 - (8) Other sources.
- (b) Any person in charge of a vessel or a facility shall report releases as described in paragraph (a)(1) of this section to the National Response Center (NRC). If direct reporting to the NRC is not practicable, reports may be made to the United States Coast Guard (USCG) on-scene coordinator (OSC) for the geographic area where the release occurs. The EPA predesignated OSC may also be contacted through the regional 24-hour emergency response telephone number. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or predesignated OSC immediately, reports may be made immediately to the nearest USCG unit. In any event, such person in charge of the vessel or facility shall notify the NRC as soon as possible.
- (c) All other reports of releases described under paragraph (a) of this section, except releases reported under paragraphs (a)(2) and (6) of this section, shall, as appropriate, be made to the NRC.
- (d) The NRC will generally need information that will help to characterize the release. This will include, but not be limited to: Location of the release; type(s) of material(s) released; an estimate of the quantity of material released; possible source of the release; and date and time of the release. Reporting under paragraphs (b) and (c) of this section shall not be delayed due to incomplete notification information.
- (e) Upon receipt of a notification of a release, the NRC shall promptly notify the appropriate OSC. The OSC shall notify the Governor, or designee, of the state affected by the release.

- (f)(1) When the OSC is notified of a release that may require response pursuant to §300.415(b), a removal site evaluation shall, as appropriate, be promptly undertaken pursuant to §300.410.
- (2) When notification indicates that removal action pursuant to §300.415(b) is not required, a remedial site evaluation shall, if appropriate, be undertaken by the lead agency pursuant to §300.420, if one has not already been performed.
- (3) If radioactive substances are present in a release, the EPA Radiological Response Coordinator should be notified for evaluation and assistance either directly or via the NRC, consistent with §§300.130(e) and 300.145(f).
- (g) Release notification made to the NRC under this section does not relieve the owner/operator of a facility from any obligations to which it is subject under SARA Title III or state law. In particular, it does not relieve the owner/operator from the requirements of section 304 of SARA Title III and 40 CFR part 355 and §300.215(f) of this part for notifying the community emergency coordinator for the appropriate local emergency planning committee of all affected areas and the state emergency response commission of any state affected that there has been a release. Federal agencies are not legally obligated to comply with the requirements of Title III of SARA.

[55 FR 8839, Mar. 8, 1990, as amended at 59 FR 47447, Sept. 15, 1994]

§300.410 Removal site evaluation.

- (a) A removal site evaluation includes a removal preliminary assessment and, if warranted, a removal site inspection.
- (b) A removal site evaluation of a release identified for possible CERCLA response pursuant to §300.415 shall, as appropriate, be undertaken by the lead agency as promptly as possible. The lead agency may perform a removal preliminary assessment in response to petitions submitted by a person who is, or may be, affected by a release of a hazardous substance, pollutant, or contaminant pursuant to §300.420(b)(5).
- (c)(1) The lead agency shall, as appropriate, base the removal preliminary assessment on readily available information. A removal preliminary assessment may include, but is not limited to:
 - (i) Identification of the source and nature of the release or threat of release;
- (ii) Evaluation by ATSDR or by other sources, for example, state public health agencies, of the threat to public health;
 - (iii) Evaluation of the magnitude of the threat;
- (iv) Evaluation of factors necessary to make the determination of whether a removal is necessary; and

- (v) Determination of whether a nonfederal party is undertaking proper response.
- (2) A removal preliminary assessment of releases from hazardous waste management facilities may include collection or review of data such as site management practices, information from generators, photographs, analysis of historical photographs, literature searches, and personal interviews conducted, as appropriate.
- (d) A removal site inspection may be performed if more information is needed. Such inspection may include a perimeter (*i.e.*, off-site) or on-site inspection, taking into consideration whether such inspection can be performed safely.
- (e)(1) As part of the evaluation under this section, the OSC shall determine whether a release governed by CWA section 311(c)(1), as amended by OPA section 4201(a), has occurred.
- (2) If such a release of a CWA hazardous substance has occurred, the OSC shall determine whether the release results in a substantial threat to the public health or welfare of the United States. Factors to be considered by the OSC in making this determination include, but are not limited to, the size of the release, the character of the release, and the nature of the threat to public health or welfare of the United States. Upon obtaining relevant elements of such information, the OSC shall conduct an evaluation of the threat posed, based on the OSC's experience in assessing other releases, and consultation with senior lead agency officials and readily available authorities on issues outside the OSC's technical expertise.
 - (f) A removal site evaluation shall be terminated when the OSC or lead agency determines:
 - (1) There is no release;
 - (2) The source is neither a vessel nor a facility as defined in §300.5 of the NCP;
- (3) The release involves neither a hazardous substance, nor a pollutant or contaminant that may present an imminent and substantial danger to public health or welfare of the United States;
- (4) The release consists of a situation specified in §300.400(b)(1) through (3) subject to limitations on response;
 - (5) The amount, quantity, or concentration released does not warrant federal response;
- (6) A party responsible for the release, or any other person, is providing appropriate response, and on-scene monitoring by the government is not required; or
 - (7) The removal site evaluation is completed.
 - (g) The results of the removal site evaluation shall be documented.

- (h) The OSC or lead agency shall ensure that natural resource trustees are promptly notified in order that they may initiate appropriate actions, including those identified in subpart G of this part. The OSC or lead agency shall coordinate all response activities with such affected trustees.
- (i) If the removal site evaluation indicates that removal action under §300.415 is not required, but that remedial action under §300.430 may be necessary, the lead agency shall, as appropriate, initiate a remedial site evaluation pursuant to §300.420.

[59 FR 47448, Sept. 15, 1994]

§300.415 Removal action.

- (a)(1) In determining the appropriate extent of action to be taken in response to a given release, the lead agency shall first review the removal site evaluation, any information produced through a remedial site evaluation, if any has been done previously, and the current site conditions, to determine if removal action is appropriate.
- (2) Where the responsible parties are known, an effort initially shall be made, to the extent practicable, to determine whether they can and will perform the necessary removal action promptly and properly.
- (3) This section does not apply to removal actions taken pursuant to section 104(b) of CERCLA. The criteria for such actions are set forth in section 104(b) of CERCLA.
- (b)(1) At any release, regardless of whether the site is included on the National Priorities List (NPL), where the lead agency makes the determination, based on the factors in paragraph (b)(2) of this section, that there is a threat to public health or welfare of the United States or the environment, the lead agency may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release.
- (2) The following factors shall be considered in determining the appropriateness of a removal action pursuant to this section:
- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;
 - (ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;
- (iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- (iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;
- (v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

- (vi) Threat of fire or explosion;
- (vii) The availability of other appropriate federal or state response mechanisms to respond to the release; and
- (viii) Other situations or factors that may pose threats to public health or welfare of the United States or the environment.
- (3) If the lead agency determines that a removal action is appropriate, actions shall, as appropriate, begin as soon as possible to abate, prevent, minimize, stabilize, mitigate, or eliminate the threat to public health or welfare of the United States or the environment. The lead agency shall, at the earliest possible time, also make any necessary determinations pursuant to paragraph (b)(4) of this section.
- (4) Whenever a planning period of at least six months exists before on-site activities must be initiated, and the lead agency determines, based on a site evaluation, that a removal action is appropriate:
- (i) The lead agency shall conduct an engineering evaluation/cost analysis (EE/CA) or its equivalent. The EE/CA is an analysis of removal alternatives for a site.
- (ii) If environmental samples are to be collected, the lead agency shall develop sampling and analysis plans that shall provide a process for obtaining data of sufficient quality and quantity to satisfy data needs. Sampling and analysis plans shall be reviewed and approved by EPA. The sampling and analysis plans shall consist of two parts:
- (A) The field sampling plan, which describes the number, type, and location of samples and the type of analyses; and
- (B) The quality assurance project plan, which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate data for use in planning and documenting the removal action.
- (5) CERCLA fund-financed removal actions, other than those authorized under section 104(b) of CERCLA, shall be terminated after \$2 million has been obligated for the action or 12 months have elapsed from the date that removal activities begin on-site, unless the lead agency determines that:
- (i) There is an immediate risk to public health or welfare of the United States or the environment; continued response actions are immediately required to prevent, limit, or mitigate an emergency; and such assistance will not otherwise be provided on a timely basis; or
- (ii) Continued response action is otherwise appropriate and consistent with the remedial action to be taken.

- (c)(1) In carrying out a response to a release of a CWA hazardous substance, as described in CWA section 311(c)(1), as amended by OPA section 4201(a), the OSC may:
- (i) Remove or arrange for the removal of a release, and mitigate or prevent a substantial threat of a release, at any time;
 - (ii) Direct or monitor all federal, state, and private actions to remove a release; and
- (iii) Remove and, if necessary, destroy a vessel releasing or threatening to release CWA hazardous substances, by whatever means are available.
- (2) If the investigation by the OSC under §300.410 shows that the release of a CWA hazardous substance results in a substantial threat to public health or welfare of the United States, the OSC shall direct all federal, state, or private actions to remove the release or to mitigate or prevent the threat of such a release, as appropriate. In directing the response, the OSC may act without regard to any other provision of law governing contracting procedures or employment of personnel by the federal government to:
 - (i) Remove or arrange for the removal of the release;
 - (ii) Mitigate or prevent the substantial threat of the release; and
- (iii) Remove and, if necessary, destroy a vessel releasing, or threatening to release, by whatever means are available.
- (3) In the case of a release of a CWA hazardous substance posing a substantial threat to public health or welfare of the United States, the OSC shall:
- (i) Assess opportunities for the use of various special teams and other assistance described in §300.145, as appropriate;
 - (ii) Request immediate activation of the RRT; and
- (iii) Take whatever additional response actions are deemed appropriate. When requested by the OSC, the lead agency or RRT shall dispatch appropriate personnel to the scene of the release to assist the OSC. This assistance may include technical support in the agency's areas of expertise and disseminating information to the public in accordance with §300.155. The lead agency shall ensure that a contracting officer is available on-scene, at the request of the OSC.
- (d) Removal actions shall, to the extent practicable, contribute to the efficient performance of any anticipated long-term remedial action with respect to the release concerned.
- (e) The following removal actions are, as a general rule, appropriate in the types of situations shown; however, this list is not exhaustive and is not intended to prevent the lead agency from taking any other actions deemed necessary under CERCLA, CWA section 311, or

other appropriate federal or state enforcement or response authorities, and the list does not create a duty on the lead agency to take action at any particular time:

