

- Iowa, State House, Des Moines, Iowa 50319, (515) 281-5241.
- Mr. Howard P. Schwartz, Judicial Administrator, Kansas Judicial Center, 301 West 10th Street, Topeka, Kansas 66612, (913) 296-4873.
- Ms. Laura Stammel, Comptroller, Administrative Office of the Courts, 403 Wapping Street, Frankfort, Kentucky 40601, (502) 564-2350.
- Dr. Hugh M. Collins, Judicial Administrator, Supreme Court of Louisiana, 301 Loyola Avenue, Room 109, New Orleans, Louisiana 70112-1887, (504) 568-5747.
- Mr. Dana R. Baggett, State Court Administrator, Administrative Office of the Courts, P.O. Box 4820, Downtown Station, Portland, Maine 04112, (207) 879-4792.
- Mr. Peter J. Lally, Assistant State Court Administrator, Courts of Appeal Building, 361 Rowe Boulevard, Annapolis, Maryland 21401, (301) 974-2141.
- Honorable Arthur M. Mason, Chief Administrative Justice, The Trial Court, Commonwealth of Massachusetts, 317 New Courthouse, Boston, Massachusetts 02108, (617) 725-8787.
- Honorable Dorothy Comstock Riley, Chief Justice, Supreme Court of Michigan, Law Building, Post Office Box 30052, Lansing, Michigan 48909, (517) 373-0128.
- Ms. Sue K. Dosal, State Court Administrator, Supreme Court of Minnesota, 230 State Capitol, St. Paul, Minnesota 55155, (617) 296-2474.
- Ms. Krista Johns, Director, Center for Court Education and Continuing Studies, Box 879, Oxford, Mississippi 38677, (601) 232-5955.
- Mr. Ron Larkin, Director of Operations, Office of the State Court Administrator, 1105 R Southwest Blvd., Jefferson City, Missouri 65109, (314) 751-3585.
- Mr. R. James Oppedahl, State Court Administrator, Montana Supreme Court, Justice Building, Room 315, 215 North Sanders, Helena, Montana 59620-3001, (406) 444-2621.
- Mr. Joseph C. Steele, State Court Administrator, Supreme Court of Nebraska, State Capitol Building, Room 1220, Lincoln, Nebraska 68509, (404) 471-2643.
- Mr. Donald J. Mello, Court Administrator, Administrative Office of the Courts, Capitol Complex, Carson City, Nevada 89710, (702) 885-5076.
- Mr. Jeffrey Leidinger, Director, Administrative Office of the Courts, Supreme Court of New Hampshire, Noble Drive, Concord, New Hampshire 03301, (603) 271-2521.
- Mr. Robert Lipscher, Administrative Director, Administrative Office of the Courts, CN-037, RJH Justice Complex, Trenton, New Jersey 08625, (609) 984-0275.
- Honorable Albert M. Rosenblatt, Chief Administrative Judge, New York State Office of Court Administrator, Empire State Plaza, Agency Building 4, 20th Floor, Albany, New York 12207, (913) 431-1930.
- Mr. Robert L. Lovato, State Court Administrator, Administrative Office of the Courts, Supreme Court of New Mexico, Supreme Court Building, Room 25, Santa Fe, New Mexico 87503, (505) 827-4800.
- Mr. Franklin E. Freeman, Jr., Administrative Director, Administrative Office of the Courts, Post Office Box 2448, Raleigh, North Carolina 27602, (919) 733-7106/7107.
- Mr. William G. Bohn, State Court Administrator, Supreme Court of North Dakota, State Capitol Building, Bismarck, North Dakota 58505, (701) 224-4216.
- Mr. Stephan W. Stover, Administrative Director of the Courts, Supreme Court of Ohio, State Office Tower, 30 East Broad Street, Columbus, Ohio 43266-0419, (614) 466-2653.
- Mr. Howard W. Conyers, Administrative Director, Administrative Office of the Courts, 1915 N. Stiles, Suite 305, Oklahoma City, Oklahoma 73105, (405) 521-2450.
- Mr. R. William Linden, Jr., State Court Administrator, Supreme Court of Oregon, Supreme Court Building, Salem, Oregon 97310, (503) 378-6046.
- Mr. Ralph Hunsicker, Administrative Office of Pennsylvania Courts, 407 City Towers, 301 Chestnut Street, Harrisburg, Pennsylvania 17101, (717) 783-7322.
- Mr. Matthew J. Smith, State Court Administrator, Supreme Court of Rhode Island, 250 Benefit Street, Providence, Rhode Island 02903, (401) 277-3263 or 277-3272.
- Mr. Louis L. Rosen, Director, South Carolina Court Administration, Post Office Box 50447, Columbia, South Carolina 29250, (803) 758-2961.
- Honorable George W. Wuest, Chief Justice, Supreme Court of South Dakota, 500 East Capitol Avenue, Pierre, South Dakota 57501, (605) 773-4885.
- Mr. Cletus W. McWilliams, Executive Secretary, Supreme Court of Tennessee, Supreme Court Building, Room 422, Nashville, Tennessee 37219, (615) 741-2687.
- Mr. C. Raymond Judice, Administrative Director, Office of Court Administration of the Texas Judicial System, Post Office Box 12066, Austin, Texas 78711, (512) 463-1625.
- Honorable Gordon R. Hall, Chief Justice, Supreme Court of Utah, State Capitol Building, Room 332, Salt Lake City, Utah 84114, (801) 533-5285.
- Mr. Thomas J. Lehner, Court Administrator, Supreme Court of Vermont, 111 State Street, Montpelier, Vermont 05602, (802) 828-3281.
- Ms. Viola E. Smith, Clerk of the Court/Administrator, Territorial Court of the Virgin Islands, Post Office Box 70, Charlotte Amalie, St. Thomas, Virgin Islands 00801, (809) 774-6680, ext. 248.
- Mr. Robert N. Baldwin, Executive Secretary, Supreme Court of Virginia, Administrative Offices, 100 North Ninth Street, 3rd Floor, Richmond, Virginia 23219, (804) 786-6455.
- Ms. Mary McQueen, State Court Administrator for the Courts, Supreme Court of Washington, Highways-Licensing Building, 6th Floor, 12th & Washington, Olympia, Washington 98504, (206) 753-5780.
- Mr. Ted J. Philyaw, Administrative Director of the Courts, Administrative Office, 402-E State Capitol, Charleston, West Virginia 25305, (304) 348-0145.
- Mr. J. Denis Moran, Director of State Courts, Post Office Box 1688, Madison, Wisconsin 53701-1688, (608) 266-6828.
- Justice Walter Urbigkit, Supreme Court of Wyoming, Supreme Court Building, Cheyenne, Wyoming, 82002, (307) 777-7571.

[FR Doc. 88-29189 Filed 12-20-88; 8:45 a.m.]

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Federal Register

Wednesday
December 21, 1988

Part IV

Environmental Protection Agency

40 CFR Part 300

**National Oil and Hazardous Substances
Pollution Contingency Plan; Notice of
Public Meetings**

WASHINGTON, D.C. 20460

OFFICE OF THE
DIRECTOR

WASHINGTON, D.C. 20460

TELEPHONE (202) 343-2100

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MAILING ADDRESS: WASHINGTON, D.C. 20460

ATTENTION: DIRECTOR

DATE: 10/1/88

RE: 10/1/88

FROM: 10/1/88

SUBJECT: 10/1/88

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**ENVIRONMENTAL PROTECTION
AGENCY****40 CFR Part 300**

[FRL-3479-8]

**National Oil and Hazardous
Substances Pollution Contingency
Plan****AGENCY:** Environmental Protection
Agency.**ACTION:** Notice of public meetings.

SUMMARY: The Environmental Protection Agency (EPA) is holding four public meetings on the proposed revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), published elsewhere in today's edition of the *Federal Register*. The revisions are intended to implement the regulatory changes necessitated by the Superfund Amendments and Reauthorization Act of 1986 (SARA), as well as to clarify existing NCP language and to reorganize the NCP to coincide more accurately with the sequence of response actions. The public meetings

are scheduled to allow EPA to meet directly with interested parties concerning the proposed revisions. At each meeting, EPA expects to present a summary of a major proposed change and to accept oral and written statements.

DATES: The four meetings are scheduled to be held on January 10, 12, 17, and 19, 1989.

ADDRESSES: The meetings will take place in the following areas from 9:00 a.m. to 5:00 p.m., unless concluded earlier, and will continue in the evening beginning at 6:30 p.m.:

January 10, 1989 *Chicago Illinois area.*
Sheraton International at O'Hare, 6810
N. Mannheim Road, Rosemont, IL
60018, (312) 297-1234.

January 12, 1989 *Washington, D.C. area.*
Holiday Inn Crown Plaza, 300 Army-
Navy Drive, Arlington, VA 22202, (703)
892-4100.

January 17, 1989 *Dallas, Texas.* Sheraton
Park Central Hotel & Towers, 12720
Merit Drive, Dallas, Texas 75251
(North Dallas), (214) 385-3000.

January 19, 1989 *Los Angeles, California area.* Sheraton Long Beach at

Shoreline Sq., 333 East Ocean
Boulevard, Long Beach, CA 90802,
(213) 436-3000.

FOR FURTHER INFORMATION CONTACT:
Betti VanEpps or Tod Gold, Policy and
Analysis Staff, Office of Emergency and
Remedial Response [OS-240], U.S.
Environmental Protection Agency, 401 M
Street, SW., Washington, DC 20460, at
1-202-382-2182.

SUPPLEMENTARY INFORMATION: Any
member of the public wishing to present
an oral statement at a meeting must
contact the Policy and Analysis Staff at
the address or telephone number given
above in advance of the meeting. Such
statements will be permitted to the
extent that time allows. Since time will
be limited, EPA recommends that the
public consider submitting written
comments in lieu of oral presentations.
All written and oral statements will be
made part of the record and will be
taken into consideration by EPA.

Henry L. Longest II,
Director, Office of Emergency and Remedial
Response.

[FR Doc.88-26788 Filed 12-20-88; 8:45 am]

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ENVIRONMENTAL PROTECTION

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Federal Register

Wednesday
December 21, 1988

Part V

Environmental Protection Agency

40 CFR Part 300
National Oil and Hazardous Substances
Pollution Contingency Plan; Proposed
Rule

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 300****[FRL-3381-4]****National Oil and Hazardous Substances Pollution Contingency Plan****AGENCY:** Environmental Protection Agency.**ACTION:** Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Superfund Amendments and Reauthorization Act of 1986 (SARA) amends existing provisions of and adds major new authorities to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Furthermore, SARA mandates that the NCP be revised to reflect these amendments. The proposed NCP revisions are intended to implement regulatory changes necessitated by SARA, as well as to clarify existing NCP language and to reorganize the NCP to coincide more accurately with the sequence of response actions.

DATES: Comments on the proposed revisions to the NCP must be submitted on or before February 21, 1989. Elsewhere in this issue of the *Federal Register*, a separate notice is being published announcing the dates, times, and locations of public meetings regarding today's proposed revisions to the NCP to be held during the public comment period.

ADDRESS: Written comments on the proposed revisions to the NCP should be submitted, in triplicate, to the Superfund Docket, located in Room LG at the U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. The record supporting this rulemaking is contained in the Superfund Docket and is available for inspection by appointment only between the hours of 9:00 a.m. and 4:00 p.m., Monday through Friday, excluding legal holidays. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

FOR FURTHER INFORMATION CONTACT: Tod Gold, Policy and Analysis Staff, Office of Emergency and Remedial Response [OS-240], U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, at 1-202-382-2182, or the RCRA/Superfund Hotline at 1-800-424-9346 (in Washington, DC, at 1-202-382-3000).

SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline:

- I. Introduction
- II. Major Revisions in Each Subpart
- III. Summary of Supporting Analyses

I. Introduction

Pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Pub. L. No. 96-510, as amended by section 105 of the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, (CERCLA or Superfund or the Act), and Executive Order (E.O.) No. 12580 (52 FR 2923, January 29, 1987), the Environmental Protection Agency (EPA) is proposing revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Revisions to the NCP were last promulgated on November 20, 1985 (50 FR 47912). For the reader's convenience and because the section numbers are being changed, EPA is reprinting the entire NCP, except for Appendices A (Uncontrolled Hazardous Waste Site Ranking System: A Users Manual) and B (National Priorities List), which are or will be proposed separately, and C (Revised Standard Dispersant Effectiveness and Toxicity Tests), for which only minor technical corrections are being proposed. EPA is not repropounding those portions of the NCP that are unchanged and does not solicit comment on those provisions. Comment is requested only on new portions of, or substantive changes to, the NCP.

All existing subparts of the NCP have proposed revisions and several new subparts are being added. Furthermore, because the NCP is being reorganized, many of the existing subparts have been redesignated with a different letter. The proposed reorganization of NCP subparts is as follows:

- Subpart A—Introduction
- Subpart B—Responsibility and Organization for Response
- Subpart C—Planning and Preparedness
- Subpart D—Operational Response Phases for Oil Removal
- Subpart E—Hazardous Substance Response
- Subpart F—State Involvement in Hazardous Substance Response
- Subpart G—Trustees for Natural Resources
- Subpart H—Participation by Other Persons
- Subpart I—Administrative Record for Selection of Response Action
- Subpart J—Use of Dispersants and Other Chemicals
- Subpart K—Federal Facilities [Reserved]

In today's revisions to the NCP, EPA is proposing a broad and comprehensive rulemaking to revise as well as restructure the NCP. The primary

purpose of today's proposal is to incorporate changes mandated by the Superfund Amendments and Reauthorization Act of 1986 (SARA) and to set forth the EPA's proposed approach for implementing SARA. SARA extensively revised existing provisions of and added new authorities to CERCLA. These changes to CERCLA necessitate revision of the NCP.

The regulation and the rest of the preamble use the term "CERCLA" to mean CERCLA as amended by SARA; the term "SARA" is used only to refer to Title III, which is an Act separate from CERCLA, and to other parts of SARA that did not amend CERCLA. The term "SARA" is used in this overview portion of the preamble, however, to highlight the changes to CERCLA.

A. Statutory Overview

The following discussion summarizes the CERCLA legislative framework, with particular focus on the major revisions to CERCLA mandated by SARA as well as those mandated by E.O. No. 12580, which delegates certain functions vested in the President by CERCLA to EPA and other Federal agencies. In addition, this discussion gives reference to the specific preamble sections that detail how these changes to CERCLA are reflected in today's proposed rule.

1. Reporting and Investigation. CERCLA section 103 requires that a release into the environment of a hazardous substance in an amount equal to or greater than its "reportable quantity" (established pursuant to section 102 of CERCLA) must be reported to the National Response Center. Title III of SARA establishes a new, separate program that requires releases of hazardous substances, as well as other "extremely hazardous substances," to be reported to State and local emergency planning officials. The preamble discussion of Subpart C summarizes Title III reporting requirements.

CERCLA section 104 provides the Federal government with authority to investigate releases. SARA amends CERCLA section 104 to clarify EPA's investigatory and access authorities, explicitly empowering EPA to compel the release of information and to enter property for the purpose of undertaking response activities. Amended section 104(e) also provides Federal courts with explicit authority to enjoin property owners from interfering with the conduct of response actions. SARA further amends CERCLA section 104 to authorize EPA to allow potentially responsible parties (PRPs) to conduct investigations. The preamble discussion

of Subpart E details how these revisions to CERCLA are reflected in today's proposed rule.

2. *Response Actions.* CERCLA section 104 provides broad authority for a Federal program to respond to releases of hazardous substances and pollutants or contaminants. There are two major types of response actions: the first is "removal action," the second is "remedial action." CERCLA section 104 is amended by SARA to increase the flexibility of removal actions. This amendment increases the dollar and time limitations on removal actions from \$1 million and six months to \$2 million and one year, and allows a new exemption from either limit if continuation of the removal action is consistent with the remedial action to be taken. (The existing exemption for emergency actions remains in effect.) SARA also amends CERCLA section 104 to require removals to contribute to the efficient performance of a long-term remedial action, where practicable.

In addition, SARA amends CERCLA section 104 to require that, for the purpose of remedial actions, primary attention be given to releases posing a threat to human health. (To this end, SARA also amends CERCLA section 104 to expand health assessment requirements at sites and to allow individuals to petition ATSDR for health assessments.)

Among the major new provisions added by SARA are CERCLA sections 121(a) through 121(d), which supplement sections 104 and 106 by stipulating general rules for the selection of remedial actions, providing for review of remedial actions, and describing requirements for the degree of cleanup. These new sections codify rigorous remedial action cleanup standards by mandating that remedial actions meet applicable or relevant and appropriate Federal standards and more stringent State standards. Where the remedial action involves transfer of hazardous substances off-site, this transfer may only be made to facilities in compliance with the Resource Conservation and Recovery Act (RCRA) (or other applicable Federal laws) and applicable State requirements. (EPA has proposed separately the regulatory requirements for the off-site transfer of hazardous substances and codify these in the final NCP, 53 FR 48218, November 29, 1988.)

Section 121 emphasizes a long-term perspective on remedies by requiring that long-term effectiveness of remedies and permanent reduction of the threat be considered and that the calculation of the cost-effectiveness of a remedy include the long-term costs, including the cost of operation and maintenance.

The section mandates a preference for remedies that permanently reduce the "volume, toxicity, or mobility" of the hazardous substance, and requires that remedies use permanent solutions and alternative technologies or resource recovery technologies to the maximum extent practicable. The preamble discussion of Subpart E details how these revisions to CERCLA are reflected in today's proposed rule.

3. *State and Public Participation.* New CERCLA section 121(f) requires the "substantial and meaningful" involvement of the States in the initiation, development, and selection of remedial actions. States are to be involved in decisions on conducting preliminary assessments and site inspections. States will also have a role in long-term planning for remedial sites and negotiations with potentially responsible parties. In addition, States are to be given reasonable opportunity to review and comment on such documents as the remedial investigation/feasibility study (RI/FS) and the proposed plan for remedial action. CERCLA also provides in section 121(e)(2) that a State is permitted to enforce any Federal or State standard, requirement, criterion, or limitation to which the remedial action is required to conform.

CERCLA section 104(d) provides that a State may apply to carry out the response action. This section allows States to enter into cooperative agreements with the Federal government to conduct response actions. SARA amends CERCLA section 104 to make it easier for States to enter into such cooperative agreements. The preamble discussion concerning Subpart F details how these revisions to CERCLA are reflected in today's proposed rule.

SARA adds a new CERCLA section 117 to codify public involvement in the Superfund response process. This section mandates public participation in the selection of remedies and provides for grants allowing groups affected by a release to obtain the technical expertise necessary to participate in decisionmaking. Proposed community relations requirements are described in section H of the Subpart E, § 300.430 preamble discussion.

4. *Enforcement.* CERCLA sections 106 and 107 authorize EPA to take legal action to recover from responsible parties the cost of response already underway or to compel them to respond to the problem themselves. SARA adds to CERCLA a number of provisions that are intended to facilitate responsible party financing of response actions. CERCLA section 122, for example, provides mechanisms by which

settlements between responsible parties and EPA can be made, and allows for "mixed funding" of response actions, with both EPA and responsible parties contributing to response costs.

SARA creates a new CERCLA section 310, which allows for citizen suits. Any person may commence a civil action on his/her own behalf against any person (including the United States and any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution), alleged to be in violation of any standard, regulation, condition, requirement, or order which has become effective pursuant to CERCLA (including any provision of an agreement under section 120 relating to Federal facilities). A civil action may also be commenced against the President or any other officer of the United States (including the Administrator of the Environmental Protection Agency and the Administrator of the Agency for Toxic Substances and Disease Registry) where there is alleged a failure to perform any act or duty under CERCLA, including an act or duty under section 120 (relating to Federal facilities), which is not discretionary with the President or such other Federal officer, except for any act or duty under section 311 (relating to research, development, and demonstration). Section 310 requires that citizen suits be brought in a United States district court.