- (1) Fences, warning signs, or other security or site control precautions—where humans or animals have access to the release;
- (2) Drainage controls, for example, run-off or run-on diversion—where needed to reduce migration of hazardous substances or pollutants or contaminants off-site or to prevent precipitation or run-off from other sources, for example, flooding, from entering the release area from other areas;
- (3) Stabilization of berms, dikes, or impoundments or drainage or closing of lagoons—where needed to maintain the integrity of the structures;
- (4) Capping of contaminated soils or sludges—where needed to reduce migration of hazardous substances or pollutants or contaminants into soil, ground or surface water, or air;
- (5) Using chemicals and other materials to retard the spread of the release or to mitigate its effects—where the use of such chemicals will reduce the spread of the release;
- (6) Excavation, consolidation, or removal of highly contaminated soils from drainage or other areas—where such actions will reduce the spread of, or direct contact with, the contamination;
- (7) Removal of drums, barrels, tanks, or other bulk containers that contain or may contain hazardous substances or pollutants or contaminants—where it will reduce the likelihood of spillage; leakage; exposure to humans, animals, or food chain; or fire or explosion;
- (8) Containment, treatment, disposal, or incineration of hazardous materials—where needed to reduce the likelihood of human, animal, or food chain exposure; or
- (9) Provision of alternative water supply—where necessary immediately to reduce exposure to contaminated household water and continuing until such time as local authorities can satisfy the need for a permanent remedy.
- (f) Where necessary to protect public health or welfare, the lead agency shall request that FEMA conduct a temporary relocation or that state/local officials conduct an evacuation.
- (g) If the lead agency determines that the removal action will not fully address the threat posed by the release and the release may require remedial action, the lead agency shall ensure an orderly transition from removal to remedial response activities.
- (h) CERCLA removal actions conducted by states under cooperative agreements, described in subpart F of this part, shall comply with all requirements of this section.

- (i) Facilities operated by a state or political subdivision at the time of disposal require a state cost share of at least 50 percent of Fund-financed response costs if a Fund-financed remedial action is conducted.
- (j) Fund-financed removal actions under CERCLA section 104 and removal actions pursuant to CERCLA section 106 shall, to the extent practicable considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws. Waivers described in §300.430(f)(1)(ii)(C) may be used for removal actions. Other federal and state advisories, criteria, or guidance may, as appropriate, be considered in formulating the removal action (see §300.400(g)(3)). In determining whether compliance with ARARs is practicable, the lead agency may consider appropriate factors, including:
 - (1) The urgency of the situation; and
 - (2) The scope of the removal action to be conducted.
- (k) Removal actions pursuant to section 106 or 122 of CERCLA are not subject to the following requirements of this section:
- (1) Section 300.415(a)(2) requirement to locate responsible parties and have them undertake the response;
- (2) Section 300.415(b)(2)(vii) requirement to consider the availability of other appropriate federal or state response and enforcement mechanisms to respond to the release;
- (3) Section 300.415(b)(5) requirement to terminate response after \$2 million has been obligated or 12 months have elapsed from the date of the initial response; and
- (4) Section 300.415(g) requirement to assure an orderly transition from removal to remedial action.
- (l) To the extent practicable, provision for post-removal site control following a CERCLA Fund-financed removal action at both NPL and non-NPL sites is encouraged to be made prior to the initiation of the removal action. Such post-removal site control includes actions necessary to ensure the effectiveness and integrity of the removal action after the completion of the on-site removal action or after the \$2 million or 12-month statutory limits are reached for sites that do not meet the exemption criteria in paragraph (b)(5) of this section. Post-removal site control may be conducted by:
- (1) The affected state or political subdivision thereof or local units of government for any removal;
 - (2) Potentially responsible parties; or
 - (3) EPA's remedial program for some federal-lead Fund-financed responses at NPL sites.

- (m) OSCs/RPMs conducting removal actions shall submit OSC reports to the RRT as required by §300.165.
- (n) Community relations in removal actions. (1) In the case of all CERCLA removal actions taken pursuant to §300.415 or CERCLA enforcement actions to compel removal response, a spokesperson shall be designated by the lead agency. The spokesperson shall inform the community of actions taken, respond to inquiries, and provide information concerning the release. All news releases or statements made by participating agencies shall be coordinated with the OSC/RPM. The spokesperson shall notify, at a minimum, immediately affected citizens, state and local officials, and, when appropriate, civil defense or emergency management agencies.
- (2) For CERCLA actions where, based on the site evaluation, the lead agency determines that a removal is appropriate, and that less than six months exists before on-site removal activity must begin, the lead agency shall:
- (i) Publish a notice of availability of the administrative record file established pursuant to §300.820 in a major local newspaper of general circulation or use one or more other mechanisms to give adequate notice to a community within 60 days of initiation of on-site removal activity;
- (ii) Provide a public comment period, as appropriate, of not less than 30 days from the time the administrative record file is made available for public inspection, pursuant to §300.820(b)(2); and
 - (iii) Prepare a written response to significant comments pursuant to §300.820(b)(3).
- (3) For CERCLA removal actions where on-site action is expected to extend beyond 120 days from the initiation of on-site removal activities, the lead agency shall by the end of the 120-day period:
- (i) Conduct interviews with local officials, community residents, public interest groups, or other interested or affected parties, as appropriate, to solicit their concerns, information needs, and how or when citizens would like to be involved in the Superfund process;
- (ii) Prepare a formal community relations plan (CRP) based on the community interviews and other relevant information, specifying the community relations activities that the lead agency expects to undertake during the response; and
- (iii) Establish at least one local information repository at or near the location of the response action. The information repository should contain items made available for public information. Further, an administrative record file established pursuant to subpart I for all removal actions shall be available for public inspection in at least one of the repositories. The lead agency shall inform the public of the establishment of the information repository and provide notice of availability of the administrative record file for public review. All items in the repository shall be available for public inspection and copying.

- (4) Where, based on the site evaluation, the lead agency determines that a CERCLA removal action is appropriate and that a planning period of at least six months exists prior to initiation of the on-site removal activities, the lead agency shall at a minimum:
- (i) Comply with the requirements set forth in paragraphs (n)(3)(i), (ii), and (iii) of this section, prior to the completion of the EE/CA, or its equivalent, except that the information repository and the administrative record file will be established no later than when the EE/CA approval memorandum is signed;
- (ii) Publish a notice of availability and brief description of the EE/CA in a major local newspaper of general circulation or use one or more other mechanisms to give adequate notice to a community pursuant to §300.820;
- (iii) Provide a reasonable opportunity, not less than 30 calendar days, for submission of written and oral comments after completion of the EE/CA pursuant to §300.820(a). Upon timely request, the lead agency will extend the public comment period by a minimum of 15 days; and
 - (iv) Prepare a written response to significant comments pursuant to §300.820(a).

[59 FR 47448, Sept. 15, 1994, as amended at 80 FR 17706, Apr. 2, 2015]

§300.420 Remedial site evaluation.

- (a) *General*. The purpose of this section is to describe the methods, procedures, and criteria the lead agency shall use to collect data, as required, and evaluate releases of hazardous substances, pollutants, or contaminants. The evaluation may consist of two steps: a remedial preliminary assessment (PA) and a remedial site inspection (SI).
- (b) Remedial preliminary assessment. (1) The lead agency shall perform a remedial PA on all sites entered into the SEMS remedial assessment active inventory as defined in §300.5 to:
- (i) Eliminate from further consideration those sites that pose no threat to public health or the environment;
 - (ii) Determine if there is any potential need for removal action;
 - (iii) Set priorities for site inspections; and
- (iv) Gather existing data to facilitate later evaluation of the release pursuant to the Hazard Ranking System (HRS) if warranted.
- (2) A remedial PA shall consist of a review of existing information about a release such as information on the pathways of exposure, exposure targets, and source and nature of release. A remedial PA shall also include an off-site reconnaissance as appropriate. A remedial PA may include an on-site reconnaissance where appropriate.

- (3) If the remedial PA indicates that a removal action may be warranted, the lead agency shall initiate removal evaluation pursuant to §300.410.
- (4) In performing a remedial PA, the lead agency may complete the EPA Preliminary Assessment form, available from EPA regional offices, or its equivalent, and shall prepare a PA report, which shall include:
 - (i) A description of the release;
 - (ii) A description of the probable nature of the release; and
- (iii) A recommendation on whether further action is warranted, which lead agency should conduct further action, and whether an SI or removal action or both should be undertaken.
- (5) Any person may petition the lead federal agency (EPA or the appropriate federal agency in the case of a release or suspected release from a federal facility), to perform a PA of a release when such person is, or may be, affected by a release of a hazardous substance, pollutant, or contaminant. Such petitions shall be addressed to the EPA Regional Administrator for the region in which the release is located, except that petitions for PAs involving federal facilities should be addressed to the head of the appropriate federal agency.
 - (i) Petitions shall be signed by the petitioner and shall contain the following:
 - (A) The full name, address, and phone number of petitioner;
 - (B) A description, as precisely as possible, of the location of the release; and
 - (C) How the petitioner is or may be affected by the release.
 - (ii) Petitions should also contain the following information to the extent available:
 - (A) What type of substances were or may be released;
 - (B) The nature of activities that have occurred where the release is located; and
 - (C) Whether local and state authorities have been contacted about the release.
- (iii) The lead federal agency shall complete a remedial or removal PA within one year of the date of receipt of a complete petition pursuant to paragraph (b)(5) of this section, if one has not been performed previously, unless the lead federal agency determines that a PA is not appropriate. Where such a determination is made, the lead federal agency shall notify the petitioner and will provide a reason for the determination.
- (iv) When determining if performance of a PA is appropriate, the lead federal agency shall take into consideration:

- (A) Whether there is information indicating that a release has occurred or there is a threat of a release of a hazardous substance, pollutant, or contaminant; and
 - (B) Whether the release is eligible for response under CERCLA.
- (c) Remedial site inspection. (1) The lead agency shall perform a remedial SI as appropriate to:
- (i) Eliminate from further consideration those releases that pose no significant threat to public health or the environment;
 - (ii) Determine the potential need for removal action;
- (iii) Collect or develop additional data, as appropriate, to evaluate the release pursuant to the HRS; and
- (iv) Collect data in addition to that required to score the release pursuant to the HRS, as appropriate, to better characterize the release for more effective and rapid initiation of the RI/FS or response under other authorities.
- (2) The remedial SI shall build upon the information collected in the remedial PA. The remedial SI shall involve, as appropriate, both on- and off-site field investigatory efforts, and sampling.
- (3) If the remedial SI indicates that removal action may be appropriate, the lead agency shall initiate removal site evaluation pursuant to §300.410.
- (4) Prior to conducting field sampling as part of site inspections, the lead agency shall develop sampling and analysis plans that shall provide a process for obtaining data of sufficient quality and quantity to satisfy data needs. The sampling and analysis plans shall consist of two parts:
- (i) The field sampling plan, which describes the number, type, and location of samples, and the type of analyses, and
- (ii) The quality assurance project plan (QAPP), which describes policy, organization, and functional activities, and the data quality objectives and measures necessary to achieve adequate data for use in site evaluation and hazard ranking system activities.
- (5) Upon completion of a remedial SI, the lead agency shall prepare a report that includes the following:
 - (i) A description/history/nature of waste handling;
 - (ii) A description of known contaminants;

- (iii) A description of pathways of migration of contaminants;
- (iv) An identification and description of human and environmental targets; and
- (v) A recommendation on whether further action is warranted.

[55 FR 8839, Mar. 8, 1990, as amended at 79 FR 65592, Nov. 5, 2014]

§300.425 Establishing remedial priorities.

- (a) *General*. The purpose of this section is to identify the criteria as well as the methods and procedures EPA uses to establish its priorities for remedial actions.
- (b) *National Priorities List*. The NPL is the list of priority releases for long-term remedial evaluation and response.
- (1) Only those releases included on the NPL shall be considered eligible for Fund-financed remedial action. Removal actions (including remedial planning activities, RI/FSs, and other actions taken pursuant to CERCLA section 104(b)) are not limited to NPL sites.
- (2) Inclusion of a release on the NPL does not imply that monies will be expended, nor does the rank of a release on the NPL establish the precise priorities for the allocation of Fund resources. EPA may also pursue other appropriate authorities to remedy the release, including enforcement actions under CERCLA and other laws. A site's rank on the NPL serves, along with other factors, including enforcement actions, as a basis to guide the allocation of Fund resources among releases.
- (3) Federal facilities that meet the criteria identified in paragraph (c) of this section are eligible for inclusion on the NPL. Except as provided by CERCLA sections 111(e)(3) and 111(c), federal facilities are not eligible for Fund-financed remedial actions.
- (4) Inclusion on the NPL is not a precondition to action by the lead agency under CERCLA sections 106 or 122 or to action under CERCLA section 107 for recovery of non-Fund-financed costs or Fund-financed costs other than Fund-financed remedial construction costs.
- (c) *Methods for determining eligibility for NPL*. A release may be included on the NPL if the release meets one of the following criteria:
- (1) The release scores sufficiently high pursuant to the Hazard Ranking System described in appendix A to this part.
- (2) A state (not including Indian tribes) has designated a release as its highest priority. States may make only one such designation; or
 - (3) The release satisfies all of the following criteria:

- (i) The Agency for Toxic Substances and Disease Registry has issued a health advisory that recommends dissociation of individuals from the release;
 - (ii) EPA determines that the release poses a significant threat to public health; and
- (iii) EPA anticipates that it will be more cost-effective to use its remedial authority than to use removal authority to respond to the release.
- (d) *Procedures for placing sites on the NPL*. Lead agencies may submit candidates to EPA by scoring the release using the HRS and providing the appropriate backup documentation.
 - (1) Lead agencies may submit HRS scoring packages to EPA anytime throughout the year.
- (2) EPA shall review lead agencies' HRS scoring packages and revise them as appropriate. EPA shall develop any additional HRS scoring packages on releases known to EPA.
- (3) EPA shall compile the NPL based on the methods identified in paragraph (c) of this section.
 - (4) EPA shall update the NPL at least once a year.
- (5) To ensure public involvement during the proposal to add a release to the NPL, EPA shall:
- (i) Publish the proposed rule in the FEDERAL REGISTER and solicit comments through a public comment period; and
- (ii) Publish the final rule in the FEDERAL REGISTER, and make available a response to each significant comment and any significant new data submitted during the comment period.
 - (6) Releases may be categorized on the NPL when deemed appropriate by EPA.
- (e) *Deletion from the NPL*. Releases may be deleted from or recategorized on the NPL where no further response is appropriate.
- (1) EPA shall consult with the state on proposed deletions from the NPL prior to developing the notice of intent to delete. In making a determination to delete a release from the NPL, EPA shall consider, in consultation with the state, whether any of the following criteria has been met:
- (i) Responsible parties or other persons have implemented all appropriate response actions required;
- (ii) All appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or

- (iii) The remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.
- (2) Releases shall not be deleted from the NPL until the state in which the release was located has concurred on the proposed deletion. EPA shall provide the state 30 working days for review of the deletion notice prior to its publication in the FEDERAL REGISTER.
- (3) All releases deleted from the NPL are eligible for further Fund-financed remedial actions should future conditions warrant such action. Whenever there is a significant release from a site deleted from the NPL, the site shall be restored to the NPL without application of the HRS.
- (4) To ensure public involvement during the proposal to delete a release from the NPL, EPA shall:
- (i) Publish a notice of intent to delete in the FEDERAL REGISTER and solicit comment through a public comment period of a minimum of 30 calendar days;
- (ii) In a major local newspaper of general circulation at or near the release that is proposed for deletion, publish a notice of availability or use one or more other mechanisms to give adequate notice to a community of the intent to delete;
- (iii) Place copies of information supporting the proposed deletion in the information repository, described in §300.430(c)(2)(iii), at or near the release proposed for deletion. These items shall be available for public inspection and copying; and
- (iv) Respond to each significant comment and any significant new data submitted during the comment period and include this response document in the final deletion package.
- (5) EPA shall place the final deletion package in the local information repository once the notice of final deletion has been published in the FEDERAL REGISTER.

[55 FR 8839, Mar. 8, 1990, as amended at 80 FR 17706, Apr. 2, 2015]

§300.430 Remedial investigation/feasibility study and selection of remedy.

- (a) General—(1) Introduction. The purpose of the remedy selection process is to implement remedies that eliminate, reduce, or control risks to human health and the environment. Remedial actions are to be implemented as soon as site data and information make it possible to do so. Accordingly, EPA has established the following program goal, expectations, and program management principles to assist in the identification and implementation of appropriate remedial actions.
- (i) *Program goal*. The national goal of the remedy selection process is to select remedies that are protective of human health and the environment, that maintain protection over time, and that minimize untreated waste.

- (ii) *Program management principles*. EPA generally shall consider the following general principles of program management during the remedial process:
- (A) Sites should generally be remediated in operable units when early actions are necessary or appropriate to achieve significant risk reduction quickly, when phased analysis and response is necessary or appropriate given the size or complexity of the site, or to expedite the completion of total site cleanup.
- (B) Operable units, including interim action operable units, should not be inconsistent with nor preclude implementation of the expected final remedy.
- (C) Site-specific data needs, the evaluation of alternatives, and the documentation of the selected remedy should reflect the scope and complexity of the site problems being addressed.
- (iii) *Expectations*. EPA generally shall consider the following expectations in developing appropriate remedial alternatives:
- (A) EPA expects to use treatment to address the principal threats posed by a site, wherever practicable. Principal threats for which treatment is most likely to be appropriate include liquids, areas contaminated with high concentrations of toxic compounds, and highly mobile materials.
- (B) EPA expects to use engineering controls, such as containment, for waste that poses a relatively low long-term threat or where treatment is impracticable.
- (C) EPA expects to use a combination of methods, as appropriate, to achieve protection of human health and the environment. In appropriate site situations, treatment of the principal threats posed by a site, with priority placed on treating waste that is liquid, highly toxic or highly mobile, will be combined with engineering controls (such as containment) and institutional controls, as appropriate, for treatment residuals and untreated waste.
- (D) EPA expects to use institutional controls such as water use and deed restrictions to supplement engineering controls as appropriate for short- and long-term management to prevent or limit exposure to hazardous substances, pollutants, or contaminants. Institutional controls may be used during the conduct of the remedial investigation/feasibility study (RI/FS) and implementation of the remedial action and, where necessary, as a component of the completed remedy. The use of institutional controls shall not substitute for active response measures (e.g., treatment and/or containment of source material, restoration of ground waters to their beneficial uses) as the sole remedy unless such active measures are determined not to be practicable, based on the balancing of trade-offs among alternatives that is conducted during the selection of remedy.
- (E) EPA expects to consider using innovative technology when such technology offers the potential for comparable or superior treatment performance or implementability, fewer or lesser adverse impacts than other available approaches, or lower costs for similar levels of performance than demonstrated technologies.

- (F) EPA expects to return usable ground waters to their beneficial uses wherever practicable, within a timeframe that is reasonable given the particular circumstances of the site. When restoration of ground water to beneficial uses is not practicable, EPA expects to prevent further migration of the plume, prevent exposure to the contaminated ground water, and evaluate further risk reduction.
- (2) Remedial investigation/feasibility study. The purpose of the remedial investigation/feasibility study (RI/FS) is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy. Developing and conducting an RI/FS generally includes the following activities: project scoping, data collection, risk assessment, treatability studies, and analysis of alternatives. The scope and timing of these activities should be tailored to the nature and complexity of the problem and the response alternatives being considered.
- (b) *Scoping*. In implementing this section, the lead agency should consider the program goal, program management principles, and expectations contained in this rule. The investigative and analytical studies should be tailored to site circumstances so that the scope and detail of the analysis is appropriate to the complexity of site problems being addressed. During scoping, the lead and support agencies shall confer to identify the optimal set and sequence of actions necessary to address site problems. Specifically, the lead agency shall:
- (1) Assemble and evaluate existing data on the site, including the results of any removal actions, remedial preliminary assessment and site inspections, and the NPL listing process.
- (2) Develop a conceptual understanding of the site based on the evaluation of existing data described in paragraph (b)(1) of this section.
- (3) Identify likely response scenarios and potentially applicable technologies and operable units that may address site problems.
- (4) Undertake limited data collection efforts or studies where this information will assist in scoping the RI/FS or accelerate response actions, and begin to identify the need for treatability studies, as appropriate.
- (5) Identify the type, quality, and quantity of the data that will be collected during the RI/FS to support decisions regarding remedial response activities.
- (6) Prepare site-specific health and safety plans that shall specify, at a minimum, employee training and protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan that conforms with 29 CFR 1910.120 (l)(1) and (l)(2).
- (7) If natural resources are or may be injured by the release, ensure that state and federal trustees of the affected natural resources have been notified in order that the trustees may initiate appropriate actions, including those identified in subpart G of this part. The lead agency shall seek to coordinate necessary assessments, evaluations, investigations, and planning with such state and federal trustees.

- (8) Develop sampling and analysis plans that shall provide a process for obtaining data of sufficient quality and quantity to satisfy data needs. Sampling and analysis plans shall be reviewed and approved by EPA. The sampling and analysis plans shall consist of two parts:
- (i) The field sampling plan, which describes the number, type, and location of samples and the type of analyses; and
- (ii) The quality assurance project plan, which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate data for use in selecting the appropriate remedy.
- (9) Initiate the identification of potential federal and state ARARs and, as appropriate, other criteria, advisories, or guidance to be considered.
- (c) *Community relations*. (1) The community relations requirements described in this section apply to all remedial activities undertaken pursuant to CERCLA section 104 and to section 106 or section 122 consent orders or decrees, or section 106 administrative orders.
- (2) The lead agency shall provide for the conduct of the following community relations activities, to the extent practicable, prior to commencing field work for the remedial investigation:
- (i) Conducting interviews with local officials, community residents, public interest groups, or other interested or affected parties, as appropriate, to solicit their concerns and information needs, and to learn how and when citizens would like to be involved in the Superfund process.
- (ii) Preparing a formal community relations plan (CRP), based on the community interviews and other relevant information, specifying the community relations activities that the lead agency expects to undertake during the remedial response. The purpose of the CRP is to:
- (A) Ensure the public appropriate opportunities for involvement in a wide variety of siterelated decisions, including site analysis and characterization, alternatives analysis, and selection of remedy;
- (B) Determine, based on community interviews, appropriate activities to ensure such public involvement, and
 - (C) Provide appropriate opportunities for the community to learn about the site.
- (iii) Establishing at least one local information repository at or near the location of the response action. Each information repository should contain a copy of items made available to the public, including information that describes the technical assistance grants application process. The lead agency shall inform interested parties of the establishment of the information repository.
 - (iv) Informing the community of the availability of technical assistance grants.

- (3) For PRP actions, the lead agency shall plan and implement the community relations program at a site. PRPs may participate in aspects of the community relations program at the discretion of and with oversight by the lead agency.
- (4) The lead agency may conduct technical discussions involving PRPs and the public. These technical discussions may be held separately from, but contemporaneously with, the negotiations/settlement discussions.
 - (5) In addition, the following provisions specifically apply to enforcement actions:
- (i) Lead agencies entering into an enforcement agreement with de minimis parties under CERCLA section 122(g) or cost recovery settlements under section 122(h) shall publish a notice of the proposed agreement in the FEDERAL REGISTERat least 30 days before the agreement becomes final, as required by section 122(i). The notice must identify the name of the facility and the parties to the proposed agreement and must allow an opportunity for comment and consideration of comments; and
- (ii) Where the enforcement agreement is embodied in a consent decree, public notice and opportunity for public comment shall be provided in accordance with 28 CFR 50.7.
- (d) *Remedial investigation*. (1) The purpose of the remedial investigation (RI) is to collect data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives. To characterize the site, the lead agency shall, as appropriate, conduct field investigations, including treatability studies, and conduct a baseline risk assessment. The RI provides information to assess the risks to human health and the environment and to support the development, evaluation, and selection of appropriate response alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Because estimates of actual or potential exposures and associated impacts on human and environmental receptors may be refined throughout the phases of the RI as new information is obtained, site characterization activities should be fully integrated with the development and evaluation of alternatives in the feasibility study. Bench- or pilot-scale treatability studies shall be conducted, when appropriate and practicable, to provide additional data for the detailed analysis and to support engineering design of remedial alternatives.
- (2) The lead agency shall characterize the nature of and threat posed by the hazardous substances and hazardous materials and gather data necessary to assess the extent to which the release poses a threat to human health or the environment or to support the analysis and design of potential response actions by conducting, as appropriate, field investigations to assess the following factors:
- (i) Physical characteristics of the site, including important surface features, soils, geology, hydrogeology, meteorology, and ecology;
 - (ii) Characteristics or classifications of air, surface water, and ground water;

- (iii) The general characteristics of the waste, including quantities, state, concentration, toxicity, propensity to bioaccumulate, persistence, and mobility;
 - (iv) The extent to which the source can be adequately identified and characterized;
 - (v) Actual and potential exposure pathways through environmental media;
 - (vi) Actual and potential exposure routes, for example, inhalation and ingestion; and
- (vii) Other factors, such as sensitive populations, that pertain to the characterization of the site or support the analysis of potential remedial action alternatives.
- (3) The lead and support agency shall identify their respective potential ARARs related to the location of and contaminants at the site in a timely manner. The lead and support agencies may also, as appropriate, identify other pertinent advisories, criteria, or guidance in a timely manner (see $\S 300.400(g)(3)$).
- (4) Using the data developed under paragraphs (d)(1) and (2) of this section, the lead agency shall conduct a site-specific baseline risk assessment to characterize the current and potential threats to human health and the environment that may be posed by contaminants migrating to ground water or surface water, releasing to air, leaching through soil, remaining in the soil, and bioaccumulating in the food chain. The results of the baseline risk assessment will help establish acceptable exposure levels for use in developing remedial alternatives in the FS, as described in paragraph (e) of this section.
- (e) Feasibility study. (1) The primary objective of the feasibility study (FS) is to ensure that appropriate remedial alternatives are developed and evaluated such that relevant information concerning the remedial action options can be presented to a decision-maker and an appropriate remedy selected. The lead agency may develop a feasibility study to address a specific site problem or the entire site. The development and evaluation of alternatives shall reflect the scope and complexity of the remedial action under consideration and the site problems being addressed. Development of alternatives shall be fully integrated with the site characterization activities of the remedial investigation described in paragraph (d) of this section. The lead agency shall include an alternatives screening step, when needed, to select a reasonable number of alternatives for detailed analysis.
- (2) Alternatives shall be developed that protect human health and the environment by recycling waste or by eliminating, reducing, and/or controlling risks posed through each pathway by a site. The number and type of alternatives to be analyzed shall be determined at each site, taking into account the scope, characteristics, and complexity of the site problem that is being addressed. In developing and, as appropriate, screening the alternatives, the lead agency shall:
- (i) Establish remedial action objectives specifying contaminants and media of concern, potential exposure pathways, and remediation goals. Initially, preliminary remediation goals are developed based on readily available information, such as chemical-specific ARARs or other reliable information. Preliminary remediation goals should be modified, as necessary, as more

information becomes available during the RI/FS. Final remediation goals will be determined when the remedy is selected. Remediation goals shall establish acceptable exposure levels that are protective of human health and the environment and shall be developed by considering the following:

- (A) Applicable or relevant and appropriate requirements under federal environmental or state environmental or facility siting laws, if available, and the following factors:
- (1) For systemic toxicants, acceptable exposure levels shall represent concentration levels to which the human population, including sensitive subgroups, may be exposed without adverse effect during a lifetime or part of a lifetime, incorporating an adequate margin of safety;
- (2) For known or suspected carcinogens, acceptable exposure levels are generally concentration levels that represent an excess upper bound lifetime cancer risk to an individual of between 10⁻⁴ and 10⁻⁶ using information on the relationship between dose and response. The 10⁻⁶ risk level shall be used as the point of departure for determining remediation goals for alternatives when ARARs are not available or are not sufficiently protective because of the presence of multiple contaminants at a site or multiple pathways of exposure;
- (3) Factors related to technical limitations such as detection/quantification limits for contaminants;
 - (4) Factors related to uncertainty; and
 - (5) Other pertinent information.
- (B) Maximum contaminant level goals (MCLGs), established under the Safe Drinking Water Act, that are set at levels above zero, shall be attained by remedial actions for ground or surface waters that are current or potential sources of drinking water, where the MCLGs are relevant and appropriate under the circumstances of the release based on the factors in §300.400(g)(2). If an MCLG is determined not to be relevant and appropriate, the corresponding maximum contaminant level (MCL) shall be attained where relevant and appropriate to the circumstances of the release.
- (C) Where the MCLG for a contaminant has been set at a level of zero, the MCL promulgated for that contaminant under the Safe Drinking Water Act shall be attained by remedial actions for ground or surface waters that are current or potential sources of drinking water, where the MCL is relevant and appropriate under the circumstances of the release based on the factors in §300.400(g)(2).
- (D) In cases involving multiple contaminants or pathways where attainment of chemical-specific ARARs will result in cumulative risk in excess of 10⁻⁴, criteria in paragraph (e)(2)(i)(A) of this section may also be considered when determining the cleanup level to be attained.
- (E) Water quality criteria established under sections 303 or 304 of the Clean Water Act shall be attained where relevant and appropriate under the circumstances of the release.