SARA amends CERCLA section 113 to require the lead agency to establish an administrative record upon which the selection of a response action is based. This record must be available to the public at or near the site. Section 113(j) provides that judicial review of any issues concerning the adequacy of any response action is limited to the administrative record. The preamble discussion of new Subpart I includes the introduction of administrative record requirements into the NCP.

5. *Federal facilities.* Section 120(a)(2) of CERCLA provides that all guidelines, rules, regulations, and criteria for preliminary assessments, site investigation, National Priorities List (NPL) listing, and remedial actions are applicable to Federal facilities to the same extent as they are applicable to other facilities. No Federal agency may adopt or utilize guidelines, rules, regulations, or criteria that are inconsistent with those established by EPA under CERCLA. (For purposes of the NCP, the term "lead agency" generally includes Federal agencies that are conducting response actions at their own facilities.)

Section 120 also defines the process that Federal agencies must use in undertaking remediation at their facilities. It requires EPA to establish a Federal agency hazardous waste compliance docket that includes a list of Federal facilities. EPA must assure that a preliminary assessment is conducted at each facility within 18 months of enactment and, where appropriate, evaluate these facilities for potential inclusion on the NPL within 30 months of enactment. Section 120(d) clarifies that Federal facilities shall be evaluated for inclusion on the NPL by applying listing criteria in the same manner as the criteria are applied to private facilities. Requirements governing listing are set forth in proposed Subpart E of the NCP and in Appendix A (the Hazard Ranking System). Federal agencies must commence the RI/FS within six months of listing on the NPL and enter into an interagency agreement with EPA. Section 120(e) provides for joint EPA/Federal agency selection of the remedy, or selection by EPA if EPA and the Federal agency are unable to reach an agreement. CERCLA section 120(f) makes clear that State officials shall have an opportunity to participate in the planning and selection of the remedial action, in accordance with section 121.

The requirements of the NCP, including the requirements related to RI/FS and selection of remedy and the administrative record, are applicable to Federal agency response actions under CERCLA at NPL and non-NPL sites, except where specifically noted that the requirements apply only to Fund-financed activities. However, the deadlines in section 120(e) and the requirement for joint selection of the remedy do not apply at non-NPL sites. A subpart specifically for Federal facilities (Subpart K) is reserved in this proposal. EPA plans to propose Subpart K after this proposal of the NCP. EPA is following its usual regulation development process for this subpart, including formation of a workgroup. The workgroup will be managed by EPA and will include membership of interested Federal agencies and States. EPA plans to finalize Subpart K as expeditiously as possible after consideration of public comment.

Even in instances where NCP requirements do not appear strictly to apply to Federal agency response, de facto compliance may still be necessary. One such example is the statutory limitations of 12 months and \$2 million on removal actions. When either of those limits is reached and no statutory exemption applies, Fund-financed activity must cease, unless appropriate

remedial actions are planned. Thus, the limitations serve two purposes. In addition to their primary function of establishing the funding limits on removals, the statutory time and dollar limits also serve as markers signaling the end point of removal authority. In order for Fund-financed remediation activity to continue at a site where a statutory limit has been reached and no exemption applies, it must be conducted as a remedial action. Thus, while the limits have no real application to funding or duration of response at a Federal facility, they do mark the point at which applicable remedial requirements of the NCP must begin to be met.

B. Brief Summary of Proposed Changes to the NCP

In addition to incorporating changes mandated by SARA and E.O. 12580, the proposed revisions are intended to:

1. Reorganize the NCP to describe more accurately the sequence in which response actions are taken pursuant to the NCP;
2. Clarify existing language on roles, responsibilities, and activities of affected parties; and
3. Incorporate changes suggested by program experience since the last revisions to the NCP.

Major revisions in each subpart are summarized briefly in the paragraphs that follow:

Proposed Subpart A is similar to existing Subpart A, but contains some clarifying revisions. Proposed Subpart A also reflects new statutory definitions and authorities. Subpart B combines the existing NCP's Subparts B and C; and the letter designations of existing Subparts D through F are changed accordingly. Proposed Subpart B of this regulation lists specific responsibilities that Federal agencies have as members of the National Response Team. Proposed Subpart C (existing Subpart D) includes the information from the current NCP regarding "Plans" and adds information on Title III of SARA. However, it should be noted that regulations implementing Title III of SARA are found at 40 CFR Part 355 et seq.

Redesignated Subpart D (existing Subpart E), "Operational Response Phases for Oil Removal," does not have significant proposed revisions. Proposed Subpart E (existing Subpart F) addresses hazardous substance response. Today EPA is proposing major revisions to this subpart to incorporate the CERCLA amendments to hazardous substance response authorities. Furthermore, EPA is proposing to restructure the sections

within new Subpart E to correspond more accurately to established procedures for hazardous substance response.

Proposed Subpart F (new) is being added to satisfy the new statutory mandate to promulgate regulations for State involvement in CERCLA response actions. State participation in Federal facility response will be governed by the provisions of proposed Subpart F. Proposed Subpart G (existing Subpart G) contains several revisions to clarify the designations of trustees for natural resources. Proposed Subpart H (new) consolidates into one new subpart existing language currently in various NCP sections concerning participation by other persons in response activities, with some revisions and additions. Proposed Subpart I (new) codifies the statutory requirements for establishment of an administrative record documenting how a response action is selected for a given CERCLA site. Proposed Subpart J, "Use of Dispersants and Other Chemicals," is very similar to existing Subpart H; clarifying revisions are proposed to this subpart.

Executive Order 12580, in conjunction with CERCLA, delegates responsibility for remedial actions at NPL or non-NPL sites and all removal actions, except emergencies, to the heads of Executive departments and agencies, where either the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of those departments and agencies, including vessels bare-boat chartered and operated. The E.O. also delegates authority to the Department of Defense (DOD) and Department of Energy (DOE) to respond to emergencies under their jurisdiction, custody, or control. The E.O. delegates to EPA the responsibility for defining the term emergency for the purposes of the delegations.

For the purpose of the delegations, EPA considers an emergency to be a release or threat of release generally requiring initiation of a removal action within hours of the lead agency's determination that a removal action is appropriate. This is consistent with the discussion in the preamble for removals (§ 300.415) and in the regulatory section on the administrative record for removals (§ 300.820). EPA will respond only to those public health or environmental emergencies that the Federal agency cannot respond to in a timely manner.

EPA invites public comment on today's revisions, including comments on the proposed reorganization described above. Table I, which shows

the distribution of current NCP sections into proposed new sections, has been prepared to assist the reader in identifying and tracking the reorganized rule language. An asterisk (*) next to a new section number indicates that substantial changes are proposed.

TABLE I.—NCP DISTRIBUTION TABLE

Old section and title	New section
<i>Subpart A</i>	(Subpart A)
300.1—Purpose and objectives.	300.1.*
300.2—Authority.	300.2.
300.3—Scope.	
300.3(a)	300.3(e).
300.3(b)	300.3(b) (1-4), (6), (9).
300.3(c)	300.3(c).
300.4—Application.	300.2.
300.5—Abbreviations.	
300.5(a)	300.4(a).
300.5(b)	300.4(b).*
300.6—Definitions.	300.5.*
<i>Subpart B</i>	(Subpart B)
300.21—Duties of the President delegated to Federal agencies.	300.100.
300.22—Coordination among and by Federal agencies.	
300.22(a)	300.105(a)(1-2).*
300.22(b)	300.105(a)(3).
300.22(c)	300.105(a)(4).
300.22(d)	300.130(d).
300.22(e)	300.130(b)(3) & (c).
300.22(f)	300.130(e).
300.22(g)	300.130(f).
300.23—Other assistance by Federal agencies.	
300.23(a)	300.170.
300.23(b)	300.170(a); 300.175.*
300.23(c)	300.170(b).
300.23(d)	300.170(c); 300.175.*
300.24—State and local participation.	300.180.
300.25—Nongovernmental participation.	
300.25(a-c)	300.185(a-c).
300.25(d)	300.185(d).*
<i>Subpart C</i>	(Proposed to become part of Subpart B)
300.31—Organizational concepts.	300.105(b) & (d).
300.32—Planning and coordination.	
300.32(a)	300.110(a-e); (g); (h) (1), (3), (5-8); (i).
300.32(b)	300.115(a-i) & (k).
300.32(c)	300.120(d) & (g); 300.210(c).*
300.33—Response operations.	
300.33(a)	300.120(a-c); 300.130(g).
300.33(b)	300.120(e); 300.135.*
300.34—Special forces and teams.	
300.34(a)	300.145(a).
300.34(b)	300.145(b).
300.34(c)	300.145(c).
300.34(d)	300.145(d).
300.34(e)	300.145(g).
300.34(f)	300.115(j)(1-4), (6-7).
300.34(g)	300.110(j).
300.34(h)	300.110(k).

TABLE I.—NCP DISTRIBUTION TABLE—Continued

Old section and title	New section
300.35—Multi-regional responses.	300.140.
300.36—Communications.	
300.36(a-c)	300.125.
300.36(d)	300.115(j)(5).
300.37—Special considerations.	
300.37(a)	Deleted.
300.37(b)	300.145(e).*
300.38—Worker health and safety.	300.150.
300.39—Public information.	300.155.
300.40—OSC reports.	300.165.
<i>Subpart D</i>	(Proposed to become Subpart C)
300.41—Regional and local plans.	300.210.*
300.42—Regional contingency plans.	
300.42(a)	300.210(b).
300.42(b)	Deleted.
300.42(c)	300.210(b).
300.43—Local contingency plans.	
300.43(a)	300.210(c).*
300.43(b)	Deleted.
<i>Subpart E</i>	(Proposed to become Subpart D)
300.51—Phase I—Discovery and notification.	300.300.
300.52—Phase II—Preliminary assessment and initiation of action.	300.305.
300.53—Phase III—Containment, countermeasures, cleanup, and disposal.	300.310.
300.54—Phase IV—Documentation and cost recovery.	300.315.
300.55—General pattern of response.	300.320.
300.56—[Reserved]	Deleted.
300.57—Waterfowl conservation.	300.330.
300.58—Funding.	300.335.
<i>Subpart F</i>	(Proposed to become Subpart E)
300.61—General.	
300.61(a)	300.400(a).
300.61(b)	Deleted.
300.61(c)	300.400(c).
300.61(d)	300.400(h).
300.61(e)	300.400(i).
300.62—State role.	Replaced by new Subpart F.
300.63—Discovery or notification.	
300.63(a)	300.405(a).
300.63(b)	300.405(b).
300.63(c)	300.405(e).
300.63(d)	300.405(f).
300.64—Preliminary assessment for removal actions.	
300.64(a-b)	300.410(b-d).
300.64(c)	300.410(e).
300.64(d)	300.410(g).
300.64(e)	300.410(h).
300.65—Removals.	
300.65(a)	300.415(a).*
300.65(b)	300.415(b).*

TABLE I.—NCP DISTRIBUTION TABLE—Continued

Old section and title	New section
300.65(c)	300.415(d).
300.65(d)	300.415(f).
300.65(e)	300.415(g).
300.65(f)	300.415(j).*
300.65(g)	
300.65(h)	300.415(k).
300.65(i)	300.700(c).*
300.66—Site evaluation phase and National Priorities List determination.	
300.66(a)	300.420(a-c).*
300.66(b)	300.425(c).*
300.66(c)	300.425(b) & (d-e).*
300.67—Community relations.	300.415(n).*; 300.430(c) & (f).*; 300.435(c).*
300.68—Remedial action.	300.430*. Appendix D.*
300.69—Documentation and cost recovery.	300.160.
300.70—Methods of remedying releases.	Replaced by new Appendix D.
300.71—Other party responses.	Replaced by new Subpart H.
<i>Subpart G</i>	(Subpart G)
300.72—Designation of Federal trustees.	300.600.*
300.73—State trustees.	300.605.
300.74—Responsibilities of trustees.	300.615.*
<i>Subpart H</i>	(Proposed to become Subpart J)
300.81—General.	300.900.
300.82—Definitions.	300.5.
300.83—NCP Product Schedule.	300.905.
300.84—Authorization of use.	300.910.
300.85—Data requirements.	300.915.
300.86—Addition of products to schedule.	300.920.
None.	Subpart I.

II. Major Revisions in Each Subpart

In this section, revisions to each subpart are explained. Major revisions for each subpart (and each section in the case of Subpart E) are discussed first, followed by a discussion of other revisions.

Subpart A—Introduction

Subpart A, the preface to the NCP, contains statements of purpose, authority, applicability, and scope. It also explains the abbreviations and defines the terms used in the NCP.

A. Major Revisions

1. *Definitions reflecting the roles of States and Federal agencies.* Changes are proposed for the current definitions of "lead agency," "on-scene coordinator" (OSC), and "remedial project manager" (RPM), and new definitions are proposed for "support agency," "support agency coordinator," "Superfund State contract," and

"Superfund Memorandum of Agreement" (SMOA).

The proposed definition of "lead agency" states that the lead agency provides the OSC/RPM to plan and implement the response action under the NCP. The terms "plan" and "implement" for purposes of a remedial action refer to the RI/FS and the remedial design/remedial action (RD/RA) activities, respectively. The "lead agency" definition includes political subdivisions of States, as well as States themselves, and a reference to SMOAs. In addition, because Indian Tribes are afforded substantially the same treatment as States are afforded during response actions, the proposed definition of "State" includes Federally recognized Indian Tribes. (See § 300.515 for requirements Indian Tribes must meet to be afforded the same treatment as States.) Thus, for example, EPA may enter into cooperative agreements with such Indian Tribes. The proposed "lead agency" definition also reflects E.O. 12580, which delegates lead agency authorities to Department of Defense (DOD), Department of Energy (DOE), and other Federal agencies under certain specific conditions. The Federal agency will maintain its lead agency implementation responsibilities even when the remedy at an NPL site is selected jointly with EPA, or when the remedy is selected by EPA alone in situations where the Federal agency and EPA are unable to reach agreement. The new definition of "support agency" clarifies the relationship between the lead and support agencies described in proposed NCP provisions. In the case of remedial actions taken at Federal facilities under CERCLA section 120, EPA and the State will both be support agencies to the lead Federal agency.

The definitions for OSC and RPM are proposed to be simplified, with emphasis placed on the agency that designates the official. The proposed definitions for OSC and RPM combined with the definition for "lead agency" allow an official from a State, political subdivision, or Indian Tribe to be the lead OSC or RPM where a cooperative agreement, a contract, or the SMOA designates one of those entities as lead agency. It should be noted that this designation must be made on a site-specific basis. In some circumstances, a support agency coordinator, also defined in Subpart A, may be designated on a site-specific basis, with authority to carry out support agency responsibilities for particular response actions.

The new definitions for SMOA and "State Superfund contract" clarify the Federal/State partnership. Both

documents are intended to formalize the responsibilities of lead and support agencies. The SMOAs are described in greater detail in the proposed new Subpart F of the NCP.

2. *Definitions of "applicable requirements" and "relevant and appropriate requirements."* These definitions have been modified pursuant to the CERCLA amendments to include the statutory provision that in addition to Federal requirements, more stringent, promulgated State requirements can also be applicable or relevant and appropriate.

In addition, EPA proposes to revise the definitions of the terms "applicable requirements" and "relevant and appropriate requirements" to clarify the wording of these two definitions without altering their basic meaning or significance. The current NCP defines "applicable requirements" as "those Federal requirements that would be legally applicable, whether directly, or as incorporated by a Federally authorized State program, if the response actions were not undertaken pursuant to CERCLA section 104 or 106." EPA today proposes to define applicable requirements as "those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or State law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site."

The proposed changes to the current definitions are not substantive and are not intended to affect implementation. They are intended to clarify the definitions and, in the case of "applicable," eliminate the conditional wording of the current definition, which has caused some confusion. However, EPA is not changing its position (see 50 FR 47917, November 20, 1985) that other environmental laws do not legally apply to on-site response actions conducted under the authority of CERCLA sections 104, 106, or 122, except as they are incorporated by CERCLA section 121(d). Nonetheless, as EPA decided in promulgating the 1985 NCP revisions, and as Congress affirmed in enacting section 121 of CERCLA, the substantive requirements of other environmental laws will be met in CERCLA remedial actions. The only exceptions to this requirement are the six specified in CERCLA section 121(d)(4).

The current NCP defines "relevant and appropriate requirements" as "those Federal requirements that, while not 'applicable,' are designed to apply to

problems sufficiently similar to those encountered at CERCLA sites that their application is appropriate. Requirements may be relevant and appropriate if they would be 'applicable' but for jurisdictional restrictions associated with the requirement." Today EPA proposes to clarify this definition with the following substitution: "Relevant and appropriate requirements means those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or State law 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."

The word "substantive" in the proposed definitions is not meant to imply a necessary level of "significance" or "weight" for a requirement to be applicable or relevant and appropriate. Rather, "substantive" is used to distinguish the universe of applicable or relevant and appropriate requirements from administrative or procedural requirements, which are not potentially applicable or relevant and appropriate.

Further discussion on applicable or relevant and appropriate requirements and how they are identified and used in the remedial selection process, including more discussion of the distinction between "substantive" and "administrative," can be found in the Subpart E, § 300.430 preamble section below, "F. Compliance with the applicable or relevant and appropriate requirements of other laws."

B. Other Revisions

1. *Organization of Subpart A.* EPA has rewritten § 300.1, "Purpose and objectives," to clarify that the purpose of the NCP is twofold: (1) To provide a plan for an organizational structure; and (2) to provide a plan for responses, under that structure, to discharges of oil and releases of hazardous substances, pollutants, or contaminants.

Section 300.2, "Authority," is combined with current § 300.4, "Application," to eliminate redundancies. Section 300.3, "Scope," is being expanded to reflect new authorities created by the CERCLA amendments. Proposed § 300.3(b) reflects the outline of the NCP.

In addition, definitions contained in the current Subpart H, "Dispersants," (e.g. burning agent, sinking agent) are proposed to be moved to Subpart A so

that all definitions are in one place. No substantive changes are proposed to these definitions. Proposed §§ 300.6 and 300.7 have been added to explain use of number and gender and computation of time in the NCP.

2. *New abbreviations.* EPA is including many operational abbreviations that are commonly used in communications regarding actual site response. For example, the abbreviation "RI/FS" is commonly used by EPA to refer to the remedial investigation/feasibility study process where hazards at CERCLA sites are characterized and alternatives for response to those hazards are developed. EPA believes that the NCP should contain abbreviations that have become common in EPA communications. However, EPA is not adding any new department or agency title abbreviations, even though the Nuclear Regulatory Commission is now a member of the National Response Team (NRT). Because "NRC" is already listed as the abbreviation for the National Response Center, confusion will be avoided by not using this abbreviation for Nuclear Regulatory Commission.

3. *Minor definitional changes.* Some of the changes are merely to conform with word or phrase changes required by CERCLA or Executive Order 12580, and others are proposed strictly for clarification. The following are changes required to conform with the statute: Addition of abandonment of drums to the definition of "release;" addition of a phrase to include related enforcement activities in the definitions of "remove or removal," "remedy or remedial action," and "respond or response;" and addition of provisions for Indian Tribes to the definition of "natural resources." Clarifying changes include expanded definitions of "trustee" and "operable unit." Indian Tribes were added to the definition of "trustee" to be consistent with statutory changes.

The definition of "operable unit" was expanded to explain that operable units can be distinguished by their dimensional aspects. This is an important concept because a Record of Decision often is signed for, and site work often is conducted as, one or several operable units, not an entire site response. Operable units may be actions performed at a site simultaneously on different portions of the site or in a series of actions. Sometimes the purpose of conducting an operable unit is to address the most imminent threat or to stabilize a threat posed by the site or to undertake a discrete, well-defined portion of the project while developing the overall remedial action. Examples of this are providing an alternative water

supply or retarding movement of a contaminated plume while a source control and ground-water remediation strategy is being formulated. Sometimes remediation may consist of several operable units conducted sequentially for logistical and technical reasons. An example of this is where demolition and treatment of waste in tanks on a site is the first operable unit to facilitate locating equipment or materials handling for staging the second operable unit, which may be to cleanup an adjacent lagoon or contaminated soils on the site. In addition, operable units sometimes may be conducted concurrently but as separate activities. An example of this is where source control activities are one operable unit and ground water restoration is another operable unit. For more information on operable units, see proposed regulatory and preamble language for Subpart E, § 300.430.

Changes also include shortened definitions of "remedial investigation," "feasibility study," "source control remedial action," and "management of migration." EPA is proposing to shorten the definitions because the current definitions contain details inappropriate for a definition. These definitional changes do not represent a change in policy or meaning.

4. *New definitions.* EPA is proposing to incorporate in the NCP new definitions that were added to CERCLA. The proposed NCP adds definitions directly from the statute for the terms "alternative water supply" and "Indian Tribe."

EPA is also proposing the addition of several new definitions including "CERCLIS," "community relations coordinator," "cooperative agreement," "miscellaneous oil spill control agents," "operation and maintenance," "preliminary assessment," "public vessel," "remedial design," "SARA," "site inspection," "State," "treatment technology," and "vessel."

1. *CERCLIS.* EPA is proposing to add a definition for CERCLIS because CERCLIS has become a key documentation tool for most Superfund remedial and removal activities, and it is mentioned in portions of the NCP. CERCLIS is EPA's inventory of potential hazardous waste sites. In the past, CERCLIS was primarily an inventory of remedial releases or sites and included only some sites on which removals had been undertaken. However, CERCLIS has recently been changed to include releases at removal, remedial, and enforcement sites so that it is a more comprehensive list of all Superfund activities. To ensure as comprehensive a data base as possible, EPA is now also

entering data for CERCLA response actions undertaken by the United States Coast Guard (USCG). In addition, as the definition explains, CERCLIS contains active and inactive (i.e., previously addressed) sites. EPA archives inactive sites in CERCLIS as a historical record of accomplishment. For informational and dissemination purposes, EPA considers only active sites.

ii. *Community relations coordinator.* EPA is proposing the addition of a definition for the term "community relations coordinator." The community relations coordinator is an important person in CERCLA responses; therefore, EPA believes it is necessary to include a definition of the title for informational purposes.

iii. *Cooperative agreement.* EPA is proposing to define cooperative agreement as a Federal assistance agreement in which substantial EPA involvement is anticipated.

iv. *Miscellaneous oil spill control agents.* EPA is proposing to add a definition of "miscellaneous oil spill control agents" for informational purposes.

v. *Operation and maintenance and remedial design.* The terms, "operation and maintenance" (O&M) and "remedial design" are proposed as new definitions because they are important terms commonly used in EPA communications; furthermore, a new NCP section (§ 300.435) has been added to reflect new CERCLA provisions affecting remedial design/remedial action (RD/RA) and O&M.

vi. *Preliminary assessment and site inspection.* EPA is proposing to add definitions for the terms, "preliminary assessment" (PA) and "site inspection" (SI), because they are important and discrete procedures in the site evaluation process. Use of the terms is also common in EPA communications. There are two kinds of PAs and SIs. Removal PAs and removal SIs are carried out to determine the nature of a release and associated threats when initial notification or discovery data suggest that a relatively rapid assessment or response is appropriate. The objective of removal PAs and SIs is to make timely and accurate decisions on which subsequent removal actions can be based. The other subset is remedial PAs/SIs. Remedial PAs are generally the first stage in the process of evaluating whether there is a release or threatened release at a site that does not appear to warrant removal action and determining the nature of the threat associated with that release or threat. Remedial SIs are the second step in the process and include an on-site

investigation and other gathering of data to determine whether further action at the site is necessary.

vii. *Public vessel and vessel.* Definitions for the terms "public vessel" and "vessel," taken from Clean Water Act (CWA) section 311 and CERCLA, are proposed for addition because the terms are used in several other NCP definitions.

viii. *SARA.* The proposed rule also includes a definition for "SARA," the Superfund Amendments and Reauthorization Act of 1986. This is the law that, among other things, amended CERCLA. One significant component of SARA is Title III, a free-standing section on emergency planning and community right-to-know. Regulations implementing Title III are codified at 40 CFR Subchapter J, and referred to in Subpart C of the proposed NCP.

ix. *State.* EPA is proposing to add a definition of "State" that includes "Indian Tribes." Except for purposes of SARA Title III or where specifically noted in the NCP, Indian Tribes may be treated in the same manner as States. EPA proposes to include Indian Tribes in the definition of State so that the term does not have to be repeated in every place that "State" appears. Section 300.515 describes in more detail requirements for Indian Tribes.

x. *Treatment technology.* The term "treatment technology" is also being added as a new definition for informational purposes. The term is used often in EPA communications and has become a central consideration in the remedial selection process. It has a precise meaning, which EPA believes should be included in the NCP.

5. *Deletion of definitions.* The definition of "Federally permitted release" is proposed to be deleted because it is no longer used in the NCP. To avoid confusion with other plans, the term "Plan" is no longer used to mean the NCP in the proposed rule. The definition of "Plan" is proposed to be deleted. The term "quality assurance/project plan" is proposed to replace "Site Quality Assurance and Sampling Plan."

C. Point of Clarification

The NCP includes within the terms "discharge" and "release," threats of discharge and threats of release. Thus, the phrases "threat of discharge" and "threat of release" have generally been deleted from the current rule where they appear with the terms "discharge" and "release," except when they are part of a statutory definition. To clarify this, EPA proposes to add the definition "threat of discharge or release" with

cross-references to "discharge" and "release."

Subpart B—Responsibility and Organization for Response

Proposed Subpart B describes the responsibilities of Federal agencies for response and preparedness planning and describes the organizational structure within which response takes place. It lists the Federal participants in the response organization, their responsibilities for preparedness planning and response, and the means by which State and local governments, Indian Tribes, and volunteers may participate in preparedness and response activities. The term "Federal agencies" is meant to include the various departments and agencies within the Executive Branch of the Federal government.

A. Major Revisions

No major substantive changes are proposed for this subpart. EPA is proposing, however, a major reorganization of Subpart B. The most significant element of this reorganization is that EPA proposes to combine existing Subparts B and C. Furthermore, EPA proposes to change the sequence in which information from current Subparts B and C is presented. The proposed revisions present key information in a logical sequence of response-oriented activities from preparedness planning through response operations. The overall National Response Team (NRT), Regional Response Team (RRT), and OSC/RPM organization is introduced at the beginning, and the discussion of activities that have to be completed before and during response operations is integrated with a discussion of the role and responsibility of each of these major entities in the Federal response organization. Qualifications, exceptions, and caveats are generally described after the main or usual course of action. The listing of the capabilities of Federal agencies with respect to preparedness planning and response now follows the sections related to response operations.

B. Other Revisions

1. *Reorganization overview of existing Subparts B and C.* EPA proposes to combine existing Subparts B and C and reorganize the existing language (with minor revisions) in the following order:

- i. Identification of the NRT/RRT/OSC/RPM organizational system (§ 300.105);
- ii. Roles and responsibilities of the NRT and RRT (§§ 300.110 and 300.115) and OSC/RPM (§ 300.120), and activities

that must be accomplished prior to a response;

iii. Notification and communication of threats or incidents (§ 300.125);

iv. Determination that a response is needed, including discussion of separate authorities of the Clean Water Act and CERCLA (§ 300.130);

v. Response operations—organized around OSC/RPM activities (§ 300.135);

vi. Other response-related topics such as multi-regional response, special teams, and documentation and cost recovery (§§ 300.140 through 300.165);

vii. Federal agency participation (§ 300.170) and Federal capabilities and expertise of NRT member agencies that might be required or useful in certain preparedness planning and responses (§ 300.175); and

viii. Information on State and local governments, Indian Tribes, and volunteer participation in and coordination with Federal preparedness planning and response (§§ 300.180 and 300.185).

In general, very little existing NCP language is proposed to be deleted. Deletions are proposed only when, in the proposed new sequence, it would be clearly repetitive and not necessary to assure that key ideas are highlighted in frequently used sections. New introductory language has been added in some sections and new headings indicate more clearly the contents of each section.

Several cross-references to other sections of the NCP have been added. For example, Community Relations Plans are referred to in this proposed subpart under Public Information to remind the reader of the existence of community relations requirements and the need for coordination where such plans are in effect.

EPA proposes to change or add language in several places to make clearer the parallels between NRT and RRT responsibilities and activities and to highlight the complementary nature of the RRT-OSC relationship. For example, the discussion of the OSC's responsibility for "OSC contingency plans" (proposed in Subpart C as the new name for plans formerly called "Federal local plans") complements the discussion of the RRT members' responsibility to participate in such planning. Language is also proposed in several places to reflect the current responsibilities or activities (e.g., RRT work planning) that are needed and being performed, but that are not identified in the current NCP.

2. *Executive Order 12580.* The 1986 CERCLA amendments and E.O. 12580 (52 FR 2923, January 29, 1987) have

expanded the responsibilities of Federal agencies for facilities and vessels under their jurisdiction, custody, or control. EPA notes that the language proposed throughout this subpart is intended to be generally applicable to all Federal OSCs/RPMs.

3. *Indian Tribes.* Proposed new language in various sections of this subpart introduces Indian Tribal government representation in the NRT/RRT system. The 1986 CERCLA amendments establish that Indian Tribes are to play essentially the same role as States for the purposes of the Superfund program. Although not explicit in the current NCP, provision had previously been made for Indian Tribes to participate in RRTs when Indian Tribes so request. Indian Tribes are now proposed to be included in the definition of State in Subpart A, so they are specifically mentioned in Subpart B only when the role of responsibilities of Indian Tribes needs separate explanation.

4. *Title III.* New references are proposed to be incorporated throughout the proposed subpart relating to review of State and local emergency preparedness planning required by SARA Title III. The emergency preparedness planning activities discussed in this subpart are carried out under the authority of Title III, not CERCLA.

5. *Incident-specific response teams (§ 300.115(j)).* EPA proposes this paragraph to notify RRT members of key information relating to a release when full RRT activation is not warranted. Without systematic transfer of correct information, RRT members may receive only partial or erroneous information from second-hand sources as to effects on people or natural resources from a release. Systematic means of notification should be covered in Regional Contingency Plans (RCPs) so the OSC/RPM is not distracted from managing the response by the need to maintain frequent contact with RRT members. EPA notes that numerous communications techniques and tools are becoming more readily available to RRT members. For example, electronic bulletin boards and conference call systems have been used successfully.

6. *On-scene coordinators and remedial project managers (§ 300.120).* The first paragraph of proposed § 300.120, sets forth all OSC/RPM responsibilities and activities up to the time of an actual response. EPA proposes this language to replace existing §§ 300.32(c) and 300.33(a) with the items of responsibility or activity in a slightly different order, stating first the basic OSC responsibility—that the OSC

is to be in charge of the response. It is in light of this responsibility that the OSC undertakes the other preparedness and planning duties and the OSC's related activities with RRT member representatives. Where appropriate, there is parallel language for RPMs regarding remedial response.

In addition to remedial action responsibilities, an RPM may have removal authority responsibilities if, during the remedial process, a release is discovered that will threaten public health or the environment within a timeframe shorter than that in which the remedial program can respond and it is more efficient for the RPM to conduct the action. Because of this overlap in OSC and RPM responsibilities, the term "OSC/RPM" is proposed to be used in the NCP, where appropriate, to describe responsibilities that may belong to either an OSC or an RPM, depending on the particular circumstances of the release.

Additionally, EPA is proposing to use the terms OSC and RPM to apply to State representatives overseeing State-lead response actions. Therefore, changes are proposed in this section, as well as elsewhere in the NCP, to accurately reflect this approach.

The SMOA, a cooperative agreement, or another agreement, such as an agreement between EPA and another Federal agency or between another Federal agency and a State, may provide for the establishment of a support agency at a response action. To clarify the response structure and the interaction of the support agency and the OSC/RPM, a description of responsibilities of a support agency coordinator (SAC) is proposed to be added to § 300.120(f). There may be a support agency and a SAC at a site only if specified in an agreement with the lead agency. Generally, a support agency will not be designated for responses to oil discharges or emergency releases of hazardous substances. If a support agency is designated in such an agreement, the support agency may designate a SAC to be the prime representative of that agency and responsible for interacting and coordinating with the OSC/RPM. The purpose of designating a SAC is to provide a specific person in the support agency to assist the OSC/RPM as requested. In particular, the SAC is responsible for providing and reviewing data and documents as requested by the OSC/RPM during the planning, design, and response activities.

Changes are proposed for § 300.120(e) regarding RPM responsibilities, currently § 300.33(b)(14), to reflect changes in Federal agency

responsibilities due to the CERCLA amendments and E.O. 12580. For example, a new paragraph, non-Fund-financed Federal-lead, was added to cover sites at which a Federal agency other than EPA or the USCG (primarily DOD and DOE) has the lead.

7. *Notification and communications (§ 300.125).* EPA proposes to add the word "notification" to the title of existing § 300.36, and to move it to a new location. In EPA's proposed revisions, notification starts the communications process, followed by the determination of whether to initiate a Federal response. This section has been moved to more accurately reflect its place in the response sequence. Both the title and the location change better reflect the importance of the National Response Center in the NRT/RRT/OSC/RPM system.

EPA reiterates that statutory and regulatory reporting requirements are still keyed to discharges of oil and releases of hazardous substances exceeding a reportable quantity (RQ). EPA is aware, however, that many notifiers do not have the training or knowledge to determine if there is an RQ of a substance involved in a release. Therefore, whenever there is any doubt about whether a release exceeds an RQ, EPA encourages that the release be reported to the NRC. Reporting ensures positive referral of every incident to each Federal agency with jurisdiction and/or regulatory interest.

The NRC is tasked with processing all reports regardless of the material involved or the reported significance of the incident. All reports are passed immediately by telephone to the proper Federal response entity and recorded in the NRC data base at the time of receipt. Public, government, industry, or academic requests for access to stored data may be made through a written Freedom of Information Act request to the Chief, National Response Center, 2100 Second Street, NW., Room 2611, Washington, DC 20593. See § 300.405, "Discovery or Notification," and related preamble discussion.

8. *Determinations to initiate response and special conditions (§ 300.130).* EPA proposes to consolidate in § 300.130 language currently in several places in the NCP. The section addresses the initiation of a Federal response, provides a basic statement about response management responsibilities of the co-chair agencies (whether under the CWA or CERCLA), discusses the special authorities and circumstances that may affect the initiation of a response, and contains cross-references to the relationship of the NCP to other kinds of

Federal response authorities (e.g., natural disasters). Also, for example, § 300.130(f) refers to the Federal Radiological Emergency Response Plan (FRERP) when a discharge or release involves radioactive materials. When EPA is required to respond under the FRERP, it will do so in accordance with the provisions of the U.S. EPA Radiological Emergency Response Plan. (See EPA Report No. 520/1-81-002, December 1986.)

9. *Response operations (§ 300.135).* EPA proposes to relocate existing § 300.33, to introduce it with language currently contained in § 300.33(b), and to keep the language that follows it virtually unchanged. EPA also proposes to relocate the language describing the way OSC jurisdiction is determined from current § 300.33(a) to new § 300.120. This section describes the OSC/RPM components of the NRT/RRT/OSC/RPM system.

10. *Special teams and other assistance available to OSCs/RPMs (§ 300.145).* EPA proposes changes to existing § 300.34 to combine information currently in two separate paragraphs about special technical resources available to OSCs/RPMs (e.g., on marine salvage) and to delete information no longer applicable (dive teams and Spill Cleanup Inventory System).

11. *Worker health and safety (§ 300.150).* EPA proposes to make several revisions to existing § 300.38 to bring it up to date with CERCLA and other changes in applicable regulations and policy developed since the last revision of the NCP.

12. *Public information (§ 300.155).* The title of this section has been changed to "Public Information and Community Relations" to indicate that obligations in this area extend beyond merely informing the public.

13. *Documentation and cost recovery (§ 300.160(d)).* Section 300.160(d) is a proposed new section of the NCP added in response to changes made by the 1986 amendments to CERCLA. Section 107(a)(4)(D) of CERCLA establishes that the responsible parties are liable for "the costs of any health assessment or health effects study carried out under section 104(i)." This new section of the NCP responds to the statutory requirement by providing for the development of documentation to assure that these costs will be recoverable from responsible parties at CERCLA sites. The responsible parties are liable under section 104(i) of CERCLA for the costs of:

i. A health assessment for each facility on the National Priorities List (NPL);

ii. Health assessments for releases or facilities where individual persons or licensed physicians provide information that individuals have been exposed to a hazardous substance, for which the probable source of such an exposure is a release;

iii. Pilot studies of health effects for selected groups of exposed individuals, where such studies are deemed appropriate by the Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR) on the basis of a health assessment;

iv. Full-scale epidemiological or other health studies as may be necessary to determine the health effects on a population exposed to a hazardous substance from a release or threatened release, where deemed appropriate by the Administrator of ATSDR on the basis of a pilot study or other study or health assessment;

v. Establishing a registry of exposed persons;

vi. Population health surveillance programs for exposed populations; and
vii. Steps necessary to reduce exposure and eliminate or substantially mitigate the significant risk to human health, including but not limited to provision of alternative water supplies and permanent or temporary relocation of individuals.

In addition, section 104(i)(5) of CERCLA authorizes health effects research addressing inadequacies in the existing health risk information on substances frequently found at CERCLA sites.

This research is based on the data inadequacies identified in the toxicological profiles on the substances selected under section 104(i)(2)(A). These substances are selected for their potential human health risk in terms of (1) chemical toxicity, (2) frequency-of-occurrence at NPL sites, and (3) potential for human exposure. This research reduces the inadequacies in the existing health effect data base by further determining the health effects of these substances or by developing the techniques and methods to further such determination. A more complete data base on these substances' health effects will allow EPA to estimate better the health risks at NPL sites.

To minimize duplication of health effects research across the various government programs, and to minimize unnecessary cost recovery actions, whenever possible, EPA and ATSDR will coordinate the research programs under the Toxic Substances Control Act (TSCA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and the National Toxicology Program (NTP) to fill the data inadequacies

identified in the toxicological profiles. This position is consistent with CERCLA section 104(i)(5)(D) which states:

It is the sense of the Congress that the costs of research programs under this paragraph be borne by the manufacturers and processors of the hazardous substance in question, as required in programs of toxicological testing under the Toxic Substances Control Act. Within 1 year after the enactment of the Superfund Amendments and Reauthorization Act of 1986, the Administrator of EPA shall promulgate regulations which provide, where appropriate, for payment of such costs by manufacturers and processors under the Toxic Substances Control Act, and registrants under the Federal Insecticide, Fungicide, and Rodenticide Act, and recovery of such costs from responsible parties under this Act.