- (F) An alternate concentration limit (ACL) may be established in accordance with CERCLA section 121(d)(2)(B)(ii).
- (G) Environmental evaluations shall be performed to assess threats to the environment, especially sensitive habitats and critical habitats of species protected under the Endangered Species Act.
- (ii) Identify and evaluate potentially suitable technologies, including innovative technologies;
 - (iii) Assemble suitable technologies into alternative remedial actions.
 - (3) For source control actions, the lead agency shall develop, as appropriate:
- (i) A range of alternatives in which treatment that reduces the toxicity, mobility, or volume of the hazardous substances, pollutants, or contaminants is a principal element. As appropriate, this range shall include an alternative that removes or destroys hazardous substances, pollutants, or contaminants to the maximum extent feasible, eliminating or minimizing, to the degree possible, the need for long-term management. The lead agency also shall develop, as appropriate, other alternatives which, at a minimum, treat the principal threats posed by the site but vary in the degree of treatment employed and the quantities and characteristics of the treatment residuals and untreated waste that must be managed; and
- (ii) One or more alternatives that involve little or no treatment, but provide protection of human health and the environment primarily by preventing or controlling exposure to hazardous substances, pollutants, or contaminants, through engineering controls, for example, containment, and, as necessary, institutional controls to protect human health and the environment and to assure continued effectiveness of the response action.
- (4) For ground-water response actions, the lead agency shall develop a limited number of remedial alternatives that attain site-specific remediation levels within different restoration time periods utilizing one or more different technologies.
- (5) The lead agency shall develop one or more innovative treatment technologies for further consideration if those technologies offer the potential for comparable or superior performance or implementability; fewer or lesser adverse impacts than other available approaches; or lower costs for similar levels of performance than demonstrated treatment technologies.
- (6) The no-action alternative, which may be no further action if some removal or remedial action has already occurred at the site, shall be developed.
- (7) As appropriate, and to the extent sufficient information is available, the short- and long-term aspects of the following three criteria shall be used to guide the development and screening of remedial alternatives:

- (i) *Effectiveness*. This criterion focuses on the degree to which an alternative reduces toxicity, mobility, or volume through treatment, minimizes residual risks and affords long-term protection, complies with ARARs, minimizes short-term impacts, and how quickly it achieves protection. Alternatives providing significantly less effectiveness than other, more promising alternatives may be eliminated. Alternatives that do not provide adequate protection of human health and the environment shall be eliminated from further consideration.
- (ii) *Implementability*. This criterion focuses on the technical feasibility and availability of the technologies each alternative would employ and the administrative feasibility of implementing the alternative. Alternatives that are technically or administratively infeasible or that would require equipment, specialists, or facilities that are not available within a reasonable period of time may be eliminated from further consideration.
- (iii) Cost. The costs of construction and any long-term costs to operate and maintain the alternatives shall be considered. Costs that are grossly excessive compared to the overall effectiveness of alternatives may be considered as one of several factors used to eliminate alternatives. Alternatives providing effectiveness and implementability similar to that of another alternative by employing a similar method of treatment or engineering control, but at greater cost, may be eliminated.
- (8) The lead agency shall notify the support agency of the alternatives that will be evaluated in detail to facilitate the identification of ARARs and, as appropriate, pertinent advisories, criteria, or guidance to be considered.
- (9) Detailed analysis of alternatives. (i) A detailed analysis shall be conducted on the limited number of alternatives that represent viable approaches to remedial action after evaluation in the screening stage. The lead and support agencies must identify their ARARs related to specific actions in a timely manner and no later than the early stages of the comparative analysis. The lead and support agencies may also, as appropriate, identify other pertinent advisories, criteria, or guidance in a timely manner.
- (ii) The detailed analysis consists of an assessment of individual alternatives against each of nine evaluation criteria and a comparative analysis that focuses upon the relative performance of each alternative against those criteria.
- (iii) *Nine criteria for evaluation*. The analysis of alternatives under review shall reflect the scope and complexity of site problems and alternatives being evaluated and consider the relative significance of the factors within each criteria. The nine evaluation criteria are as follows:
- (A) Overall protection of human health and the environment. Alternatives shall be assessed to determine whether they can adequately protect human health and the environment, in both the short- and long-term, from unacceptable risks posed by hazardous substances, pollutants, or contaminants present at the site by eliminating, reducing, or controlling exposures to levels established during development of remediation goals consistent with §300.430(e)(2)(i). Overall protection of human health and the environment draws on the assessments of other evaluation

criteria, especially long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs.

- (B) Compliance with ARARs. The alternatives shall be assessed to determine whether they attain applicable or relevant and appropriate requirements under federal environmental laws and state environmental or facility siting laws or provide grounds for invoking one of the waivers under paragraph (f)(1)(ii)(C) of this section.
- (C) Long-term effectiveness and permanence. Alternatives shall be assessed for the long-term effectiveness and permanence they afford, along with the degree of certainty that the alternative will prove successful. Factors that shall be considered, as appropriate, include the following:
- (1) Magnitude of residual risk remaining from untreated waste or treatment residuals remaining at the conclusion of the remedial activities. The characteristics of the residuals should be considered to the degree that they remain hazardous, taking into account their volume, toxicity, mobility, and propensity to bioaccumulate.
- (2) Adequacy and reliability of controls such as containment systems and institutional controls that are necessary to manage treatment residuals and untreated waste. This factor addresses in particular the uncertainties associated with land disposal for providing long-term protection from residuals; the assessment of the potential need to replace technical components of the alternative, such as a cap, a slurry wall, or a treatment system; and the potential exposure pathways and risks posed should the remedial action need replacement.
- (D) *Reduction of toxicity, mobility, or volume through treatment.* The degree to which alternatives employ recycling or treatment that reduces toxicity, mobility, or volume shall be assessed, including how treatment is used to address the principal threats posed by the site. Factors that shall be considered, as appropriate, include the following:
- (1) The treatment or recycling processes the alternatives employ and materials they will treat;
- (2) The amount of hazardous substances, pollutants, or contaminants that will be destroyed, treated, or recycled;
- (3) The degree of expected reduction in toxicity, mobility, or volume of the waste due to treatment or recycling and the specification of which reduction(s) are occurring;
 - (4) The degree to which the treatment is irreversible;
- (5) The type and quantity of residuals that will remain following treatment, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents; and

- (6) The degree to which treatment reduces the inherent hazards posed by principal threats at the site.
- (E) *Short-term effectiveness*. The short-term impacts of alternatives shall be assessed considering the following:
- (1) Short-term risks that might be posed to the community during implementation of an alternative;
- (2) Potential impacts on workers during remedial action and the effectiveness and reliability of protective measures;
- (3) Potential environmental impacts of the remedial action and the effectiveness and reliability of mitigative measures during implementation; and
 - (4) Time until protection is achieved.
- (F) *Implementability*. The ease or difficulty of implementing the alternatives shall be assessed by considering the following types of factors as appropriate:
- (1) Technical feasibility, including technical difficulties and unknowns associated with the construction and operation of a technology, the reliability of the technology, ease of undertaking additional remedial actions, and the ability to monitor the effectiveness of the remedy.
- (2) Administrative feasibility, including activities needed to coordinate with other offices and agencies and the ability and time required to obtain any necessary approvals and permits from other agencies (for off-site actions);
- (3) Availability of services and materials, including the availability of adequate off-site treatment, storage capacity, and disposal capacity and services; the availability of necessary equipment and specialists, and provisions to ensure any necessary additional resources; the availability of services and materials; and availability of prospective technologies.
 - (G) Cost. The types of costs that shall be assessed include the following:
 - (1) Capital costs, including both direct and indirect costs;
 - (2) Annual operation and maintenance costs; and
 - (3) Net present value of capital and O&M costs.
- (H) *State acceptance*. Assessment of state concerns may not be completed until comments on the RI/FS are received but may be discussed, to the extent possible, in the proposed plan issued for public comment. The state concerns that shall be assessed include the following:

- (1) The state's position and key concerns related to the preferred alternative and other alternatives; and
 - (2) State comments on ARARs or the proposed use of waivers.
- (I) *Community acceptance*. This assessment includes determining which components of the alternatives interested persons in the community support, have reservations about, or oppose. This assessment may not be completed until comments on the proposed plan are received.
- (f) Selection of remedy—(1) Remedies selected shall reflect the scope and purpose of the actions being undertaken and how the action relates to long-term, comprehensive response at the site.
- (i) The criteria noted in paragraph (e)(9)(iii) of this section are used to select a remedy. These criteria are categorized into three groups.
- (A) *Threshold criteria*. Overall protection of human health and the environment and compliance with ARARs (unless a specific ARAR is waived) are threshold requirements that each alternative must meet in order to be eligible for selection.
- (B) *Primary balancing criteria*. The five primary balancing criteria are long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost.
- (C) *Modifying criteria*. State and community acceptance are modifying criteria that shall be considered in remedy selection.
- (ii) The selection of a remedial action is a two-step process and shall proceed in accordance with §300.515(e). First, the lead agency, in conjunction with the support agency, identifies a preferred alternative and presents it to the public in a proposed plan, for review and comment. Second, the lead agency shall review the public comments and consult with the state (or support agency) in order to determine if the alternative remains the most appropriate remedial action for the site or site problem. The lead agency, as specified in §300.515(e), makes the final remedy selection decision, which shall be documented in the ROD. Each remedial alternative selected as a Superfund remedy will employ the criteria as indicated in paragraph (f)(1)(i) of this section to make the following determination:
 - (A) Each remedial action selected shall be protective of human health and the environment.
- (B) On-site remedial actions selected in a ROD must attain those ARARs that are identified at the time of ROD signature or provide grounds for invoking a waiver under \$300.430(f)(1)(ii)(C).
- (1) Requirements that are promulgated or modified after ROD signature must be attained (or waived) only when determined to be applicable or relevant and appropriate and necessary to ensure that the remedy is protective of human health and the environment.

- (2) Components of the remedy not described in the ROD must attain (or waive) requirements that are identified as applicable or relevant and appropriate at the time the amendment to the ROD or the explanation of significant difference describing the component is signed.
- (C) An alternative that does not meet an ARAR under federal environmental or state environmental or facility siting laws may be selected under the following circumstances:
- (1) The alternative is an interim measure and will become part of a total remedial action that will attain the applicable or relevant and appropriate federal or state requirement;
- (2) Compliance with the requirement will result in greater risk to human health and the environment than other alternatives;
- (3) Compliance with the requirement is technically impracticable from an engineering perspective;
- (4) The alternative will attain a standard of performance that is equivalent to that required under the otherwise applicable standard, requirement, or limitation through use of another method or approach;
- (5) With respect to a state requirement, the state has not consistently applied, or demonstrated the intention to consistently apply, the promulgated requirement in similar circumstances at other remedial actions within the state; or
- (6) For Fund-financed response actions only, an alternative that attains the ARAR will not provide a balance between the need for protection of human health and the environment at the site and the availability of Fund monies to respond to other sites that may present a threat to human health and the environment.
- (D) Each remedial action selected shall be cost-effective, provided that it first satisfies the threshold criteria set forth in §300.430(f)(1)(ii)(A) and (B). Cost-effectiveness is determined by evaluating the following three of the five balancing criteria noted in §300.430(f)(1)(i)(B) to determine overall effectiveness: long-term effectiveness and permanence, reduction of toxicity, mobility, or volume through treatment, and short-term effectiveness. Overall effectiveness is then compared to cost to ensure that the remedy is cost-effective. A remedy shall be cost-effective if its costs are proportional to its overall effectiveness.
- (E) Each remedial action shall utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. This requirement shall be fulfilled by selecting the alternative that satisfies paragraph (f)(1)(ii)(A) and (B) of this section and provides the best balance of trade-offs among alternatives in terms of the five primary balancing criteria noted in paragraph (f)(1)(i)(B) of this section. The balancing shall emphasize long-term effectiveness and reduction of toxicity, mobility, or volume through treatment. The balancing shall also consider the preference for treatment as a principal element and the bias against off-site land disposal of untreated waste. In making the determination under

this paragraph, the modifying criteria of state acceptance and community acceptance described in paragraph (f)(1)(i)(C) of this section shall also be considered.

- (2) The proposed plan. In the first step in the remedy selection process, the lead agency shall identify the alternative that best meets the requirements in §300.430(f)(1), above, and shall present that alternative to the public in a proposed plan. The lead agency, in conjunction with the support agency and consistent with §300.515(e), shall prepare a proposed plan that briefly describes the remedial alternatives analyzed by the lead agency, proposes a preferred remedial action alternative, and summarizes the information relied upon to select the preferred alternative. The selection of remedy process for an operable unit may be initiated at any time during the remedial action process. The purpose of the proposed plan is to supplement the RI/FS and provide the public with a reasonable opportunity to comment on the preferred alternative for remedial action, as well as alternative plans under consideration, and to participate in the selection of remedial action at a site. At a minimum, the proposed plan shall:
- (i) Provide a brief summary description of the remedial alternatives evaluated in the detailed analysis established under paragraph (e)(9) of this section;
 - (ii) Identify and provide a discussion of the rationale that supports the preferred alternative;
 - (iii) Provide a summary of any formal comments received from the support agency; and
- (iv) Provide a summary explanation of any proposed waiver identified under paragraph (f)(1)(ii)(C) of this section from an ARAR.
- (3) Community relations to support the selection of remedy. (i) The lead agency, after preparation of the proposed plan and review by the support agency, shall conduct the following activities:
- (A) Publish a notice of availability and brief analysis of the proposed plan in a major local newspaper of general circulation;
- (B) Make the proposed plan and supporting analysis and information available in the administrative record required under subpart I of this part;
- (C) Provide a reasonable opportunity, not less than 30 calendar days, for submission of written and oral comments on the proposed plan and the supporting analysis and information located in the information repository, including the RI/FS. Upon timely request, the lead agency will extend the public comment period by a minimum of 30 additional days;
- (D) Provide the opportunity for a public meeting to be held during the public comment period at or near the site at issue regarding the proposed plan and the supporting analysis and information;
- (E) Keep a transcript of the public meeting held during the public comment period pursuant to CERCLA section 117(a) and make such transcript available to the public; and

- (F) Prepare a written summary of significant comments, criticisms, and new relevant information submitted during the public comment period and the lead agency response to each issue. This responsiveness summary shall be made available with the record of decision.
- (ii) After publication of the proposed plan and prior to adoption of the selected remedy in the record of decision, if new information is made available that significantly changes the basic features of the remedy with respect to scope, performance, or cost, such that the remedy significantly differs from the original proposal in the proposed plan and the supporting analysis and information, the lead agency shall:
- (A) Include a discussion in the record of decision of the significant changes and reasons for such changes, if the lead agency determines such changes could be reasonably anticipated by the public based on the alternatives and other information available in the proposed plan or the supporting analysis and information in the administrative record; or
- (B) Seek additional public comment on a revised proposed plan, when the lead agency determines the change could not have been reasonably anticipated by the public based on the information available in the proposed plan or the supporting analysis and information in the administrative record. The lead agency shall, prior to adoption of the selected remedy in the ROD, issue a revised proposed plan, which shall include a discussion of the significant changes and the reasons for such changes, in accordance with the public participation requirements described in paragraph (f)(3)(i) of this section.
- (4) Final remedy selection. (i) In the second and final step in the remedy selection process, the lead agency shall reassess its initial determination that the preferred alternative provides the best balance of trade-offs, now factoring in any new information or points of view expressed by the state (or support agency) and community during the public comment period. The lead agency shall consider state (or support agency) and community comments regarding the lead agency's evaluation of alternatives with respect to the other criteria. These comments may prompt the lead agency to modify aspects of the preferred alternative or decide that another alternative provides a more appropriate balance. The lead agency, as specified in §300.515(e), shall make the final remedy selection decision and document that decision in the ROD.
- (ii) If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.
- (iii) The process for selection of a remedial action at a federal facility on the NPL, pursuant to CERCLA section 120, shall entail:
- (A) Joint selection of remedial action by the head of the relevant department, agency, or instrumentality and EPA; or
- (B) If mutual agreement on the remedy is not reached, selection of the remedy is made by EPA.

- (5) Documenting the decision. (i) To support the selection of a remedial action, all facts, analyses of facts, and site-specific policy determinations considered in the course of carrying out activities in this section shall be documented, as appropriate, in a record of decision, in a level of detail appropriate to the site situation, for inclusion in the administrative record required under subpart I of this part. Documentation shall explain how the evaluation criteria in paragraph (e)(9)(iii) of this section were used to select the remedy.
- (ii) The ROD shall describe the following statutory requirements as they relate to the scope and objectives of the action:
- (A) How the selected remedy is protective of human health and the environment, explaining how the remedy eliminates, reduces, or controls exposures to human and environmental receptors;
- (B) The federal and state requirements that are applicable or relevant and appropriate to the site that the remedy will attain;
- (C) The applicable or relevant and appropriate requirements of other federal and state laws that the remedy will not meet, the waiver invoked, and the justification for invoking the waiver;
- (D) How the remedy is cost-effective, *i.e.*, explaining how the remedy provides overall effectiveness proportional to its costs;
- (E) How the remedy utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and
- (F) Whether the preference for remedies employing treatment which permanently and significantly reduces the toxicity, mobility, or volume of the hazardous substances, pollutants, or contaminants as a principal element is or is not satisfied by the selected remedy. If this preference is not satisfied, the record of decision must explain why a remedial action involving such reductions in toxicity, mobility, or volume was not selected.

(iii) The ROD also shall:

- (A) Indicate, as appropriate, the remediation goals, discussed in paragraph (e)(2)(i) of this section, that the remedy is expected to achieve. Performance shall be measured at appropriate locations in the ground water, surface water, soils, air, and other affected environmental media. Measurement relating to the performance of the treatment processes and the engineering controls may also be identified, as appropriate;
- (B) Discuss significant changes and the response to comments described in paragraph (f)(3)(i)(F) of this section;
- (C) Describe whether hazardous substances, pollutants, or contaminants will remain at the site such that a review of the remedial action under paragraph (f)(4)(ii) of this section no less often than every five years shall be required; and

- (D) When appropriate, provide a commitment for further analysis and selection of long-term response measures within an appropriate time-frame.
- (6) Community relations when the record of decision is signed. After the ROD is signed, the lead agency shall:
- (i) Publish a notice of the availability of the ROD in a major local newspaper of general circulation; and
- (ii) Make the record of decision available for public inspection and copying at or near the facility at issue prior to the commencement of any remedial action.

§300.435 Remedial design/remedial action, operation and maintenance.

- (a) *General*. The remedial design/remedial action (RD/RA) stage includes the development of the actual design of the selected remedy and implementation of the remedy through construction. A period of operation and maintenance may follow the RA activities.
- (b) *RD/RA activities*. (1) All RD/RA activities shall be in conformance with the remedy selected and set forth in the ROD or other decision document for that site. Those portions of RD/RA sampling and analysis plans describing the QA/QC requirements for chemical and analytical testing and sampling procedures of samples taken for the purpose of determining whether cleanup action levels specified in the ROD are achieved, generally will be consistent with the requirements of §300.430(b)(8).
- (2) During the course of the RD/RA, the lead agency shall be responsible for ensuring that all federal and state requirements that are identified in the ROD as applicable or relevant and appropriate requirements for the action are met. If waivers from any ARARs are involved, the lead agency shall be responsible for ensuring that the conditions of the waivers are met.
- (c) *Community relations*. (1) Prior to the initiation of RD, the lead agency shall review the CRP to determine whether it should be revised to describe further public involvement activities during RD/RA that are not already addressed or provided for in the CRP.
- (2) After the adoption of the ROD, if the remedial action or enforcement action taken, or the settlement or consent decree entered into, differs significantly from the remedy selected in the ROD with respect to scope, performance, or cost, the lead agency shall consult with the support agency, as appropriate, and shall either:
- (i) Publish an explanation of significant differences when the differences in the remedial or enforcement action, settlement, or consent decree significantly change but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost. To issue an explanation of significant differences, the lead agency shall:
- (A) Make the explanation of significant differences and supporting information available to the public in the administrative record established under §300.815 and the information repository; and