In many cases, the cost of research conducted under these programs is already borne by the manufacturers, the processors, and the registrants of the substances as intended by the Congress. The existing regulations under TSCA and FIFRA allow EPA to pass the major portion of the research costs to them. For example, 40 CFR Part 716 requires submission of health and safety studies on chemical substances selected for priority consideration for testing rules under section 4(a) of TSCA. Under 40 CFR Part 158, manufacturers and processors of pesticides are required to provide health and environmental risk information on pesticides for which registration is sought.

Where costs are incurred that are not otherwise borne by manufacturers, processors, or registrants, any agency conducting health effects research initiated by the Administrator of ATSDR, under the authority of CERCLA section 104(i), should maintain complete documentation of the expenditures related to this research and submit these documents to EPA for cost recovery actions.

14. *OSC reports (§ 300.165).* EPA proposes to leave current § 300.40 largely unchanged, except for an increase in the time for submitting OSC reports from 60 to 90 days. This change is viewed as giving the OSC a more realistic amount of time in light of the OSC's many other responsibilities. EPA expects that, wherever possible, all or parts of reports prepared to meet other requirements can be used with little or no revision to meet review needs of the RRTs and the NRT. An OSC report's recommendations may be a source for new procedures and policy.

15. *Federal agency capabilities (§§ 300.170 and 300.175).* EPA is proposing that the description of the capabilities of Federal agencies with

respect to response (currently § 300.23) be reorganized to highlight the leadership roles of EPA and the USCG. EPA also proposes to amend the regulation to refer to EPA's legal expertise in interpreting CERCLA and other environmental laws. Additionally, EPA is proposing to revise and update the descriptions of some of the other agencies' capabilities and expertise related to preparedness planning and response. Furthermore, EPA is adding a paragraph describing the Nuclear Regulatory Commission's capabilities and expertise to reflect the fact that the Commission was recently added to the NRT membership roll. It should be noted that the purpose of these sections is to discuss the special capabilities agencies have and the assistance they can render during any response action. These sections are not intended to specifically address Federal facilities.

16. *Nongovernmental participation* (§ 300.185). This section deals with the use of volunteers in Superfund response actions. Use of volunteers may be appropriate when it can be done in a safe and well-organized way. Key to the use of volunteers is capable leadership on the part of knowledgeable officials and areas of work that are suitable to these individuals. Prior to the use of volunteers, appropriate consideration must be given to the issue of liability for volunteer action, with regard to its effect on both the lead agency and on the volunteers themselves.

17. *National System for Emergency Coordination*. In January 1988, the President approved the National System for Emergency Coordination (NSEC). The NSEC is a mechanism for assuring that the Federal government provides assistance to State and local governments in "extreme catastrophic technological, natural, or other domestic disasters of national significance." The President may activate the NSEC in the event of a catastrophic environmental incident. As additional information regarding the implementation of NSEC becomes available, it may be necessary to make additional revisions to the NCP.

Subpart C—Planning and Preparedness

Proposed Subpart C revises current Subpart D and provides an extensive cross-reference to SARA Title III (the "Emergency Planning and Community Right-to-Know Act of 1986") and its regulations at 40 CFR Subchapter J.

A. Major Revisions

1. *SARA Title III*. Historically, the NCP has provided for Federal planning and coordination entities and for Federal contingency plans. Although there has previously been no Federal

requirement for State and local planning, the NCP has always provided for coordination with such entities and plans where they exist. SARA Title III, however, now requires development of a State and local planning structure and local emergency response plans.

Title III provides the mechanism for citizen and local government access to information concerning potential chemical hazards present in their communities. This information includes requirements for the submission of material safety data sheets and emergency and hazardous chemical inventory forms to State and local governments, and for the submission of toxic chemical release forms to the States and EPA. Title III also contains general provisions concerning emergency training, review of emergency systems, trade secret protection, providing information to health professionals, public availability of information, enforcement, and citizen suits. Regulations implementing Title III are codified at 40 CFR Subchapter J. EPA will reference Title III and these regulations in Subpart C where appropriate.

2. *OSC contingency plans*. The name and contents of "Federal local plans" have been modified. EPA proposes to use the new name "OSC contingency plans" to replace the name "Federal local plan" in order to remove ambiguity in the phrase "Federal local" and because the OSC is responsible for developing these plans. Changes also have been made to describe better what these plans are and to identify how they are different from and linked to the "emergency plans" required by section 303 of SARA.

B. Point of Clarification

Title III definitions of facility and release. Title III and CERCLA provide slightly differing definitions of the terms "facility" and "release." Affected parties should carefully note these differences and their applicability to requirements in Title III and CERCLA.

Subpart D—Operational Response Phases for Oil Removal

Proposed Subpart D contains only minor revisions to current Subpart E. Proposed § 300.300(b) includes a reference to the EPA Regional emergency response telephone number. Another modification to § 300.300(b) and the addition of § 300.300(c) have been proposed to clarify that in the case of required reports of oil discharges made by the person in charge of a vessel or facility, reports must be made to the National Response Center (NRC). In other cases, reporting to the NRC is

encouraged but not mandatory (this section is consistent with the changes to the counterpart section in Subpart E, "Discovery or Notification" (§ 300.405)). Proposed § 300.305(d) clarifies the requirement for OSC notification of natural resource trustees and makes it consistent with the wording in § 300.410. Proposed § 300.310(c) requires that applicable or relevant and appropriate requirements be met in the disposal of materials recovered in cleanup operations. Finally, proposed § 300.320(b)(4) describes appropriate responses for medium and major oil discharges, which are described separately in existing §§ 300.55(b)(4) and 300.55(b)(5).

Subpart E—Hazardous Substance Response

The Hazardous Substance Response subpart contains a detailed plan covering the entire range of authorized activities involved in abating and remedying releases or threats of releases of hazardous substances, pollutants, or contaminants. EPA is proposing major revisions to the hazardous substance response authorities included in the NCP. The revisions incorporate amendments to CERCLA and reorganize the sections of the subpart to coincide with the general order of established procedures during response.

Specifically, EPA is proposing to expand current § 300.62 on the State role into a separate subpart (new Subpart F), which incorporates the new State involvement regulations, and to move the entire discussion to appear after the Hazardous Substance Response subpart—today proposed to be redesignated as "Subpart E." EPA also proposes to revise and reformat current § 300.67 on community relations so that it is no longer a separate section but is incorporated into the other sections as appropriate. Furthermore, EPA is proposing to rename and reorganize the sections in Subpart E as follows:

- § 300.400 General.
- § 300.405 Discovery or notification.
- § 300.410 Removal site evaluation.
- § 300.415 Removal action.
- § 300.420 Remedial site evaluation.
- § 300.425 Establishing remedial priorities.
- § 300.430 Remedial investigation/feasibility study (RI/FS) and selection of remedy.
- § 300.435 Remedial design/remedial action, operation and maintenance.

General Framework for Responding to Releases

Before discussing the revisions section-by-section, it is useful to review the general framework for responding to releases of hazardous substances,

pollutants, or contaminants. The framework outlined in the 1982 NCP and refined in the 1985 NCP and in this proposed revision to the NCP establishes general procedures for discovery or notification, response, and remediation of releases that pose a threat to human health and the environment. EPA's primary consideration in CERCLA response actions is that remedies be protective of human health and the environment. The variety of releases and threats encountered, however, makes it necessary that specific response actions and cleanup levels be determined on a site-by-site basis. Therefore, the function of the NCP is to delineate how such site-specific decisions on response actions will be made.

CERCLA authorizes EPA to administer response actions in several ways:

- i. EPA can take direct action using Fund monies;
- ii. Under EPA oversight, responsible parties can undertake a response action as a result of EPA's enforcement authorities; and

iii. States can undertake a response action using CERCLA monies pursuant to a cooperative agreement with EPA.

1. *Discovery or notification.* The first step in the response process occurs when there is discovery or notification of a release (the definition of "release" in Subpart A includes threat of release). This discovery or notification occurs in the various ways described in § 300.405. As described in that section, notice of a release is typically directed to the National Response Center. Once Federal officials are aware of a release, there are two types of responses: Removal or remedial. Before any response action is taken, however, the conditions and problems at the site must be evaluated.

2. *Site evaluation.* When notice of a release is received, EPA will consider the reported facts and circumstances to determine whether a removal or a remedial site evaluation should be undertaken.

The main differences between removal and remedial site evaluations are their respective purposes and the amount of time available for conducting the evaluation before an action must begin. When a lead agency conducts a removal site evaluation, the agency usually has some reason to believe that a prompt action may be needed. If there is any indication that there may be an emergency or other time-critical situation, the release is evaluated for possible removal action. The same is generally not true with remedial site evaluations because the primary purpose of a remedial site evaluation is

to assist in determining whether a release should be included on the National Priorities List (NPL). (See § 300.425(b); urgent situations do not allow for developing the more comprehensive data required in remedial site evaluations to score the site for the NPL.)

It should be noted, however, that removal and remedial site evaluations overlap. Information gathered during a remedial site evaluation may indicate that the contamination or one portion of the contamination at a site should be addressed by the removal program or information gathered during a removal site evaluation may indicate that the contamination at a site can be better addressed by the remedial program. The important point is that when the lead agency receives notification of a release, it makes a quick determination as to whether the site seems to be a likely candidate for removal action. If the release does not immediately seem to be a likely candidate for removal, then the release is listed on CERCLIS for a remedial site evaluation to be conducted in the future.

Because of the pressing nature of removal response, a removal PA/SI is characterized by a quick assessment. When the OSC is responding to an explosion or transportation spill, a removal site evaluation may involve only an on-site assessment. Where more time is available (for a non-time-critical removal), a remedial site evaluation may involve a review of any existing information available on the release plus an on-site evaluation, including sampling. During these evaluations, the lead agency generally reviews conditions of a release to see whether the release is from a discrete source. Due to the limitations on removal actions, the removal program is generally unable to address large areas of contamination, i.e., where there is not an identifiable discrete source. For example, the lead agency may look for unstabilized tanks, drums, lagoons, or a small area of highly contaminated soil in evaluating the urgency of the release. Section 300.410 describes in more detail the removal site evaluation, including when it is terminated. The criteria for removal actions described in § 300.415(b)(2) are used in the removal site evaluation to determine whether a removal action may be appropriate.

Remedial PAs and SIs are more comprehensive and structured because there is not the same time constraint as there is for removal PA/SIs. A remedial PA will consist of a review of existing information and may include on-site or off-site reconnaissance where safe and appropriate. After the PA is complete,

the lead agency will prepare a report that describes the characteristics of the release and recommends whether further remedial evaluation is warranted. At sites where further action is indicated, the lead agency will conduct an SI that will build on the information collected in the remedial PA and involve, as required, on-site and off-site field investigations and sampling. Data gathered during the remedial PA/SI are used to evaluate the release using the Hazard Ranking System (HRS) to determine whether the site should be listed on the NPL. For more discussion on remedial site evaluation see the preamble section below, "§ 300.420—Remedial Site Evaluation." For more discussion on the NPL, see the preamble section below, "§ 300.425—Establishing Remedial Priorities."

3. *Removal actions.* After conducting the removal site evaluation (or, as appropriate, during a remedial activity) the factors described in § 300.415(b)(2) are considered in determining whether or not a removal action is appropriate. If the lead agency determines, upon consideration of such factors, that a removal action is appropriate, actions shall begin as soon as possible to prevent, minimize, or mitigate the threat to human health and the environment. (Section 300.415(d) describes the types of measures that may be taken.) CERCLA requires the termination of Fund-financed removal actions after 12 months have elapsed from the date of the initial response or after \$2 million has been obligated unless statutory exemptions apply.

EPA has conducted removal actions in response to a wide range of situations including "midnight dumping" and other illegal disposal, releases from active manufacturing or waste disposal facilities, and transportation-related incidents. In addition, removal actions may be conducted in response to a time-critical situation at a remedial response site. For example, a removal action may be required to stabilize an NPL site before remedial response activities can begin, or a removal action may be necessary in response to a sudden dangerous situation such as a fire or explosion that occurs during a long-term remedial response.

In situations involving immediate threats, it is not difficult to determine that use of removal authorities is appropriate. In less obvious situations, however, the lead agency must rely on the best technical judgment of its response personnel to determine whether use of removal authority or remedial authority is more appropriate to address the identified threats. On-

scene coordinators and remedial project managers are charged with using all the information available to them at the time to determine how quickly a response must be initiated and, therefore, which response authorities are appropriate.

Notwithstanding the discussion of lead and support agency conduct of removals, potentially responsible parties may undertake these activities under EPA oversight as a result of EPA's enforcement authorities.

4. Remedial response—i. Remedial investigation/feasibility study and selection of remedy. The lead agency generally will conduct a remedial investigation (RI) and feasibility study (FS) (although actions may be initiated at any time prior to, during, or after the RI/FS when there is a need or opportunity to reduce or control risk or prevent further environmental degradation). The purpose of the RI is to gather sufficient data to characterize the conditions at the site in order to assist in determining the appropriate action. The RI should be focused so that only data needed to develop and evaluate alternatives and to support design are collected. Nonetheless, because of the complexity of the problems, it can take many months of investigatory and sampling work to characterize properly the pathways of exposure to the surrounding population, the hazardous substances that are present at the site, the concentrations of these substances in various areas of the site, and other conditions that must be understood before the best remedy can be selected for that site.

As the problems at a site are beginning to be understood, a feasibility study is conducted. The purpose of the FS is to develop and analyze alternatives for appropriate action. The level and detail of the analysis will be tailored to the scope and complexity of the action needed. As the impacts of these alternatives and other factors are considered, the number of alternatives is reduced. A remedy is selected in a Record of Decision based on these studies. The proposed regulation and preamble for § 300.430 explain in detail the RI/FS and selection of remedy process; therefore details of the process will not be repeated here.

ii. Remedial design/remedial action and operation and maintenance. After an RI/FS has been completed and a remedy has been selected, the lead agency designs the remedy. The remedial design stage includes developing the actual plans and specifications for the selected remedy. When this is completed, the lead agency conducts and completes the remedial

action. After a joint inspection of the remedy following the completion of construction, the State or other appropriate party (e.g., a Federal facility) will generally assume responsibility for ensuring that the remedy is operational and functional. After the lead and support agencies have determined that the remedy is operational and functional, the State or other appropriate party is responsible for operating and maintaining the site as needed. Section 300.435 describes remedial design/remedial action (RD/RA) and operation and maintenance (O&M) activities.

Notwithstanding the discussion of lead and support agency conduct of RI/FSs, RD/RAs, and O&M, potentially responsible parties (PRPs) can undertake these activities as a result of EPA's enforcement authorities.

5. Relationship between removal and remedial activities. It is important to note that response to releases of hazardous substances does not follow a straight sequential path from discovery through removal to remedial action. Although the NCP sections on removal site evaluation and removal actions come before the remedial site evaluation and other remedial sections, in reality, a decision to conduct a removal may be made at any time in the remedial process, and sites initially evaluated or addressed by the removal program may be referred to the remedial program. Thus the need for removal is considered during a remedial PA, a remedial SI, RI/FS, and actual remedial action. If a removal action does not fully address the threat posed by a release, the lead agency will ensure an orderly transition from removal to remedial response activities. The removal program is intended to address releases that pose a relatively near-term threat that can be addressed within the statutory limits. The remedial program is intended to address significant releases that cannot be addressed under the removal program. There will always be some overlap between the two programs, and it is important that they work closely together. The goal is to ensure that the most significant threats are addressed in the most efficient and effective manner.

6. State participation. State participation is critical to the response program. It is EPA's intention that the States and EPA function as partners, and States are encouraged to participate in all facets of the response process: Removal, pre-remedial, remedial, and enforcement. EPA proposes to use general agreements called Superfund Memoranda of Agreement (SMOA) to delineate non site-specific Federal/State interactions and responsibilities. Site-

specific State-lead actions are undertaken via cooperative agreements between the State and the EPA Region. For more information on State involvement see proposed Subpart F of the NCP.

7. Public participation. CERCLA requires the opportunity for participation of the public and of PRPs in the remedy selection process and the development of the administrative record supporting the remedy selected (see Subpart I). The NCP discusses the opportunities for public and PRP participation, including comment periods, public meetings, and formal community relations plans specifying interactions at each remedial action site. In enforcement actions, there will be comment periods for consent decrees and, in the removal action process, participation is encouraged to the extent allowed by the exigencies of the situation. The public participation requirements have been incorporated into each of the sections where they apply (e.g., §§ 300.415, 300.430, and 300.435). See Subpart E, § 300.430 preamble section below, "H. Community Relations."

8. Federal facilities. CERCLA emphasizes the application of the Superfund program to Federal facilities indicating the intent of Congress that Federal agencies address releases from such facilities with attention equal to that given by EPA to non-Federal sites. Unless a provision specifically addresses Fund-financed activities only, all provisions in Subpart E (and throughout the NCP, as appropriate) apply to Federal facilities.

Subpart E: Section-by-Section

A section-by-section discussion of the proposed revisions to Subpart E follows, in order of appearance, with two exceptions: Community relations and applicable or relevant and appropriate requirements. These requirements are described in their own separate preamble sections because the requirements are interspersed throughout the Subpart E regulatory sections.

Section 300.400 General.

This section revises existing NCP § 300.61 and contains a general discussion of the prerequisites, methods, criteria, and limitations of response actions addressing hazardous substance releases.

A. Major Revisions

1. Limitations on response (§ 300.400(b)). Amendments to CERCLA section 104(a)(3) added significant

limitations on response authorities. Those limitations have been incorporated into the NCP through the addition of new § 300.400(b). The proposed section states that the Fund may not be used to respond to releases of naturally occurring substances, to releases from products that are a part of the structure of a building and result in exposure within that building, or to releases into drinking water supplies due to deterioration of the water system through normal use. However, there is an exception allowed. The Fund may be used to respond in cases where the lead agency determines that the release is a public or environmental emergency and that no other person with the authority and capability to respond will do so in a timely manner. EPA expects these exceptions to be rare.

An example of the first type of situation for which the Fund is not available for response is found in the Reading Prong and other areas, where high levels of radon were discovered inside buildings erected on naturally radioactive formations. Examples of the second type of situation are chemically-treated wood or masonry materials containing radionuclides which may be part of the structure of a building and result in exposure to persons in that building. Examples of the third type of situation are releases of lead and other contaminants into a municipal drinking water supply system solely from the natural deterioration of pipes and welds in the system.

2. Entry and access (§ 300.400(d)). CERCLA section 104(e)(3) allows any officer, employee, or representative of the President, duly designated by the President, to have access to vessels, facilities, establishments, or other places, where any hazardous substance, pollutant, or contaminant may be, or has been released, generated, stored, treated, disposed of, or transported from or where access is needed to determine the need for response or the appropriate response or to effectuate a response action under CERCLA. As one method of enforcing such authority, where consent is not forthcoming, CERCLA section 104(e)(5) authorizes the President to issue administrative orders for entry and access to such property. In E.O. 12580 the President delegated this authority to Executive departments and agencies. To ensure full understanding of the scope and proper utilization of this authority, EPA proposes to include in § 300.400(d) the requirements for administrative orders, the scope of orders, the activities permitted under orders, and certain content, delivery, and enforcement aspects of such orders.

In accordance with CERCLA's increased emphasis on private party response, EPA specifies in this section that it may designate a potentially responsible party as EPA's representative solely for the purpose of access, and that it may exercise the authorities contained in section 104(e), including issuing an administrative order, to gain access for the potentially responsible party. Such designation will only be used where the potentially responsible party is conducting a response action pursuant to an administrative order or consent decree and the designation is in accordance with relevant EPA policy.

3. "On-site" for permitting purposes (§ 300.400(e)). Section 121(e) of the amended CERCLA states: "No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely on-site, where such remedial action is selected and carried out in compliance with this section." EPA proposes to state that on-site permits are not required for response actions taken by EPA, other Federal agencies, States, or private parties pursuant to CERCLA sections 104, 106, or 122. For the purposes of implementing this section, EPA has proposed to define the term "on-site" in § 300.400(e)(1) to include the "areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action."

Flexibility in defining a site is necessary in order to provide expeditious response to site hazards. EPA emphasizes that the lead agency must always comply with the substantive requirements that would otherwise be included in a permit and that the NCP requires public participation in the remedy selection process. EPA also believes that required approval or consultation by regulatory bodies is analogous to permit requirements and is encompassed within the CERCLA section 121(e) exemption. However, EPA intends to consult closely with the appropriate regulatory authority where time permits. The definition will exempt the lead agency only from administrative processes. These administrative processes could otherwise delay implementation of a response action for several months.

The definition of "on-site" is intended to address the following types of situations. First, remedial actions frequently involve treatment systems that require significant land area for construction. For example, an incinerator cannot be placed on top of

contaminated soil but may require some area adjacent to the area of contamination. Situations have arisen where the contamination is in a lowland marshy area and it is not possible to locate an incinerator or construction staging area in the marshy area but it is possible to do so in an uncontaminated upland area in very close proximity. Moreover, the "areal extent of contamination" is intended to include sites where areas of contamination are discrete rather than continuous but are within reasonably close proximity to one another. The decision document should describe the boundaries of the site. A second situation is where a containment structure or a slurry wall to contain contaminated material must be built adjacent to the contaminated material, not in the contaminated area. Third, a ground water plume may extend several miles from the source of contamination or the source may not even be defined at the time of response. If the remedy selected is to intercept the plume and treat the ground water upgradient of a drinking water supply, the treatment facility must be placed near the point of interception.

EPA's interpretation of CERCLA section 121(e) is that each of these situations falls under the purview of that section and that permits are not required for the activities. For this reason, EPA has proposed a flexible definition of "on-site" that can be tailored to specific cases. However, as a matter of policy, EPA will implement the proposed definition with certain limitations. It is EPA's general policy to invoke the permit exemption only when the area within very close proximity to the contamination is necessary for implementation of the portion of the response action relating to the hazardous substance with which it is in proximity. An example is an area of contaminated soil and contaminated ground water that extends several miles from the contaminated soil. The remedy selected includes incineration of the contaminated soil and pumping and treating the contaminated ground water plume. Following EPA's policy in this example, the lead agency would locate the pump system along the contaminated ground water plume, as necessary, without a permit; but, it would only locate the incinerator near the contaminated soil. The lead agency would generally not locate the incinerator several miles from the contaminated soil over the plume. In such a case, where the incinerator must be located far from the source, the lead agency, in accordance with this policy, should obtain a permit.

EPA's interpretation of "on-site" further includes situations where the remedial activity occurs entirely on-site but the effects of such activity cannot be strictly limited to the site. For example, a direct discharge of CERCLA wastewater would be an on-site activity if the receiving water body is in the area of contamination or is in very close proximity to the site, even if the water flows off-site.

EPA notes that section 104(d)(4) of CERCLA allows EPA to treat non-contiguous facilities as one where those facilities are "reasonably related on the basis of geography, or on the basis of threat or potential threat to public health or welfare or the environment." EPA interprets this section to allow it to elect to treat several CERCLA facilities as one "site" for purposes of section 121(e). Under this approach, hazardous substances from several CERCLA facilities could be managed on-site at one of those CERCLA facilities without having to obtain a permit for the wastes that are brought from the other CERCLA facilities. Among the criteria EPA uses to treat non-contiguous facilities as one site are that the facilities are reasonably close to one another and the wastes are compatible for the selected treatment or disposal approach. EPA solicits comment on whether to limit this approach to situations where the non-contiguous facilities are under the ownership of the same entity.

EPA is considering several other possible ways of defining "on-site" for permitting purposes. Each of these is described and discussed briefly below.

i. Define "on-site" as the areal extent of surface contamination. This concept is similar to the RCRA concept of a hazardous waste management area. It would make the definition of "on-site" more definite but would have several problems. First, there are CERCLA sites that have relatively minimal or no surface contamination because the contamination is primarily in the ground water. This definition would mean that in certain cases there would be little or no area that would be considered "on-site" and exempt from permits. Second, this option would mean that permits would have to be obtained in cases where the construction or staging area cannot be located on top of the contamination, even if the staging areas were in very close proximity. As described above, these administrative processes could delay remedial actions at many sites even after there has been public comment on the proposed remedy.

ii. Define "on-site" as identical to a CERCLA facility. The term "facility" is defined in section 101(9) of CERCLA

(this definition is repeated in § 300.5 of the NCP) as "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 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." Defining the term "on-site" to be the same as "facility" probably would allow the lead agency to follow a plume and construct a treatment system over the plume without obtaining a permit because of the phrase "or any site where a hazardous substance has been deposited * * * or otherwise come to be located." It would not, however, address the concern that noncontaminated land may be needed as a construction staging area and may be an integral part of the remedial action to be taken. In addition, it should be noted that it is often difficult to define a CERCLA facility boundary. When a site is listed on the NPL, an attempt is made to describe the facility and its boundaries. However, the extent of contamination is not always known at that point in the process. Later, during the RI/FS stage, the facility boundaries may be better defined.

iii. Define "on-site" as the facility plus any contiguous area necessary for carrying out the response. This would address the problem described in number (i) above but the requirement of contiguity may present other problems. For example, sometimes it may not be possible to locate the construction staging area directly contiguous to the facility; perhaps there is unused railroad property between the facility and the proposed staging area or some other similar obstacle.

iv. Define "on-site" as encompassing the area having the same legal ownership as the primary contaminated area or areas. This definition would limit the permit-free areas available for staging and implementing response actions. Because the site would be defined in terms that do not directly relate to the contamination, there may be situations where the ability to implement a remedy expeditiously is artificially constrained by the proximity of the property line.

B. Other Revisions

1. *Current § 300.61(b)*. This paragraph has been deleted to conform with amendments to CERCLA section 104(a)(1)(B). The former CERCLA section 104(a)(1) and NCP authorized a

response action "unless the President determines that such removal or remedial action will be done properly by the owner or operator of the facility * * * or by any other responsible party." The change to CERCLA and deletion of this section from the NCP clarify that the Federal government is not precluded from conducting a response action, merely because responsible parties have indicated a willingness to take some form of response action.

2. *Health assessments (§ 300.400(f))*. This paragraph has been added to codify the requirements of CERCLA section 104(i) that a health assessment be performed by ATSDR at each site proposed to be listed on the NPL or in response to a petition for a health assessment.

C. Points of Clarification

1. *Pollutants and Contaminants*. CERCLA section 104(a)(1) authorizes response actions whenever any hazardous substance, including mixtures of oil and hazardous substances, is released or whenever there is a release of any pollutant or contaminant that may present an imminent and substantial danger to the public health or welfare. This standard is reflected in NCP § 300.400(a). Note that under CERCLA, "imminent and substantial danger" limitation applies only to pollutants and contaminants and not to hazardous substances. Moreover, the limitation does not define the scope of the removal actions as described in § 300.415(b).

2. *Response to HWTC's petition to modify the NCP to permit treatability testing without the need to obtain a RCRA permit*. The Hazardous Waste Treatment Council (HWTC) has petitioned EPA to issue regulations facilitating small-scale treatability studies on wastes at Superfund sites that contain or may contain RCRA hazardous wastes by exempting owners or operators of facilities conducting such tests from RCRA requirements that would otherwise apply to facilities treating, storing, and disposing of hazardous wastes. HWTC has submitted two petitions for regulatory action. One seeks a regulation under RCRA that would generally exempt such studies from regulation under RCRA when conducted within certain limits of study size, storage volume, etc. The second petition is directed more specifically at treatability studies conducted to support decisionmaking at CERCLA sites. It seeks to exempt treatability studies conducted to support remedy decisions at CERCLA sites from

permitting requirements by defining the facilities at which treatability studies are conducted as being "on-site." As discussed elsewhere, activities conducted "on-site" are exempted from the need to obtain permits. Such a definition, therefore, would exempt those conducting treatability studies from any permitting requirements and would not be limited to the need to obtain a RCRA permit. EPA is separately considering HWTC's petition for rulemaking under RCRA. (See 52 FR 35279, September 18, 1987.) Only the second petition, under which treatability tests on wastes from CERCLA sites would be exempted from permitting by defining them as occurring "on-site," is considered here.

Treatability tests are an important part of the RI/FS process as well as other waste management processes. EPA has concluded, however, that to the extent it is appropriate to adjust permitting requirements to encourage treatability testing, that should be accomplished by directly modifying the RCRA regulations to address such testing generally. EPA does not believe that the term "on-site" can extend to a distant facility that may be conducting a treatability test. For these reasons, EPA is not proposing in today's notice to extend the definition of the term "on-site" to include facilities conducting treatability tests characterizing wastes from CERCLA sites as contemplated by HWTC's petition. Instead EPA will consider the merits of HWTC's position in the context of HWTC's petition for rulemaking under RCRA.

Section 300.405 Discovery or Notification.

This section revises current NCP § 300.63 and discusses how CERCLA sites may be discovered, the notification responsibility to report releases of hazardous substances, pollutants, or contaminants to the National Response Center (NRC), and the details of the notification process. There are no major revisions.

Revisions

1. *Discovery of release (§ 300.405(a)).* EPA is proposing two minor clarifying changes to current § 300.63(a) on how releases are discovered. First, notification under section 103(a) of CERCLA (notification of releases of reportable quantities) and under section 103(c) of CERCLA (owners and operator's notification to EPA of the existence of a facility at which hazardous substances are or have been stored, treated or disposed of) have been separated into (1) and (2).

Second, EPA is proposing to add to the list of discovery methods a new method for discovering releases. This revision is intended to reflect the fact that the new statutory provision allowing citizen petitions for preliminary assessments also represents a new method for discovering a release.

2. *Notification requirements (§ 300.405(b), (c) and (d)).* EPA is proposing a minor clarifying change to the notification requirements in § 300.63(b) to state that where direct reporting to the NRC is not practicable, reports may be made to the predesignated EPA OSC through the Regional 24-hour emergency response telephone number. This wording was added to alert the public that such numbers exist, but should be used only in the very rare cases where the NRC cannot be reached (for example, because a caller cannot get through to the NRC). EPA strongly urges that all reports of releases be made directly to the NRC. If the notifier can reach a telephone, the NRC must be called. EPA notes that the most likely situations in which direct reporting to the NRC may not be practicable are releases from vessels at sea or offshore platforms with no telephone access. In these cases, releasers would normally report by radio to a Coast Guard station that maintains a radio watch. Releasers who report to the nearest Coast Guard unit under this provision must also notify the NRC as soon thereafter as possible.

Reporting requirements and penalties in CERCLA and the NCP are effective only for releases covered by the 40 CFR 302.4 List of Hazardous Substances and Reportable Quantities (RQs). However, whenever there is any doubt about whether a release equals or exceeds a RQ, EPA encourages that it be reported to the NRC. Paragraph (c) is proposed to be added to highlight this and to make clear the only two situations that should not be reported to the NRC.

The NRC processes all reports of releases that it receives, regardless of the substance involved or the significance of the incident. Reports are archived into the NRC computer data base at the time of receipt and passed immediately by telephone to the appropriate response entity. This centralized reporting simplifies and expedites public, governmental, industrial, and academic access to information regarding hazardous substance releases and response.

EPA is proposing to add a new § 300.405(d), to enumerate the kinds of information that should be provided to the NRC during notification of releases. However, EPA points out that reporting

should not be delayed because of missing information.

3. *CERCLIS (§ 300.405(f)(2)).* EPA is proposing language to indicate that when notification shows that removal action is not necessary, but that a remedial site evaluation should be performed, the release will be listed in the CERCLIS remedial inventory. (For a definition and discussion of CERCLIS, see the Subpart A preamble section, "4. New Definitions.")

4. *SARA Title III (§ 300.405(g)).* EPA is proposing minor clarifying changes to the notification requirements of the NCP. EPA is adding a reference to the new SARA Title III notification requirements. This reference states that notification of the NRC does not generally satisfy all Title III notification requirements. This has been added because it is important to note that several notifications may be needed for each release to meet the requirements of SARA.

Section 300.410 Removal Site Evaluation.

This section revises current NCP § 300.64 and discusses the preliminary assessment that is conducted to evaluate available data about a reported release to determine whether the conditions warrant a removal action.

A. Major Revisions

1. *Title of section.* EPA is proposing to change the title of this section from "Preliminary Assessment for Removal Actions" to "Removal Site Evaluation." Parallel changes for the section concerning remedial site evaluations are also being made. These changes clarify that one of the first steps before conducting either a removal or remedial action is to evaluate the release conditions in order to determine what actions may be needed. Section titles in the current NCP do not reflect the similar requirements for removal and remedial actions.

2. *Natural resources (§ 300.410(g)).* EPA proposes to revise current § 300.64(d) to state that the OSC or lead agency is responsible for ensuring that State and Federal trustees of affected natural resources are notified promptly when it is determined that natural resources have been, or are likely to be, damaged. Current § 300.64(d) links this notification to a preliminary assessment determination. The proposed language broadens the section to require trustee notification whenever any data indicate that natural resources will be threatened. Furthermore, the new language clarifies that the OSC or lead agency will coordinate, as appropriate,

the necessary response action assessments, evaluations, investigations, and planning with the State and Federal trustees.

B. Other Revisions

1. *Removal/Remedial program coordination (§ 300.410(h)).* EPA proposes a minor addition at § 300.410(h) to clarify that when a removal site evaluation indicates that a removal action is not needed, but that a remedial action may be needed, a remedial site evaluation shall be initiated and the release shall be listed on the CERCLIS remedial inventory. This is similar to the addition proposed for the notifications section at § 300.405(f)(2).

2. *Termination of removal site evaluation (§ 300.410(e)).* EPA is proposing minor changes to current § 300.64(c) to reference the limitations on response in § 300.400(b).

As discussed in the current NCP, it is important to note that if another party is responding, the OSC will not continue to pursue a removal site evaluation or action, whether or not such person is under court or administrative order. However, if the person is under an order, the OSC may provide surveillance as a separate action, to assure compliance with the order. There may also be instances of voluntary response where the OSC provides monitoring to assure proper response and to avoid a situation where followup action would be needed.

C. Minor Revisions

EPA is proposing other minor conforming revisions to ensure consistency in wording between the new statute and the NCP, and between subparts.

Section 300.415 Removal action.

This section contains the CERCLA program's removal authorities. EPA is proposing several revisions to portions of the current NCP § 300.65 including: the statutory limits on removal actions and exceptions to those limits; the relationship of removal action to anticipated long-term remedial action; a list of appropriate removal actions for specific situations; requirements for post-removal site control; and the requirement for submission of the OSC's report to the RRT.

Today's preamble discussion uses several descriptive terms to broadly differentiate among various types of removals, and EPA wishes to provide here an understanding of their meanings in this context: "Emergencies" generally refer to those actions where the release requires that response activities begin

on-site within hours of the lead agency's determination that a removal action is appropriate. "Time-critical" removals are those where, based on the site evaluation, the lead agency determines that a removal action is appropriate and that there is a period of less than six months available before response activities begin on-site. "Non-time-critical" removals are those where, based on the site evaluation, the lead agency determines that a removal action is appropriate and that there is a planning period of more than six months available before on-site activities must begin. The lead agency for non-time-critical removals will undertake an engineering evaluation/cost analysis (EE/CA) or its equivalent.

Because Superfund resources are finite, it is not possible for EPA to conduct all removals authorized by CERCLA. Therefore, the removal program sets priorities to ensure that the most serious public health and environmental threats will be addressed. Classic emergencies, such as fires and explosions and time-critical removals that cannot be addressed by any other authority, are the removal program's highest priorities.

A. Major Revisions

1. *Statutory limits (§ 300.415(b)(5)).* The amendments to CERCLA section 104(c)(1) raised the statutory limits for Fund-financed removal actions from six months and \$1 million, to twelve months and \$2 million, respectively. The amendments also provide a new exemption from the time and dollar limits for situations where the lead agency determines that continued response is otherwise appropriate and consistent with the remedial action to be taken. Formerly, there was an exemption only for those situations that met the emergency criteria in CERCLA section 104(c).

EPA proposes to include the new statutory limits and the new exemption in the NCP at § 300.415(b)(5). In the proposal, only statutory language has been included for both provisions. This is consistent with the way the emergency exemption has been treated in the current NCP.

EPA has developed an approach for implementing the new exemption and solicits comment on this approach. EPA believes that the new exemption should be used primarily for proposed and final NPL sites and should be used for non-NPL sites only in rare circumstances. EPA believes that Congress originally put the statutory limits in place because it intended that the removal program generally be short-term and mitigative in nature. Long-term remedial actions

generally involve complete cleanup of sites which are on the NPL. EPA believes that the new exemption was included to ensure that the time and monetary limits would not preclude proper implementation of the requirement in CERCLA section 104(a)(2) that removal actions should, to the extent practicable, contribute to the efficient performance of any long-term remedial action (see below for discussion of this provision). The purpose of the provision is to conserve Fund monies at NPL sites by performing indicated removals at these sites that take into account the ultimate remedy. Monies spent wisely during the removal portion at NPL sites would enable the entire action to be completed more efficiently and cost-effectively.

In accordance with this interpretation, EPA has developed the following criteria for determining when use of the new exemption at proposed and final NPL sites is appropriate:

- i. To avoid a foreseeable threat;
- ii. To prevent further migration of contaminants;
- iii. To use alternate technology to reduce mobility, toxicity, or volume; or
- iv. To comply with off-site requirements.

Although EPA intends to use the new exemption primarily at NPL sites in order to maintain the effectiveness of the NPL priority system, EPA also recognizes that there may be some limited circumstances at non-NPL sites where use of the new exemption could be appropriate. If, for example, treatment could be used that would permanently or significantly reduce mobility, toxicity, or volume at a non-NPL site, then it might be appropriate to use the new exemption at a non-NPL site. Use of the exemption in these situations at non-NPL sites would be consistent with a permanent remedy, but use at non-NPL sites is not intended to supplant the remedial program. EPA will ensure that the new exemption is used at non-NPL sites only in limited circumstances by requiring that each decision for using the new exemption at a non-NPL site be approved by the Assistant Administrator for the Office of Solid Waste and Emergency Response.

2. *Efficient performance of the long-term remedial action (§ 300.415(c)).* CERCLA section 104(a)(2) provides that removal actions should, to the extent practicable, contribute to the efficient performance of any long-term remedial action with respect to the release. EPA is proposing to incorporate this language into the NCP. This provision is intended to avoid repetitive removal actions or actions that do not take into account

their impact on performance of subsequent remedial action, and to allow for more permanent tasks to be completed under removal authorities. EPA proposes to apply this requirement to all removal actions. Since removals may occur in situations where there is only limited information on whether or not a remedial action is anticipated, the lead agency need only consider information that is available at that time. The lead agency should consider the following questions when selecting a removal action that will contribute to the efficient performance of the long-term remedy:

i. What is the long-term response plan for the site? If there is no plan, what is it likely to be? To determine the long-term response plan the OSC need use only currently available information. The OSC is not required to determine long-term action.

ii. Which threats will require attention prior to the start of the long-term response? An efficient removal should address those threats that require attention in order to stabilize the site or protect human health and the environment until the long-term remedy can be implemented.

iii. How far should the removal go to ensure that the threats are adequately abated? If a long-term remedy is planned, an efficient removal should mitigate the threat to human health and the environment until the remedial action can be implemented. At a minimum, this means that the removal should prevent or reduce further migration or public contact.

iv. Is the proposed removal action consistent with the long-term remedy? An efficient removal generally should not hinder or foreclose viable options for a long-term remedial action.