- (B) Publish a notice that briefly summarizes the explanation of significant differences, including the reasons for such differences, in a major local newspaper of general circulation; or
- (ii) Propose an amendment to the ROD if the differences in the remedial or enforcement action, settlement, or consent decree fundamentally alter the basic features of the selected remedy with respect to scope, performance, or cost. To amend the ROD, the lead agency, in conjunction with the support agency, as provided in §300.515(e), shall:
- (A) Issue a notice of availability and brief description of the proposed amendment to the ROD in a major local newspaper of general circulation;
- (B) Make the proposed amendment to the ROD and information supporting the decision available for public comment;
- (C) Provide a reasonable opportunity, not less than 30 calendar days, for submission of written or oral comments on the amendment to the ROD. Upon timely request, the lead agency will extend the public comment period by a minimum of 30 additional days;
- (D) Provide the opportunity for a public meeting to be held during the public comment period at or near the facility at issue;
- (E) Keep a transcript of comments received at the public meeting held during the public comment period;
- (F) Include in the amended ROD a brief explanation of the amendment and the response to each of the significant comments, criticisms, and new relevant information submitted during the public comment period;
- (G) Publish a notice of the availability of the amended ROD in a major local newspaper of general circulation; and
- (H) Make the amended ROD and supporting information available to the public in the administrative record and information repository prior to the commencement of the remedial action affected by the amendment.
- (3) After the completion of the final engineering design, the lead agency shall issue a fact sheet and provide, as appropriate, a public briefing prior to the initiation of the remedial action.
- (d) *Contractor conflict of interest.* (1) For Fund-financed RD/RA and O&M activities, the lead agency shall:
- (i) Include appropriate language in the solicitation requiring potential prime contractors to submit information on their status, as well as the status of their subcontractors, parent companies, and affiliates, as potentially responsible parties at the site.

- (ii) Require potential prime contractors to certify that, to the best of their knowledge, they and their potential subcontractors, parent companies, and affiliates have disclosed all information described in §300.435(d)(1)(i) or that no such information exists, and that any such information discovered after submission of their bid or proposal or contract award will be disclosed immediately.
- (2) Prior to contract award, the lead agency shall evaluate the information provided by the potential prime contractors and:
- (i) Determine whether they have conflicts of interest that could significantly impact the performance of the contract or the liability of potential prime contractors or subcontractors.
- (ii) If a potential prime contractor or subcontractor has a conflict of interest that cannot be avoided or otherwise resolved, and using that potential prime contractor or subcontractor to conduct RD/RA or O&M work under a Fund-financed action would not be in the best interests of the state or federal government, an offeror or bidder contemplating use of that prime contractor or subcontractor may be declared nonresponsible or ineligible for award in accordance with appropriate acquisition regulations, and the contract may be awarded to the next eligible offeror or bidder.
- (e) *Recontracting*. (1) If a Fund-financed contract must be terminated because additional work outside the scope of the contract is needed, EPA is authorized to take appropriate steps to continue interim RAs as necessary to reduce risks to public health and the environment. Appropriate steps may include extending an existing contract for a federal-lead RA or amending a cooperative agreement for a state-lead RA. Until the lead agency can reopen the bidding process and recontract to complete the RA, EPA may take such appropriate steps as described above to cover interim work to reduce such risks, where:
- (i) Additional work is found to be needed as a result of such unforeseen situations as newly discovered sources, types, or quantities of hazardous substances at a facility; and
- (ii) Performance of the complete RA requires the lead agency to rebid the contract because the existing contract does not encompass this newly discovered work.
 - (2) The cost of such interim actions shall not exceed \$2 million.
- (f) Operation and maintenance. (1) Operation and maintenance (O&M) measures are initiated after the remedy has achieved the remedial action objectives and remediation goals in the ROD, and is determined to be operational and functional, except for ground- or surface-water restoration actions covered under §300.435(f)(4). A state must provide its assurance to assume responsibility for O&M, including, where appropriate, requirements for maintaining institutional controls, under §300.510(c).
- (2) A remedy becomes "operational and functional" either one year after construction is complete, or when the remedy is determined concurrently by EPA and the state to be functioning

properly and is performing as designed, whichever is earlier. EPA may grant extensions to the one-year period, as appropriate.

- (3) For Fund-financed remedial actions involving treatment or other measures to restore ground- or surface-water quality to a level that assures protection of human health and the environment, the operation of such treatment or other measures for a period of up to 10 years after the remedy becomes operational and functional will be considered part of the remedial action. Activities required to maintain the effectiveness of such treatment or measures following the 10-year period, or after remedial action is complete, whichever is earlier, shall be considered O&M. For the purposes of federal funding provided under CERCLA section 104(c)(6), a restoration activity will be considered administratively "complete" when:
- (i) Measures restore ground- or surface-water quality to a level that assures protection of human health and the environment;
- (ii) Measures restore ground or surface water to such a point that reductions in contaminant concentrations are no longer significant; or
 - (iii) Ten years have elapsed, whichever is earliest.
- (4) The following shall not be deemed to constitute treatment or other measures to restore contaminated ground or surface water under §300.435(f)(3):
 - (i) Source control maintenance measures; and
- (ii) Ground- or surface-water measures initiated for the primary purpose of providing a drinking-water supply, not for the purpose of restoring ground water.

§300.440 Procedures for planning and implementing off-site response actions.

- (a) Applicability. (1) This section applies to any remedial or removal action involving the off-site transfer of any hazardous substance, pollutant, or contaminant as defined under CERCLA sections 101 (14) and (33) ("CERCLA waste") that is conducted by EPA, States, private parties, or other Federal agencies, that is Fund-financed and/or is taken pursuant to any CERCLA authority, including cleanups at Federal facilities under section 120 of CERCLA, and cleanups under section 311 of the Clean Water Act (except for cleanup of petroleum exempt under CERCLA). Applicability extends to those actions taken jointly under CERCLA and another authority.
- (2) In cases of emergency removal actions under CERCLA, emergency actions taken during remedial actions, or response actions under section 311 of the Clean Water Act where the release poses an immediate and significant threat to human health and the environment, the On-Scene Coordinator (OSC) may determine that it is necessary to transfer CERCLA waste off-site without following the requirements of this section.
- (3) This section applies to CERCLA wastes from cleanup actions based on CERCLA decision documents signed or consent decrees lodged after October 17, 1986 ("post-SARA")

- CERCLA wastes") as well as those based on CERCLA decision documents signed and consent decrees lodged prior to October 17, 1986 ("pre-SARA CERCLA wastes"). Pre-SARA and post-SARA CERCLA wastes are subject to the same acceptability criteria in §300.440(b)(1) and (2).
- (4) EPA (usually the EPA Regional Office) will determine the acceptability under this section of any facility selected for the treatment, storage, or disposal of CERCLA waste. EPA will determine if there are relevant releases or relevant violations at a facility prior to the facility's initial receipt of CERCLA waste. A facility which has previously been evaluated and found acceptable under this rule (or the preceding policy) is acceptable until the EPA Regional Office notifies the facility otherwise pursuant to §300.440(d).
- (5) Off-site transfers of those laboratory samples and treatability study CERCLA wastes from CERCLA sites set out in paragraphs (a)(5)(i) through (iii) of this section, are not subject to the requirements of this section. However, those CERCLA wastes may not be transferred back to the CERCLA site unless the Remedial Project Manager or OSC assures the proper management of the CERCLA waste samples or residues and gives permission to the laboratory or treatment facility for the samples and/or residues to be returned to the site.
 - (i) Samples of CERCLA wastes sent to a laboratory for characterization;
- (ii) RCRA hazardous wastes that are being transferred from a CERCLA site for treatability studies and that meet the requirements for an exemption for RCRA under 40 CFR 261.4(e); and
- (iii) Non-RCRA wastes that are being transferred from a CERCLA site for treatability studies and that are below the quantity threshold established at 40 CFR 261.4(e)(2).
- (b) Acceptability criteria—(1) Facility compliance. (i) A facility will be deemed in compliance for the purpose of this rule if there are no relevant violations at or affecting the unit or units receiving CERCLA waste:
- (A) For treatment to standards specified in 40 CFR part 268, subpart D, including any pretreatment or storage units used prior to treatment;
- (B) For treatment to substantially reduce its mobility, toxicity or persistence in the absence of a defined treatment standard, including any pre-treatment or storage units used prior to treatment; or
- (C) For storage or ultimate disposal of CERCLA waste not treated to the previous criteria at the same facility.
- (ii) Relevant violations include significant deviations from regulations, compliance order provisions, or permit conditions designed to: ensure that CERCLA waste is destined for and delivered to authorized facilities; prevent releases of hazardous waste, hazardous constituents, or hazardous substances to the environment; ensure early detection of such releases; or compel corrective action for releases. Criminal violations which result in indictment are also relevant violations. In addition, violations of the following requirements may be considered relevant:

- (A) Applicable subsections of sections 3004 and 3005 of RCRA or, where applicable, other Federal laws (such as the Toxic Substances Control Act and subtitle D of RCRA);
 - (B) Applicable sections of State environmental laws; and
- (C) In addition, land disposal units at RCRA subtitle C facilities receiving RCRA hazardous waste from response actions authorized or funded under CERCLA must be in compliance with RCRA section 3004(o) minimum technology requirements. Exceptions may be made only if the unit has been granted a waiver from these requirements under 40 CFR 264.301.
- (2) *Releases*. (i) Release is defined in §300.5 of this part. Releases under this section do not include:
 - (A) De minimis releases;
- (B) Releases permitted under Federal programs or under Federal programs delegated to the States (Federally permitted releases are defined in §300.5), except to the extent that such releases are found to pose a threat to human health and the environment; or
- (C) Releases to the air that do not exceed standards promulgated pursuant to RCRA section 3004(n), or absent such standards, or where such standards do not apply, releases to the air that do not present a threat to human health or the environment.
- (ii) Releases from units at a facility designated for off-site transfer of CERCLA waste must be addressed as follows:
- (A) Receiving units at RCRA subtitle C facilities. CERCLA wastes may be transferred to an off-site unit regulated under subtitle C of RCRA, including a facility regulated under the permit-by-rule provisions of 40 CFR 270.60 (a), (b) or (c), only if that unit is not releasing any hazardous waste, hazardous constituent, or hazardous substance into the ground water, surface water, soil or air.
- (B) Other units at RCRA subtitle C land disposal facilities. CERCLA wastes may not be transferred to any unit at a RCRA subtitle C land disposal facility where a non-receiving unit is releasing any hazardous waste, hazardous constituent, or hazardous substance into the ground water, surface water, soil, or air, unless that release is controlled by an enforceable agreement for corrective action under subtitle C of RCRA or other applicable Federal or State authority. For purposes of this section, a RCRA "land disposal facility" is any RCRA facility at which a land disposal unit is located, regardless of whether a land disposal unit is the receiving unit.
- (C) Other units at RCRA subtitle C treatment, storage, and permit-by-rule facilities. CERCLA wastes may not be transferred to any unit at a RCRA subtitle C treatment, storage or permit-by-rule facility, where a release of any hazardous waste, hazardous constituent, or hazardous substance from non-receiving units poses a significant threat to public health or the environment, unless that release is controlled by an enforceable agreement for corrective action under subtitle C of RCRA or other applicable Federal or State authority.