Removal action should not be unduly delayed by the consideration of the above criteria. The threat to human health and the environment shall remain the primary concern of the lead agency conducting the removal. Occasionally, it may not be practicable to be entirely consistent with the long-term remedial action. This may occur when it is necessary to slow the migration but not possible to implement the long-term remedy. For example, removal actions may be needed that merely stabilize (e.g., cap) some sites to reduce the migration threat until a long-term treatment remedy is developed. EPA is currently developing guidance to further address the details. EPA solicits comments on the policy of extending the section 104(a)(2) provision to all removals rather than limiting it to NPL sites only, and on the criteria for determining whether a removal will

contribute to the efficient performance of the long-term remedial action.

B. Other Revisions

1. *Engineering evaluations and costs analyses (§ 300.415(b)(4))*. It is EPA's intent that the lead agency conduct an engineering evaluation and cost analysis (EE/CA) or its equivalent, as appropriate, as a part of removal actions in those cases where adequate planning time is available before the start of the removal. EPA believes adequate planning time is a minimum of six months. EE/CAs contain evaluations of possible alternative technologies, selection of the response, and document the decisionmaking process. Engineering evaluations and cost analyses use a screening process and analysis of removal options based upon such factors as technical feasibility, institutional considerations, reasonableness of cost, timeliness of the option with respect to threat mitigation, environmental impacts, and the protectiveness of the option. This information will be subject to review and comment by the public prior to initiation of the affected removal.

2. *Appropriate actions (§ 300.415(d))*. EPA is proposing some minor changes to the current §§ 300.65(c) (3) and (6) by clarifying additional activities that can be conducted.

3. *Off-site policy*. Current § 300.65(g) requires that removal actions taken pursuant to CERCLA sections 104 and 106 that involve the storage, treatment, or disposal of hazardous substances, pollutants, or contaminants at off-site facilities shall use only those facilities that are operating under appropriate Federal or State permits or authorization and other legal requirements. EPA has separately proposed regulations implementing CERCLA section 121(d)(3) which imposes requirements on the off-site transfer of hazardous substances or pollutants or contaminants, 53 FR 48218, November 29, 1988.

4. *State-lead removals (§§ 300.415 (h) and (i))*. EPA is proposing to codify in the NCP its existing policy allowing States to enter into cooperative agreement to undertake Fund-financed removal actions, provided that States follow all the provisions of the NCP removal authorities. Non-time-critical actions are the most likely candidates for State-lead removal because sufficient time generally exists to complete a cooperative agreement. The new language also states that facilities operated by a State or political subdivision require a minimum cost share of 50 percent of the total response costs if a remedial action is taken.

5. *Post-removal site control (§ 300.415(l))*. Because of statutory limits on removals and the historical role of removals as short-term actions, there will sometimes be situations at both NPL and non-NPL sites where post-removal site control actions (such as watering a grass cover) will be necessary. EPA expects that States, potentially responsible parties, or EPA's remedial program (in the case of some Fund-financed NPL sites) will provide for post-removal site control activities to ensure the protectiveness of the removal action. This may also involve arranging for private parties or Federal facilities to conduct the post-removal site control. In most cases, the possible State role in post-removal site control will be discussed prior to initiation of removal activities. EPA wants to encourage that, to the extent practicable, the State commitment to conduct such action be secured prior to the start of cleanup.

EPA is developing procedures for assumption of post-removal site control at NPL and non-NPL sites. For more discussion of State assurances necessary for cooperative agreement for State-lead removal and remedial actions, see the discussion of the new State involvement regulations in today's preamble discussion of Subpart F.

6. *OSC reports (§ 300.415(m))*. This paragraph has been added to ensure that OSCs and RPMs conducting removal actions submit OSC reports. It is important that where RPMs are overseeing removal actions at NPL sites, they submit OSC reports to the RRT for review (see "Points of Clarification" below for discussion of situations where an RPM might oversee a removal). The Subpart B discussion of OSC reports also proposes some minor clarifying changes for OSC reports.

7. *Community relations (§ 300.415(n))*. Discussion of community relations is included in the Subpart E, § 300.430 preamble section, "H. Community Relations."

C. Points of Clarification

1. *Compliance with other laws*. CERCLA section 121 requires that remedial actions attain a level of standard of control which is applicable or relevant and appropriate to any hazardous substance, pollutant or contaminant that will remain on-site. In contrast, section 121 does not require that removal actions attain applicable or relevant and appropriate requirements (ARARs). EPA's policy for removal actions, however, is that ARARs will be identified and attained to the extent practicable. ARARs are those substantive requirements that pertain to

actions or conditions in the environment (see Subpart E, § 300.430 preamble section below, F.15).

Three factors will be applied to determine whether the identification and attainment of ARARs are practicable in a particular situation: (i) The exigencies of the situation; (ii) the scope of the removal action to be taken; and (iii) the effect of ARAR attainment on the statutory limits for duration and cost.

i. *Exigencies of the situation.* OSCs must often act quickly to provide protection of public health and the environment, and any delay would compromise this objective of the removal action. Where urgent conditions constrain or preclude efforts to identify and attain ARARs, the OSC's documentation of these conditions will be considered sufficient as justification for not attaining all ARARs. To illustrate, a site may contain leaking drums that pose a danger of fire or explosion in a residential area. The drums should be removed or stabilized immediately without attempting to identify and comply with all potential ARARs. The OSC's documentation should describe the time-critical nature of the situation and the removal action taken.

ii. *Scope of the removal action.* Removal actions generally focus on the stabilization of a release or threat of release and mitigation of near-term threats. ARARs that are within the scope of such removal actions, therefore, are only those ARARs that must be attained in order to eliminate the near-term threats. For example, a removal action may be conducted to remove large numbers of leaking drums and associated contaminated soil. In this situation, because the removal focuses only on partial control, chemical-specific ARARs for groundwater restoration would not be considered.

iii. *Statutory limits.* CERCLA sets time and money limitations on a Fund-financed removal action. Attainment of all ARARs for a removal response may not be possible within the 12 months or \$2 million limits set in the statute. For instance, a removal action may be undertaken at a site where there is widespread soil and ground water contamination. This response might involve removal of surface debris and excavation of highly contaminated soil necessary to reduce the direct contact threat and further deterioration of the ground water. If the statutory limits were reached or approached as a result of the debris removal and limited excavation, and no statutory exemption applied, more extensive excavation of

low-level soil contamination as part of the removal may not be warranted. Although the statutory limits may preclude removals from attaining all identified ARARs, OSCs will strive to comply with those ARARs that are most crucial to the proper stabilization of the site and protection of public health and the environment. (Exemptions to the \$2 million/12 month statutory limits may be granted where sites meet the criteria for approving the "emergency" or "consistency" exemptions.)

If none of the three factors would act to preclude identification and attainment of particular ARARs (i.e., attainment is not impracticable), then the statutory waivers in CERCLA section 122(d)(4) and § 300.430(f)(3) of the proposed NCP should be examined to ascertain, as for a remedial action, whether the ARAR may be waived. For example, State ARARs do not have to be attained where the State standard, requirement, criterion, or limitation has not been consistently applied in circumstances similar to the response in question. If a State standard is identified as an ARAR for a removal action, attainment of that ARAR may be waived if the State has inconsistently applied it in similar circumstances. The ARARs waivers generally may be used as they are used for remedial activities.

2. *Removals conducted during the remedial process.* During the course of the remedial process at an NPL site, releases or threats of releases may be discovered that will threaten public health or the environment within a length of time shorter than that in which the remedial program can respond. In such situations, it is appropriate to use removal authority to quickly abate or remove the threat. This may be done either through: (i) A traditional removal action conducted by the removal program using its own resources, or (ii) through an "expedited response action" (ERA) conducted by the remedial program using its own resources. ERAs are performed when the threat identified in the removal action memorandum is of such a nature that response can be delayed for six months or more. The delay allows time for the procurement process, preparation of an EE/CA or its equivalent, and solicitation of formal public comment to be completed.

The potential for concurrent removal and remedial activities, and new CERCLA language encouraging consistency with remedial actions makes it important for OSCs and RPMs to coordinate with each other and to share the data that they have generated during their respective activities.

3. *Removal versus remedial actions and "trigger" level.* EPA has considered

whether a clearer removal/remedial distinction could be made through the establishment of "trigger" levels for these actions (e.g., setting specific maximum levels of contamination for particular hazardous substances that would always "trigger" a removal action rather than a remedial action). EPA has decided against this because response decisions are made on a site-by-site basis and there is no one trigger level which would be appropriate for all situations involving a particular contaminant. In general, as described at the beginning of the preamble discussion for Subpart E, the removal program is more likely to remove point sources of contamination that can be addressed within the removal statutory limits. The remedial program, on the other hand, may address a wider range of contamination problems. Use of "trigger" levels is not appropriate for making this distinction. In addition, "trigger" levels would vary based on the additive effects that can result from the interaction of several chemicals. Finally, as treatment technology changes, established standards may change, and any regulatory language might always be a few steps behind technology. Therefore, EPA continues to believe strongly that OSCs and RPMs must consider all information available to them at the time that decisions are made about which response approach to use at a given site.

4. *Regulations on reimbursement to local governments.* CERCLA section 123 authorizes reimbursement of local governments for expenses incurred in providing temporary emergency measures in response to releases of hazardous substances, pollutants, or contaminants. Reimbursement is limited to \$25,000 per response and is not intended to supplant local funds normally provided for such response. EPA has issued a separate interim final rule, 40 CFR Part 310, which establishes the procedures and requirements for local government reimbursement. (See 52 FR 39386, October 21, 1987.) As such, only a reference to this new CERCLA provision is included in Subpart H of the NCP.

Section 300.420 Remedial Site Evaluation.

This section revises current § 300.66, "Site evaluation phase and National Priorities List determination." Current § 300.66 has been split into two sections: "Remedial Site Evaluation" and "Establishing Remedial Priorities." In § 300.420, EPA is today proposing revisions that expand the activities that may be undertaken during remedial site

evaluation to determine whether a site should be included on the NPL. The revised section addresses how EPA proposes to use remedial preliminary assessments and site inspections (PA/SIs) to evaluate and characterize releases to determine if they warrant remedial action.

A. Major Revisions

1. *Purpose and content of a remedial preliminary assessment (§ 300.420(b)).* The revised rule states in § 300.420(b) that remedial preliminary assessments (PAs) shall be conducted for all sites listed in the CERCLIS remedial inventory. Moreover, EPA is proposing to define a PA, which was previously undefined, in the definition section of Subpart A (see also Subpart A preamble).

The purpose of the remedial PA, as described in the current NCP, is to set priorities for remedial site inspection, to determine whether removal action is warranted, and to eliminate from further remedial consideration those releases that do not threaten public health or the environment. Today's proposed regulatory revisions would expand the purpose of the remedial PA to include the gathering of appropriate existing data to assist in developing a hazard ranking score. Additionally, EPA proposes that remedial PAs may consist not only of a review of existing data and an off-site reconnaissance, but also may include an on-site reconnaissance, if appropriate.

Today's proposed revisions would add provisions requiring the lead agency to complete a remedial PA report. The revisions generally outline the type of information that should be contained in the report, including a description of the site, the probable nature of the release, and a recommendation of whether further action is warranted as well as the nature of such further action and which agency should carry it out.

2. *Citizen petitions for preliminary assessments (§ 300.420(b)(5)).* Section 105(d) of CERCLA, as amended, provides that any person who is, or may be affected by a release of a hazardous substance, pollutant, or contaminant, may petition the President to conduct a preliminary assessment of the hazards associated with the release. If a PA has not yet been conducted, it must be completed within a year or an explanation of why the PA is not appropriate must be provided. In E.O. 12580, the President delegated this authority to EPA or the heads of Executive departments and agencies with respect to facilities under the jurisdiction, custody, or control of those departments and agencies. EPA is

proposing procedures which address how the public should petition EPA or other appropriate Federal agency and how EPA will respond to petitions, including criteria for determining when a PA is not appropriate.

Petitions for PAs should be directed to the Regional Administrator who oversees the area in which the release is located or, in the case of a release from a Federal facility, to the Federal agency responsible for that facility. In cases where EPA receives a petition involving a release from a Federal facility, this petition will be forwarded to the appropriate Federal agency for action. A list of EPA Regional Offices, their addresses, and the States and other areas for which they are responsible is provided in section C. below.

3. *Required information to be submitted with PA petitions (§ 300.420(b)(5) (i) and (ii)).* In developing the procedures for petitions, EPA has attempted to balance the need for specific information concerning a release or potential release necessary to act on the petition, against the potential burdens that such procedures might place on the public. Specific information on the location of the release is essential. Additional information and documentation on the nature of, and history of, activities at the release will expedite response to petitions; and in cases where an immediate threat may be posed, facilitate appropriate further evaluation or response to such threats. In accordance with CERCLA section 105(d), petitioners also have a responsibility to demonstrate how they are, or may be, affected by the release. EPA is proposing that at a minimum the petition shall contain the following information:

- i. Name, address, phone number, and signature of petitioner;
- ii. Description of the location of the release or suspected release, including a marked map, if possible;
- iii. How the petitioner is or may be affected by the release or suspected release;

Additionally, EPA is proposing that the petitioner should include as much information as possible regarding:

- iv. The type of substances released or with potential to be released;
- v. The nature and the history of activities that have occurred at releases or suspected releases; and
- vi. Prior contacts with local and State authorities about the release and the disposition of these notifications.

Items i. through iii. are essential to a complete petition, and EPA will not deem the one-year time period for responding to the petition to begin until such information has been provided.

Information in response to items iv. through vi. is recommended and will facilitate the review of the petition and identification of the need for further assessment and/or immediate response to potential threats which might be posed by the release. Additionally, since not all releases or potential releases of hazardous substances can be addressed under CERCLA, EPA encourages petitioners affected by releases to notify all appropriate State and local agencies of the suspected release. This will assist in determining the appropriate response authority in cases where response appears warranted.

4. *Responsibilities of the lead Federal agency in receiving or responding to PA petitions (§ 300.420(b)(5)(iii)).* Upon receipt of a complete PA petition, EPA or the appropriate Federal agency (the lead Federal agency) will first determine whether a PA has already been conducted for the release. In cases where a PA has not been conducted, pursuant to the language in CERCLA section 105(d), the lead Federal agency will determine whether such an assessment is appropriate. Where appropriate, a removal or remedial PA will be completed within one year. When a PA is deemed appropriate, the lead Federal agency will determine whether a removal, as opposed to a remedial, PA will be performed, based on the information available at the time of notification of the release or the suspected release. Where a PA is not deemed appropriate, the lead Federal agency will notify the petitioner and provide an explanation of this determination within one year.

In determining whether a PA is appropriate, the lead Federal agency will take into consideration: (i) Whether there is any information indicating that a release has occurred or that there is a threat of a release of a hazardous substance, pollutant, or contaminant; and (ii) whether the site appears to be eligible for response under CERCLA.

The first criterion is expected to be used rarely, but could be applicable in those cases where the petition, or other readily available information, does not provide sufficient information to show that there has been a release or there is potential for release at a specific site. EPA is proposing the second criterion for situations where, based on the available information, it is clear that the site will ultimately not be eligible for response under CERCLA, for example, because of a statutory exemption. Therefore, further site evaluation would not be appropriate under CERCLA.

When determining whether or not a PA is appropriate, the lead Federal

agency will also consider whether there is any indication that an immediate response may be needed. If there is such an indication, the lead Federal agency will initiate a removal PA. If the release is found to meet one of the removal criteria in § 300.415(b), the lead Federal agency will initiate a removal action. Although this will satisfy the requirement to perform a PA in response to a petition, when the removal PA or removal action is complete, the lead Federal agency will consider whether further evaluation may be needed.

When there is no indication that an immediate response may be needed, the lead Federal agency will conduct a remedial PA to respond to a citizen petition for a PA. As described elsewhere, remedial PAs are more comprehensive and serve a different purpose than removal PAs. Because EPA expects that remedial PAs will generally be conducted in response to a citizen petition, the paragraphs on PA petitions are proposed to be located in the section on remedial site evaluations.

When the results of a completed PA indicate that the release or threat of release may pose a threat to human health or the environment, the remedial evaluation process will be continued.

5. Purpose and content of site inspections (§ 300.420(c)). The proposed revisions to the NCP state that if the PA indicates that further site evaluation is warranted, the lead agency shall conduct a remedial site inspection (SI). The current NCP states that the purposes of the SI are to determine which releases pose no threat or potential threat to public health or the environment, to determine if there is any immediate threat to persons living or working near the release, and to collect data to determine whether a site where a release has occurred or may occur should be included on the NPL.

The proposed NCP retains the same basic concepts with some modifications. First, EPA proposes that the language in subparagraph (c)(1) be changed so that it parallels language used about PAs in subparagraph (b)(1). Second, subparagraph (c)(1)(iv) as proposed concerns collecting data beyond that which is required to score the release pursuant to the HRS. This paragraph no longer ties SIs directly to listing a release on the NPL as the existing NCP does. EPA proposes in (c)(1)(iv) to expand the scope of data collection and sampling during selected SIs, as appropriate, to better characterize the release so that, where necessary, the RI/FS or response under other authorities can be initiated more rapidly and effectively. While information gathered during the SI may be used to evaluate a

release pursuant to the HRS, it may be more appropriate to undertake response under authorities other than CERCLA. In such a case, the release would not be listed on the NPL. (For further information, see preamble discussion, "§ 300.425—Establishing Remedial Priorities.")

The SI builds upon the information collected in the remedial PA and consists of a visual inspection of the release as well as the collection of samples. However, if adequate sampling has already occurred, the additional collection of samples may not be necessary. Like the PA, if the SI reveals that a removal action may be necessary, the lead agency shall initiate a removal site evaluation.

Today's revisions would require that the lead agency complete an SI report and that the revisions generally outline the contents of this report. The report would include information regarding a description, history, or nature of waste-handling at the site, a description of known contaminants, a description of pathways of migration of contaminants, an identification and description of human and environmental receptors, and a recommendation as to whether further action is warranted.

B. Point of Clarification

Criteria for determining that further remedial evaluation is warranted. At each step in the remedial site evaluation process the lead agency is responsible for recommending whether further evaluation or action is warranted. Because the major end purpose of the remedial site evaluation process has been to determine whether a release should be included on the NPL, EPA generally has not begun or continued to evaluate a site (except where a removal action was needed) if a site was found, as a matter of policy, not to be eligible for the NPL (e.g., a RCRA site).

EPA is proposing revisions to the primary purpose of the remedial site evaluation process. (See the proposed changes described above.) EPA is also requesting comments on expanding the current NPL deferral policy to include other Federal and State response authorities (See preamble discussion, "§ 300.425—Establishing Remedial Priorities.") EPA believes that the overriding goal in the remedial site evaluation program should be to ensure, to the extent practicable, that sites posing the most serious threat are identified and then addressed as soon as possible by the appropriate Federal or State authorities. This could result in a remedial PA or SI being conducted at a site that is later deferred, as a matter

of policy, from listing on the NPL. For example, EPA may perform an SI on a site subject to RCRA corrective action even though the site may be eligible for deferral from the NPL.

The second result is that the focus of further remedial site evaluation will be on sites that show evidence of a significant threat or potential threat to human health or the environment. In determining at the end of the remedial PA and SI whether or not a site poses a significant threat or potential threat to human health or the environment, the lead agency may use a combination of a preliminary HRS score and best professional judgment. The preliminary HRS score is based on the HRS model but uses very conservative assumptions to compensate for the limited data available at early stages of the evaluation process. In addition, where necessary and appropriate, best professional judgment may be used to supplement the preliminary score in making decisions about whether or not to proceed to the next phase of evaluation. The use of conservative assumptions combined with the use of best professional judgment should address those situations where data are limited but there may be a potential threat.

If the lead agency determines that a site poses a significant threat or potential threat based on a preliminary HRS score or based on best professional judgment, then the site may proceed to the next stage of evaluation up to NPL consideration. If the preliminary score or judgment indicates that the site is unlikely to meet NPL scoring requirements, then EPA will notify the appropriate State of the results of the site evaluation and that EPA does not at that time intend to pursue further action under CERCLA section 104 or other Federal authorities.

During the remedial preliminary assessment, available information is collected and documented to characterize the site as accurately as possible so that a decision can be made about the site. The remedial PA should result in a recommendation on whether further action is needed. The recommendation may be that the site may be appropriate for a removal, or that the site should proceed to a remedial site inspection because there is evidence of significant threat, or that the remedial site evaluation should be terminated because the evidence does not show that there is or may be a significant threat.

C. REGIONAL OFFICES

(AS OF OCTOBER 1988)

Address	Areas in the region
REGION I	
JFK Federal Building, Room 2203, Boston, MA 02203.	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.
REGION II	
26 Federal Plaza, New York, NY 10278.	New Jersey, New York, Puerto Rico, Virgin Islands.
REGION III	
841 Chestnut Street, Philadelphia, PA 19107.	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia.
REGION IV	
345 Courtland Street, NE Atlanta, GA 30365.	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee.
REGION V	
230 South Dearborn St., Chicago, IL 60604.	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin.
REGION VI	
1445 Ross Avenue, Suite 1200, Dallas, TX 75202.	Arkansas, Louisiana, New Mexico, Oklahoma, Texas.
REGION VII	
726 Minnesota Ave., Kansas City, KS 66101.	Iowa, Kansas, Missouri, Nebraska.
REGION VIII	
999 18th Street, Suite 500, Denver, CO 80202-2405.	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming.
REGION IX	
215 Fremont Street, San Francisco, CA 94105.	American Samoa, Arizona, California, Guam, Hawaii, Nevada, Northern Mariana Islands, Trust Territory of the Pacific Islands.
REGION X	
1200 Sixth Avenue, Seattle, WA 98101.	Alaska, Idaho, Oregon, Washington.

Section 300.425 Establishing Remedial Priorities.

This section reorganizes and revises current § 300.66(c) of the NCP which addressed listing on the National Priorities List. The revised section sets forth the criteria and procedures for placing sites on the NPL and the criteria and procedures for deleting sites from the NPL.

A. Major Revisions

1. Clarification of rank on the NPL (§ 300.425(b)). EPA is proposing to revise the first sentence of current paragraph § 300.66(c)(2), which states that "[t]he NPL serves as a basis to guide the

allocation of Fund resources among releases," to clarify that the NPL is a list of priority releases for long-term remedial response under CERCLA. A site's rank on the NPL is one of a number of factors which guide the allocation of Fund resources. Sites are added to the NPL in order of their HRS score and as new sites are added to the NPL they are generally incorporated into the previously promulgated NPL in order of their HRS score. The NPL is presented in groups of 50 sites to emphasize that minor differences in HRS score do not necessarily represent significantly different levels of risk. EPA considers sites within a group to have approximately the same priority for response actions.

To the extent feasible, once sites are listed on the NPL, EPA determines high-priority candidates for either Fund-financed response action or enforcement action from within the highest priority groupings, however many factors other than a site's rank are considered. For example, the status of enforcement actions, voluntary private party response, and State willingness to cost share may enter into the decision regarding the order in which funds will be committed to respond to sites. In addition, it should be noted that CERCLA section 120(e)(1) requires the appropriate Federal agency to commence an RI/FS at a Federal facility not later than 6 months after the inclusion of the Federal facility on the NPL.

In § 300.425(b), EPA proposes not to include the reference to the 400-site minimum originally required in the 1980 CERCLA and reflected in current § 300.66(c)(1). This is a minor conforming revision to reflect the statutory amendments.

2. Procedures for placing sites on the NPL (§ 300.425(d)). Most of this section is proposed to be reorganized from current § 300.66(c). The major addition is the description of procedures for proposing the NPL in the Federal Register and ensuring public involvement. Sections 300.425(d)(5) (i) and (ii) have been standard procedure for listing sites on the NPL and were added to the NCP for clarification.

3. Revision of requirement to submit the recommended NPL to the NRT. EPA is proposing that current § 300.66(c)(9) be deleted because the NRT does not generally have additional factual data that is relevant to the HRS score or other NPL eligibility of specific sites. Therefore, it is not generally necessary to submit the recommended NPL to the NRT for review and comment as the current NCP requires. EPA notes that

sites are added to the NPL only after they have been proposed for listing on the NPL in the Federal Register. After proposal in the Federal Register, EPA receives and responds to these comments from interested members of the public as well as from other Federal and State entities in the final rulemaking. EPA believes that through the Federal Register proposal, the member agencies of the NRT would still receive notice and have an opportunity to comment regarding sites for which they may have information relating to whether a specific site is eligible for the NPL. In situations in which the NRT has, or appears likely to have, factual information regarding whether a particular site is eligible for the NPL, EPA will consider this information during the NPL rulemaking process and, if appropriate, consult with the NRT.

4. Deletion of sites from the NPL (§ 300.425(e)). This section incorporates former § 300.66(c)(7) in describing the criteria for deleting sites from the NPL. A site may be deleted where no further response is appropriate.

There are three changes to § 300.425(e) on deletions. The first change is that § 300.425(e)(2) has been added to specify that the State in which the release was located must concur in deleting it from the NPL. CERCLA section 121(f)(1)(C) requires State concurrence on deletion from the NPL.

The second change is a minor conforming addition to § 300.425(e)(3) to reflect the new provision in CERCLA section 105(e) to relist without rescoreing a site that has been deleted if there is a significant later release at that site.

The third change is that information has been added to describe how EPA will conduct the deletion process and ensure public involvement. This procedure for publishing a Notice of Intent to Delete in the Federal Register and soliciting public comments is existing EPA policy and was followed in the March 7, 1986 Notice of Deletion.

Any site deleted from the NPL under proposed § 300.425(e) remains eligible for further Fund-financed response in the unlikely event that conditions at the site require such action, consistent with CERCLA section 105(e).

B. Point of Clarification

HRS revisions. The 1986 amendments to CERCLA require EPA to promulgate amendments to the HRS to assure, to the maximum extent feasible, that the HRS accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review. The HRS is Appendix A to the NCP and is the

principal mechanism EPA uses to place sites on the NPL. Revisions to the HRS are being undertaken as a separate rulemaking action, and when finalized after opportunity for public comment, will be incorporated into the NCP as revised.

C. Proposal to Recategorize Sites on the NPL

The current NCP provides that releases may be deleted or recategorized on the NPL. At the time of promulgation of the 1985 NCP revisions, the deletion criteria and procedures had undergone several comment periods (see 49 FR 40322, October 15, 1984; 50 FR 5862, February 12, 1985; and 50 FR 47912, November 20, 1985) and EPA was in the process of deciding whether sites would be deleted from or recategorized on the NPL. The final NPL rulemaking on June 10, 1986 (51 FR 21066-67) reflected EPA's intention to delete sites rather than recategorize them on the NPL. However, EPA is now considering an approach that would recategorize sites on the NPL while still providing for deletion from the NPL when appropriate under current deletion criteria.

The purpose of this proposal would be to improve the way EPA communicates to the public the status of remediation progress at NPL sites. Currently, EPA identifies a response category and cleanup status code for each site on the NPL at which action has been initiated (51 FR 21075, June 10, 1986). Sites may be deleted from the NPL "where no further response is appropriate," such as where response actions have been completed either by the PRPs or through Fund-financed response, or where no remedial measures have been deemed necessary. EPA is concerned that the response category (identifies who has the lead) and the cleanup status codes (I=implementation activity underway, one or more operable units; O=one or more operable units completed, others may be underway; and C=implementation activity completed for all operable units) do not fully reflect the remedial response activities at a site. In many cases, due to the nature of hazardous waste contamination, a significant period of time may be required between installation of an appropriate and fully functional remedy and the completion of the remedial action. For example, a remedy designed to restore groundwater quality to acceptable levels may consist of long-term (e.g., 20 years) "pump and treat" operations. That such long-term activity is underway is not well communicated by the current status codes.

Therefore, in order to provide more useful information on the status of

remedial activities conducted at NPL sites, EPA is considering a proposal to establish a new category on the NPL. This category would be the Construction Completion category, consisting of sites where construction activities have been completed, i.e., sites where long-term response actions (LTRA) are in progress or sites awaiting deletion. An LTRA represents a site where all remedial actions have been implemented but where continued operation of the remedy is required for an indefinite period before the levels of protection specified in the Record of Decision (ROD) are achieved. A site awaiting deletion is where an approved Close Out Report indicates that no further remedial activity is required or appropriate at that site.

When a remedy has been implemented and is operating properly, a Close Out Report (interim or final) would summarize the technical basis for determining that construction activities are complete at a site. For sites awaiting deletion, the Close Out Report would document that the remedy has achieved protectiveness levels specified in the ROD, and that remedial action is complete. For LTRAs, the Close Out Report would describe the nature of the continuing action. Sites initially denoted as LTRAs would eventually become sites awaiting deletion (on the basis of final or amended Close Out Reports). Those sites for which CERCLA requires five-year reviews of the remedy (see § 300.430(f)) would be clearly identified upon attaining classification in the Construction Completion category. Moreover, EPA does not believe that the need to conduct a five-year review means that a site must be listed as an LTRA; such sites may also, where appropriate, become deletion candidates.

After a Close Out Report has documented that a site can be placed in the Construction Completion category, EPA may begin the deletion process, where appropriate. However, in cases where a significant delay will exist between placing a site in the Construction Completion category and the date of the next NPL deletion notice, EPA may initiate the deletion process without placing the site in that category.

EPA requests comment on this proposal, specifically on the merits of creating a Construction Completion category.

D. Deferral Policies

EPA has in the past deferred the listing of sites on the National Priorities List (NPL) when other authorities were found to exist that were capable of accomplishing needed corrective action.

To date, this deferral policy has been limited to two specifically enumerated Federal laws. EPA is considering broadening the deferral approach, such that listing of sites on the NPL would be deferred in cases where a Federal authority and its implementing program are found to have corrective action authority. EPA further requests comment on whether to extend this policy as well to States that have implementing programs with corrective action authorities to address CERCLA releases. EPA also requests comment on extending this policy to sites where the potentially responsible parties (PRPs) enter into Federal enforcement agreements for site remediation under CERCLA.

This section of the preamble is intended to clarify EPA's approach to determining which of those sites meeting the eligibility criteria of the NCP will be listed on the NPL. This section will describe the reasons EPA has implemented a deferred listing approach for certain authorities, the regulatory and statutory background of NPL listing policies, and issues raised by today's draft policy to consider the expansion of the deferred listing approach. EPA intends to keep the current deferral policies in effect, and not implement a general deferred listing policy, until comments are considered on today's draft policy.

There are two primary reasons why EPA is considering expanding its use of NPL deferrals to appropriate Federal and State authorities. First, EPA believes that this approach will assist EPA in meeting CERCLA objectives; by deferring to other authorities, a maximum number of potentially dangerous hazardous waste sites can be addressed, and EPA can direct its CERCLA efforts (and Fund monies, if necessary) to those sites where remedial action cannot be achieved by other means. Second, EPA believes where other authorities are in place to achieve corrective action, it may be appropriate to defer to those authorities.

1. *Purpose of the NPL.* EPA's approach to listing sites on the NPL is based on its interpretation of the purpose of the NPL. A conference report on CERCLA explains that the NPL was intended to:

[S]erve primarily informational purposes identifying for the States and the public those facilities and sites or other releases which appear to warrant remedial actions. S. Rep. No. 96-848, 96th Cong., 2d Sess. 60 (1980).

In the past, EPA viewed the NPL as a list compiled for the purpose of informing the public of the most serious hazardous waste sites in the nation,

regardless of which law applies. Subsequently, it was viewed as a list for informing the public of hazardous waste sites that appear to warrant remedial action under CERCLA. In addition, it may be appropriate to view the non-Federal section of the NPL merely as a list for informing the public of hazardous waste sites that appear to warrant CERCLA funding for remedial action through CERCLA funding alone. EPA believes that one of the latter two approaches would be preferable to the broad approach of listing all potential problem sites. This will allow EPA to make the NPL a more useful management tool for EPA and also to provide more meaningful information to the public and the States. EPA's decision on which way to view the NPL will be largely determined by its decision on the deferral policies discussed below. As explained in the following discussion, EPA believes that the latter two alternative views of the NPL are consistent with CERCLA and its legislative history.

EPA's interpretation of the NPL as a list that should not include all sites that could potentially be addressed by CERCLA is consistent with the terms of the statute itself. CERCLA section 105(a)(8)(B) calls upon the President to list "national priorities among the known releases or threatened releases throughout the United States," not to list all releases. Therefore, although EPA believes it has the authority to list any site where there has been a release or threatened release of a hazardous substance, pollutant, or contaminant, EPA believes that it is not obligated to do so.

Further, the statute requires EPA, in determining whether a site is to be listed on the NPL, to consider factors enumerated in CERCLA sections 105(a)(8)(A) and (B). The factors include the relative risks posed by the site, State preparedness to assume State costs and responsibilities, and "other appropriate factors." The statutory directive to "take into account to the extent possible" the enumerated factors provides EPA with broad discretion to weigh factors as appropriate. Moreover, the fact that Congress did not specify what factors are "appropriate" supports the breadth of EPA's discretion. Since the proposal of the first NPL (47 FR 58476, December 30, 1982), EPA has considered "other appropriate factors" to include the availability of other Federal authorities to address the problems at a site. PRP enforcement agreements, as well as the willingness of a State to undertake a site remediation, may also constitute other appropriate factors.

This interpretation is also consistent with Congressional intent. In the House Appropriations Committee Report for Fiscal Year 1988, the conferees expressed some concern over whether Superfund is operating to produce maximum environmental benefit for the investment: "The Committee wants to reemphasize the overriding principle of the legislation that Superfund should be reserved for the most serious sites not otherwise being addressed." H. Rept. 189, 100th Cong., 1st sess. 27-28 (1987).

The view of the NPL as a list of sites where CERCLA action is required is also consistent with the legislative history surrounding the reauthorization of RCRA. In adding new authorities to RCRA (sections 3004(u) and 3008(h)) in 1984, for example, Congress recognized that the burden of responding to the nation's waste sites should not fall entirely on Superfund. In its report on the Hazardous and Solid Waste Amendments of 1984, the House Committee on Energy and Commerce stated the following:

Unless all hazardous constituent releases from solid waste management units at permitted facilities are addressed and cleaned up the Committee is deeply concerned that many more sites will be added to the future burdens of the Superfund program with little prospect for control or cleanup. The responsibility to control such releases lies with the facility owner and operator and should not be shifted to the Superfund program, particularly when a final [RCRA] permit has been requested by the facility. H. Rept. 198, 98th Cong., 1st Sess. 61 (1983).

EPA believes that the use of the NPL to identify sites that appear to warrant remedial (or Fund-financed) action under CERCLA, as compared to action under RCRA or another authority, is consistent with Congressional intent.

Finally, EPA believes that a more limited use of the NPL gives greater effect to the informational and management functions of the list. To include on the NPL every site that has a hazardous substance problem may give the public the misleading impression that every such site is awaiting CERCLA review or attention. In fact, some sites may be addressed by an ongoing corrective action program under another statute such as RCRA. Listing only those sites that appear to warrant remedial action or funding under CERCLA will also serve to make the NPL a more useful management tool for EPA, e.g., in setting priorities for reviewing and addressing sites.

A determination that a site "appears to warrant" remedial action or funding under CERCLA would not reflect a judgment that remedial action should be

taken or funds spent at a site. As has always been the case, the decision to list a site on the NPL is not sufficiently refined to make final determinations as to which sites pose threats qualifying for remedial action under CERCLA (see 48 FR 40658, September 8, 1983). Rather, the findings are meant to pinpoint problem sites that deserve more comprehensive analysis under CERCLA. The approach being discussed today would simply add a judgment that no other authority is currently available to address the problem, and thus the site should be listed on the NPL for further evaluation.

2. Current deferral policies. EPA's current deferral policy has been limited to sites that can be addressed by the corrective action authorities of RCRA Subtitle C or that are subject to regulation by the Nuclear Regulatory Commission. EPA is now considering, and seeks comment on, the possibility of deferring more generally to Federal authorities. This would be consistent with the view of the NPL as a list of sites where response action is appropriate under CERCLA.

Currently, RCRA Subtitle C facilities are listed on the NPL only if necessary corrective actions under RCRA are unlikely to be performed (51 FR 21054, June 10, 1986), or if certain criteria for listing are met (53 FR 23978, June 24, 1988). Three categories of RCRA facilities have been identified where it is unlikely that RCRA corrective action will be performed: (i) Facilities owned by persons who are bankrupt, (ii) facilities that have lost RCRA interim status and for which there are additional indications that the owner or operator will be unwilling to undertake corrective action; and (iii) facilities, analyzed on a case-by-case basis, whose owners or operators have shown an unwillingness to undertake corrective action. On August 9, 1988 (53 FR 30002-09), EPA announced the additional criteria that would be used in determining if a RCRA facility was unwilling to adequately carry out corrective action activities, and requested comment on criteria to be used in determining if the owner/operator is unable to pay for corrective action. On June 24, 1988 (53 FR 23978), EPA identified four other categories of RCRA facilities that may be listed on the NPL, i.e., non- or late-filers, protective filers, sites with pre-HSWA permits, and converters. RCRA Subtitle C facilities that meet any of the above categories are appropriate for listing provided the site meets the HRS scoring or other eligibility requirements.

EPA's present policy for Nuclear Regulatory Commission-licensed sites

(48 FR 40658, September 8, 1983) is not to list releases of source, by-product, or special nuclear material from any Nuclear Regulatory Commission-licensed facility on the grounds that the Nuclear Regulatory Commission has full authority to require cleanup of releases from such facilities, but to list such releases from State-licensed facilities.

EPA under CERCLA does not oversee remedial activities at deferred sites under either the RCRA or Nuclear Regulatory Commission deferred listing policy. EPA generally does not believe it is appropriate under CERCLA to oversee the work of other Federal agencies, or of other authorities under EPA's jurisdiction once a site has been deferred. (Of course, EPA would oversee the remedial activities at a site deferred from listing based on a CERCLA enforcement order.) Although a policy of deferring to other Federal authorities may result in variations in procedures and extent of remedial action, it may be appropriate to assume that the Federal authority will adequately address the remedial action. The Federal laws that have been passed have undergone national notice and comment, and are generally consistent in their application from State to State. In the case of sites deferred for action under RCRA Subtitle C, the corrective action provisions are substantially equivalent to those required under CERCLA, and thus EPA believes it is not necessary to require compliance with CERCLA corrective action standards as a condition of deferral. In the case of the Nuclear Regulatory Commission sites, the Commission has full authority and expertise to require corrective action of the unique waste types subject to its jurisdiction. EPA did not deem it appropriate to require compliance with CERCLA standards.