- (D) All other facilities. CERCLA wastes should not be transferred to any unit at an other-than-RCRA subtitle C facility if the EPA Regional Office has information indicating that an environmentally significant release of hazardous substances has occurred at that facility, unless the release is controlled by an enforceable agreement for corrective action under an applicable Federal or State authority.
- (iii) Releases are considered to be "controlled" for the purpose of this section as provided in $\S 300.440$ (f)(3)(iv) and (f)(3)(v). A release is not considered "controlled" for the purpose of this section during the pendency of administrative or judicial challenges to corrective action requirements, unless the facility has made the requisite showing under $\S 300.440$ (e).
- (c) Basis for determining acceptability. (1) If a State finds that a facility within its jurisdiction is operating in non-compliance with state law requirements including the requirements of any Federal program for which the State has been authorized, EPA will determine, after consulting with the State as appropriate, if the violation is relevant under the rule and if so, issue an initial determination of unacceptability.
- (2) If a State finds that releases are occurring at a facility regulated under State law or a Federal program for which the State is authorized, EPA will determine, after consulting with the State as appropriate, if the release is relevant under the rule and if so, issue an initial determination of unacceptability.
- (3) EPA may also issue initial determinations of unacceptability based on its own findings. EPA can undertake any inspections, data collection and/or assessments necessary. EPA will then notify with the State about the results and issue a determination notice if a relevant violation or release is found.
- (d) *Determination of unacceptability*. (1) Upon initial determination by the EPA Regional Office that a facility being considered for the off-site transfer of any CERCLA waste does not meet the criteria for acceptability stated in §300.440(b), the EPA Region shall notify the owner/operator of such facility, and the responsible agency in the State in which the facility is located, of the unacceptability finding. The notice will be sent by certified and first-class mail, return receipt requested. The certified notice, if not acknowledged by the return receipt card, should be considered to have been received by the addressee if properly sent by regular mail to the last address known to the EPA Regional Office.
- (2) The notice shall generally: state that based on available information from a RCRA Facility Assessment (RFA), inspection, or other data sources, the facility has been found not to meet the requirements of §300.440; cite the specific acts, omissions, or conditions which form the basis of these findings; and inform the owner/operator of the procedural recourse available under this regulation.
- (3) A facility which was previously evaluated and found acceptable under this rule (or the preceding policy) may continue to receive CERCLA waste for 60 calendar days after the date of issuance of the notice, unless otherwise determined in accordance with paragraphs (d)(8) or (d)(9) of this section.

- (4) If the owner or operator of the facility in question submits a written request for an informal conference with the EPA Regional Office within 10 calendar days from the issuance of the notice, the EPA Regional Office shall provide the opportunity for such conference no later than 30 calendar days after the date of the notice, if possible, to discuss the basis for the underlying violation or release determination, and its relevance to the facility's acceptability to receive CERCLA cleanup wastes. State representatives may attend the informal conference, submit written comments prior to the informal conference, and/or request additional meetings with the EPA Region, relating to the unacceptability issue during the determination process. If no State representative is present, EPA shall notify the State of the outcome of the conference. An owner/operator may submit written comments by the 30th day after issuance of the notice, in addition to or instead of requesting an informal conference.
- (5) If the owner or operator neither requests an informal conference nor submits written comments, the facility becomes unacceptable to receive CERCLA waste on the 60th day after the notice is issued (or on such other date designated under paragraph (d)(9) of this section). The facility will remain unacceptable until such time as the EPA Regional Office notifies the owner or operator otherwise.
- (6) If an informal conference is held or written comments are received, the EPA Region shall decide whether or not the information provided is sufficient to show that the facility is operating in physical compliance with respect to the relevant violations cited in the initial notice of unacceptability, and that all relevant releases have been eliminated or controlled, as required in paragraph (b)(2) of this section, such that a determination of acceptability would be appropriate. EPA will notify the owner/operator in writing whether or not the information provided is sufficient to support a determination of acceptability. Unless EPA determines that information provided by the owner/operator and the State is sufficient to support a determination of acceptability, the facility becomes unacceptable on the 60th calendar day after issuance of the original notice of unacceptability (or other date established pursuant to paragraphs (d)(8) or (d)(9) of this section).
- (7) Within 10 days of hearing from the EPA Regional Office after the informal conference or the submittal of written comments, the owner/operator or the State may request a reconsideration of the unacceptability determination by the EPA Regional Administrator (RA). Reconsideration may be by review of the record, by conference, or by other means deemed appropriate by the Regional Administrator; reconsideration does not automatically stay the determination beyond the 60-day period. The owner/operator will receive notice in writing of the decision of the RA.
- (8) The EPA Regional Administrator may decide to extend the 60-day period if more time is required to review a submission. The facility owner/operator shall be notified in writing if the Regional Administrator extends the 60 days.
- (9) The EPA Regional Office may decide that a facility's unacceptability is immediately effective (or effective in less than 60 days) in extraordinary situations such as, but not limited to, emergencies at the facility or egregious violations. The EPA Region shall notify the facility

owner/operator of the date of unacceptability, and may modify timeframes for comments and other procedures accordingly.

- (e) Unacceptability during administrative and judicial challenges of corrective action decisions. For a facility with releases that are subject to a corrective action permit, order, or decree, an administrative or judicial challenge to the corrective action (or a challenge to a permit modification calling for additional corrective action) shall not be considered to be part of a corrective action "program" controlling those releases and shall not act to stay a determination of unacceptability under this rule. However, such facility may remain acceptable to receive CERCLA waste during the pendency of the appeal or litigation if:
- (1) It satisfies the EPA Regional Office that adequate interim corrective action measures will continue at the facility; or
- (2) It demonstrates to the EPA Regional Office the absence of a need to take corrective action during the short-term, interim period.

Either demonstration may be made during the 60-day review period in the context of the informal conference and RA reconsideration.

- (f) *Re-evaluating unacceptability*. If, after notification of unacceptability and the opportunity to confer as described in §300.440(d), the facility remains unacceptable, the facility can regain acceptability. A facility found to be unacceptable to receive CERCLA wastes based on relevant violations or releases may regain acceptability if the following conditions are met:
- (1) *Judgment on the merits*. The facility has prevailed on the merits in an administrative or judicial challenge to the finding of noncompliance or uncontrolled releases upon which the unacceptability determination was based.
- (2) *Relevant violations*. The facility has demonstrated to the EPA Region its return to physical compliance for the relevant violations cited in the notice.
 - (3) *Releases*. The facility has demonstrated to the EPA Region that:
- (i) All releases from receiving units at RCRA subtitle C facilities have been eliminated and prior contamination from such releases is controlled by a corrective action program approved under subtitle C of RCRA;
- (ii) All releases from other units at RCRA subtitle C land disposal facilities are controlled by a corrective action program approved under subtitle C of RCRA;
- (iii) All releases from other units at RCRA subtitle C treatment and storage facilities do not pose a significant threat to human health or the environment, or are controlled by a corrective action program approved under subtitle C of RCRA.

- (iv) A RCRA subtitle C corrective action program may be incorporated into a permit, order, or decree, including the following: a corrective action order under RCRA section 3008(h), section 7003 or section 3013, a RCRA permit under 40 CFR 264.100 or 264.101, or a permit under an equivalent authority in a State authorized for corrective action under RCRA section 3004(u). Releases will be deemed controlled upon issuance of the order, permit, or decree which initiates and requires completion of one or more of the following: a RCRA Facility Investigation, a RCRA Corrective Measures Study, and/or Corrective Measures Implementation. The release remains controlled as long as the facility is in compliance with the order, permit, or decree, and enters into subsequent agreements for implementation of additional corrective action measures when necessary, except during periods of administrative or judicial challenges, when the facility must make a demonstration under §300.440(e) in order to remain acceptable.
- (v) Facilities with releases regulated under other applicable Federal laws, or State laws under a Federally-delegated program may regain acceptability under this section if the releases are deemed by the EPA Regional Office not to pose a threat to human health or the environment, or if the facility enters into an enforceable agreement under those laws to conduct corrective action activities to control releases. Releases will be deemed controlled upon the issuance of an order, permit, or decree which initiates and requires one or more of the following: a facility investigation, a corrective action study, and/or corrective measures implementation. The release remains controlled as long as the facility is in compliance with the order, permit, or decree, and enters into subsequent agreements for implementation of additional corrective measures when necessary, except during periods of administrative or judicial challenges, when the facility must make a demonstration under §300.440(e) in order to remain acceptable.
- (4) Prior to the issuance of a determination that a facility has returned to acceptability, the EPA Region shall notify the State in which the facility is located, and provide an opportunity for the State to discuss the facility's acceptability status with EPA.
- (5) An unacceptable facility may be reconsidered for acceptability whenever the EPA Regional Office finds that the facility fulfills the criteria stated in §300.440(b). Upon such a finding, the EPA Regional Office shall notify the facility and the State in writing.

[58 FR 49215, Sept. 22, 1993]