Later in this section, there is discussion of the possibility of also deferring sites, with the State's concurrence, subject to CERCLA section 106 enforcement agreements. This would be deferral under CERCLA authorities, and not deferral to another Federal authority. This approach would be consistent with the view of the NPL as a list of sites that appear to warrant CERCLA funding for remedial action.

3. *Expanding the deferral policy to other Federal authorities.* EPA is today considering extending the deferral option to other Federal programs as follows:

i. *RCRA Subtitle D.* Under the deferred listing approach, RCRA Subtitle D landfills would continue to be listed on the NPL because corrective action authorities are not currently available for such facilities. However,

EPA proposed regulations that will require corrective action at new and existing Subtitle D municipal waste landfills (53 FR 33313, August 30, 1988). These regulations are expected to be implemented by the States when they adopt permit programs to implement the regulations. Only after the Subtitle D regulations are effective would new and existing municipal landfills generally be deferred to the States that have adopted State permit programs that incorporate the revised Federal Subtitle D regulations. Because closed municipal landfills will not be regulated by Subtitle D, they will continue to be listed on the NPL if eligible.

ii. *RCRA Subtitle I.* Under the deferred listing approach, EPA would defer listing sites that can be addressed by Subtitle I corrective action authorities when those authorities take effect. Section 9003(h) of RCRA gives EPA authority to respond to petroleum releases from underground storage tank (UST) systems or to require their owners and operators to do so. It also establishes a trust fund to finance some of these activities. On September 23, 1988, EPA issued final standards for the regulation of hazardous materials in USTs under RCRA Subtitle I. Subpart F of those regulations requires corrective action for "confirmed releases" from USTs containing either hazardous substances listed under CERCLA or petroleum (53 FR 37082).

However, where USTs are but one of numerous leaking units (landfills, surface impoundments, above ground tanks, etc.), EPA will determine whether to defer to a mix of authorities or list sites on the NPL.

iii. *Mining wastes.* Under the deferred listing approach, in cases where States address sites using State-share monies from the Abandoned Mine Land Reclamation (AMLR) Fund under the response authorities of the Surface Mining Control and Reclamation Act of 1977 (SMCRA), the sites would be deferred from listing.

Although the AMLR Fund was designed primarily to address reclamation and restoration of land and water resources adversely affected by past coal mining, SMCRA sections 409 (a) and (c) provide that States can use funds to address noncoal sites if either all coal sites have been addressed, or the Governor of the State declares that the noncoal project is necessary for the protection of public health or safety. It is important to note that generally the decision to use AMLR funds at a particular site resides with the State concerned, except in one narrow circumstance. EPA will continue to add noncoal mining sites to the NPL should

States choose not to take action to respond to the site under SMCRA. States may also choose to use State-share AMLR funds for portions of CERCLA remedial action activities. Sites at which only portions of the remedial action take place with AMLR funds would continue to be listed.

One exception to this policy is the situation where a State has funded all of its known coal and noncoal mining projects, and is proposing to use its remaining AMLR funds for impact assistance (e.g., construction of roads, recreation facilities, etc.). EPA would not list a mining site that is: (a) Discovered in a State where it was previously thought that all mining projects had been completed and impact assistance had been granted, (b) the site is eligible for AMLR funding, (c) sufficient AMLR funds remain to fund the entire response action, and (d) the State intends to use those funds for impact assistance. Currently, no sites meet this description.

iv. *Pesticide sites.* To date, EPA has not finalized its policy regarding the listing of pesticide application sites; thus, pesticide application sites will not be generally listed on the NPL at this time (49 FR 40320, October 15, 1984). EPA believes that the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) may be the most appropriate statute for controlling the source of contamination resulting from the registered use of pesticides since it provides the authority to cancel or limit a pesticide's use or to require label changes when the risks associated with use outweigh the benefits. Therefore, FIFRA will be the primary statute used to address pesticide problems. However, EPA will continue to list sites resulting from leaks, spills, and improper disposal of pesticides. In addition, CERCLA removal activities, such as providing alternate water supplies, may be initiated if it is determined that the release or threat of release constitutes a public health or environmental emergency and no other party has the authority or capability to respond in a timely manner.

v. *Other Federal authorities.* It is possible that by amendment, a Federal regulatory authority not mentioned above will be authorized to require corrective action at sites currently addressed under CERCLA. If so, the affected sites would also be addressed under the general deferred listing approach.

vi. *Oversight of Federal authorities.* As noted earlier, EPA believes it may be appropriate to assume that a Federal authority will adequately address a site,

and thus has to date deferred to RCRA Subtitle C and Nuclear Regulatory Commission authorities without oversight. However, the additional Federal authorities being considered today for deferral do not necessarily present the same level of assurance of remediation that meet the environmental protection standards of CERCLA. Thus, for response actions under these additional Federal authorities, it may be appropriate to require some oversight by CERCLA officials or a requirement that CERCLA cleanup standards be applied. A decision by EPA to defer to another Federal authority for the corrective action of a site does not constitute an approval by EPA of the method or extent of the response to be undertaken by that other authority.

EPA requests comment on the appropriateness of deferring generally to Federal authorities, and on whether such authorities should be required to meet some or all CERCLA standards in addressing deferred NPL sites.

4. *Expanding the deferral policy to State authorities.* EPA believes it is appropriate at this time to consider broadening the scope of the deferral policies to include State authorities in addition to Federal authorities in recognition of other possible avenues of response action.

EPA has already instituted a policy of deferring non-Federal RCRA sites to States that are authorized to carry out the Subtitle C corrective action authorities of RCRA (51 FR 21054, June 10, 1986). However, EPA currently does not defer to other State authorities even if they have authority to achieve some corrective action at contaminated sites. The present framework of the NPL process has not precluded States from taking independent enforcement authorities during CERCLA remedial activities, and a State can request the enforcement lead at sites on the NPL. (Under any of the proposed approaches for State deferral, a State would retain the option of having a State-lead enforcement site listed. Subpart F of today's proposal discusses EPA's criteria for designating a State as the lead agency. The Subpart F criteria are intended solely for State-lead actions under CERCLA.)

EPA has, in the past, listed sites being addressed under State authorities so that it could ensure that similar sites were remediated to similar levels, and in a manner consistent with the NCP. Further, public participation, ATSDR health assessments, and oversight by EPA is assured for all NPL sites. In addition, affected communities are eligible to apply for Technical

Assistance Grants (TAGs) at sites on the NPL (53 FR 9471, March 24, 1988), and mixed funding settlements for remedial action are possible.

EPA is now considering deferring to State authorities more generally. EPA recognizes that many more sites need to be addressed than present CERCLA resources can accommodate; by deferring some problem sites to the States, EPA believes more overall response actions can be accomplished more quickly, and EPA can direct its resources to sites that otherwise would not be addressed. As with any deferral, no CERCLA funds would be available to the State for the site being deferred, although EPA may exercise its enforcement or response authorities at that site. Moreover, the State may be required to obtain on-site permits, as permit exemptions are only available for CERCLA actions.

EPA notes that even if a State has authorities applicable to Federal facilities, the remediation of such sites will not be deferred, and Federal facilities will continue to be listed on the NPL, consistent with CERCLA section 120(d)(2).

EPA believes it may be appropriate to defer listing sites on the NPL to allow the States to fully utilize corrective action authorities under their own programs when they have programs in place for obtaining some corrective action at contaminated sites. This approach is consistent with the view of the NPL as a list of sites where response action is appropriate under CERCLA, and the site is not being otherwise addressed.

A deferral would not be a delegation of any CERCLA authority, and it is not intended to ensure equivalence to CERCLA. By deferring to a State authority, EPA is not approving the remediation to be undertaken by that State authority. In considering this deferral policy, EPA recognizes that corrective actions under State authorities may not follow the procedures and requirements of the NCP, and in some cases, this may result in differences, e.g., some States may have more stringent corrective action standards than EPA while other States may have less stringent corrective action standards. Requiring State authorities to conform strictly to NCP requirements might result in fewer States choosing to undertake a site remediation that could be deferred. EPA requests comment on the level of remediation that should be required for sites deferred to States.

It is important to note in instances where State authorities intend to recover their costs from responsible parties under CERCLA section 107 for

sites subsequently listed on the NPL, response actions at these sites may not be "inconsistent with" the NCP.

Although EPA does not intend to apply all of the procedures and requirements of the NCP to deferred sites, EPA strongly believes that the general public participation procedures of the NCP are a necessary part of any State deferral policy. The NCP has specific requirements to inform the community of releases and planned actions at a site, and to provide the public an opportunity to comment on removal and remedial plans. However, EPA recognizes that specific requirements to involve a community in remediation decisions may or may not exist under State authorities. Therefore, EPA believes if sufficient public participation requirements do not already exist under the State authority, the State should be required, as a condition of deferral, to develop a site-specific public participation plan to inform the community of remediation progress and involve the community in the remedy selection.

EPA is requesting comment in general on the issue of deferring to State authorities, and requests comment on two options for implementing deferral to States: (i) Deferral based upon a State petition to EPA requesting deferral; and (ii) deferral based upon a State's certification of its commitment and ability to address the site according to certain CERCLA standards. EPA intends to keep the current limited State deferral policy, i.e., deferral to authorized State RCRA authorities, in effect while public comments are reviewed. If a more expanded State deferral policy is implemented, EPA would apply it prospectively to sites as they are proposed for listing (see discussion of final sites below).

i. *Option 1—Deferral based upon a State petition.* Under this option, EPA would defer sites from listing on the NPL in cases where the State petitioned EPA for deferral. Specifically, once EPA believes that a site scores above the HRS cutoff, or otherwise meets eligibility requirements for listing sites on the NPL, EPA would consider deferring the site if the State petitions EPA certifying that:

a. The State has provided reasonable notice to the public of its intent to petition for deferral of a site, and its plans and general schedule for corrective action under State laws;

b. The State will provide for public participation in the remedy selection process; and

c. If requested by the public, the State would hold a public meeting at which it

discussed its decision to petition for deferral.

Under this option, the State would explain to the public and EPA its plans and general schedule for corrective action under State laws. EPA specifically requests comment on whether the State should be required to hold a public meeting or if such meeting should be held only if requested. This option represents a total deferral; it is not intended to ensure equivalence to CERCLA. EPA believes that this option could maximize the overall number of corrective actions that occur by allowing CERCLA funds and resources to be directed to other sites at which no response action by State authorities is anticipated.

This option would have no requirements or obligations for oversight by EPA. However, EPA would still have the flexibility to exercise CERCLA authorities to achieve corrective action at sites deferred from listing, if necessary. EPA would reserve the right to terminate the deferral status of a site and take the necessary procedural steps to list the site on the NPL where the State revises its earlier position and requests that the site be considered for listing.

ii. *Option 2—Deferral based upon a State certification.* This option would defer individual sites from listing on the NPL in cases where the State provides a more detailed certification of its ability and commits to perform corrective action according to certain CERCLA standards. Specifically, once EPA believes that a site scores above the HRS threshold for listing, or otherwise meets eligibility requirements for listing sites on the NPL, EPA would consider deferring the site if the State demonstrates and certifies in writing to EPA the following:

a. The existence of State regulatory response or enforcement authorities that are sufficient to achieve corrective action.

b. Sufficient State personnel and funds committed for either: (1) enforcement actions, compliance monitoring, and oversight of PRP remediation, or (2) State-implemented corrective action.

c. Satisfactory schedules with milestones to complete the enforcement or corrective action process.

d. Commitment to provide status reports to EPA and the public.

e. Provision for public participation in the remedy selection process, and

f. Commitment to select a remedy that is consistent with the cleanup standards of section 121 of CERCLA.

This option accomplishes the overall goal of increasing the States'

involvement in the corrective action process, thereby making CERCLA resources available for other sites. It would require greater EPA oversight than the first option, and requires remediation consistent with standards in section 121 of CERCLA.

As discussed in the first option, EPA would retain its right to apply CERCLA authorities at deferred sites, if necessary. Additionally, EPA would consider terminating the deferral status of a site and taking the necessary procedural steps to list the site on the NPL if any of the commitments in the State certification were not met.

For both options, EPA is considering two management approaches to account for sites that are deferred. The first approach would be to propose deferral site candidates for listing on the NPL, and solicit public comment on the HRS score and the deferral issue. If a decision is made to defer, the sites would remain on the proposed NPL in a stayed, deferred status. This would provide the public with information on the sites EPA has deferred from listing, and would allow EPA to engage in final rulemaking to place the site on the NPL in an expeditious manner if termination were necessary. (In such a case, EPA would request comment on termination of the deferral prior to promulgating the site on the final NPL.)

If deferred sites are proposed on the NPL in a stayed, deferred status, ATSDR health assessments would be performed at those sites, and affected communities would be eligible to apply for TAGs. EPA requests comments on whether it is appropriate to issue TAGs at these sites, since one purpose of the deferral policy is to direct Fund monies to sites that otherwise cannot be addressed by authorities other than CERCLA.

The second management approach EPA is considering would be to defer sites to States prior to, and without, NPL proposal. This could conserve the resources that EPA would use for proposal so that they could be applied to other sites. Under this approach, the responsibility to inform the public about deferred sites could be left solely to the States through the petition or certification procedures discussed above. Alternatively, EPA could retain the role of informing the public through a separate, non-NPL listing in the Federal Register of deferred sites. In either case, by not first proposing the site, EPA would have to propose the site to the NPL and take comment on the HRS score before addressing a site under the CERCLA remedial program if deferral termination is necessary. (Of course, the HRS score would not change as a result of any response actions taken

by the State during the period of deferral, consistent with EPA's past practice explained at 48 FR 40664, September 8, 1983). However, EPA could apply certain CERCLA response authorities to the sites prior to their listing, including removal actions and remedial investigations.

Further, due to the absence of NPL proposal under this approach, ATSDR would not be required to perform a health assessment at the deferred site. (CERCLA authorizes ATSDR to perform health assessments in response to requests from the public. Petitions for health assessments will require data showing a high probability of the existence of a current or potential health problem.) In addition, TAGs would not be available (CERCLA does not authorize TAGs at non-NPL sites) and the possibility of mixed funding settlements for remedial actions at such sites would be precluded.

EPA specifically requests comment on whether a site deferred to a State should be proposed to the NPL in a "deferred" category, or whether the public should be informed of the deferral through a non-NPL notification or State action.

EPA will consider comments on the current policy and the two options for deferral to State authorities. If EPA determines that it is appropriate to revise the current policy, EPA may adopt one of the options described or a combination of both.

5. *Sites regulated by multiple authorities.* EPA recognizes that there may be some sites that are regulated by a mix of authorities. In cases such as these, EPA requests comment on whether the site should be deferred to a mix of authorities, or whether EPA should address the site comprehensively under CERCLA.

6. *Deferral of sites with agreements under CERCLA enforcement authorities.* Currently, it is EPA's policy to keep enforcement-lead sites on the NPL until the selected remedy is complete in order to ensure that CERCLA Fund resources are available to quickly achieve mitigation if the PRPs fail to comply with CERCLA orders or enforcement agreements, and to keep the public apprised of remedial progress at the site. This policy also provides for the potential availability of TAGs, the performance of ATSDR health assessments at affected sites, and allows for the possibility of mixed funding for remedial actions.

However, in addition to the State deferral options previously discussed, EPA is also considering options for not listing, or deferring from listing sites where PRPs enter into Federal

enforceable agreements for site remediation under CERCLA. A policy of not listing sites where enforceable cleanup orders or agreements under CERCLA are in place may facilitate EPA efforts to expeditiously obtain such enforceable agreements for remedial action at sites that would otherwise be listed on the NPL and evaluated under the CERCLA remedial program. EPA would retain approval authority over any remedial action at sites deferred from listing based on an enforceable CERCLA order or agreement. State concurrence would be necessary for deferring sites under this policy.

Although EPA has not yet reached a decision on this issue, the options being considered today are within EPA's discretion under the statute. CERCLA section 104(a)(1) authorizes EPA to respond to the release or threat of release of hazardous substances, but provides that a PRP may be allowed to carry out the action if the President or his delegate "determines that such [removal and remedial] action will be done properly and promptly by the owner or operator of the facility or vessel or by any other responsible party." In addition, CERCLA section 105(a)(8)(A) directs EPA to "the extent practicable, to tak[e] into account" appropriate factors in developing the NPL, giving EPA broad discretion to consider such factors as PRP remedial action agreements.

EPA seeks comment on two principal options: (i) Deferral to CERCLA enforcement authorities prior to NPL proposal based on an agreement to carry out the EPA-selected remedial design/remedial action (RD/RA) pursuant to a consent decree, and (ii) deferral at the time of proposal based on an agreement to conduct a remedial investigation/feasibility study (RI/FS) for that site, with the proposed site dropped if the PRP subsequently agrees to perform the RD/RA pursuant to a consent decree. Both options will continue to assure the opportunity for public comment on the remedy selected by EPA under the CERCLA consent decree. This CERCLA enforcement authority deferral policy being considered today will not be implemented until public comments have been considered. EPA intends to keep the current deferral policies in effect while comments are reviewed. If this deferral policy is issued, EPA plans to apply it prospectively (see discussion of final sites below). These options, and variations of these options, are discussed below.

i. Option 1—Pre-proposal deferral based on agreement to perform RD/RA.

Under this option, EPA would, with the concurrence of the State agency, defer listing of a site if a PRP were willing to enter into a consent decree with EPA for the total remediation of a site prior to the site's proposal for NPL listing. However, EPA would not delay the normal process for assessing sites, developing HRS scores, and proposing on the NPL. Only those sites for which a consent decree is signed prior to proposal of the site on the NPL would be considered.

Because completed preliminary assessments and site investigations are publicly available documents, EPA believes that many PRPs will have adequate information concerning the potential listing of a site on the NPL in order to decide whether to begin negotiations of a consent decree with EPA for remediation of a site. However, EPA intends to continue its policy of not releasing draft HRS scores prior to a decision to propose a site for the NPL. EPA would simply acknowledge that a site is being considered for listing on the NPL.

Under this option, more consent decrees providing for remediation may be signed, freeing CERCLA Fund resources for remedial action at other sites. (CERCLA resources would be required for oversight of sites deferred based on an agreement under CERCLA enforcement authorities.) Moreover, these consent decrees would represent enforceable agreements under CERCLA for the entire response effort, including remedial action, and would provide the necessary legal assurances that a protective remedy, selected and approved by EPA, would proceed in a timely manner. Further, EPA would select the remedy under this approach, and the full remedial process described under Subpart E of the NCP, including the public participation requirements, would be required; all consent decrees would also be published in the *Federal Register* before entry by the court.

This option would allow PRPs, by agreeing to an enforceable consent decree under CERCLA to perform the total remediation, to avoid the listing of their site on the NPL. However, at this stage in the remedial process, the actual remedy to be implemented will be unknown and the PRPs may be reluctant to agree to implement a remedy of unknown cost and dimensions. Even if the PRPs agreed to implement the EPA-selected remedy, they might be reluctant to waive their rights to contest EPA's choice of remedy in the context of dispute resolution under the consent decree, which process may involve further resource commitment by EPA.

This option might have limited applicability at sites with multiple parties. Because EPA does not intend to implement a formal process prior to proposal to notify parties of their potential responsibility at sites, there may not be adequate time for numerous PRPs to agree to implement the site remedy to be selected by EPA in the future.

If a PRP fails to complete the remedy and the enforcement mechanisms available under the consent decree are not successful (e.g., if the PRP is financially unable to continue the work), Fund-financed action could not be taken until the site was listed on the NPL (although financial assurances such as performance bonds could also be required under this option to ensure that remedial action would continue).

Under this approach, because sites would not be listed or proposed for listing on the NPL, TAGs would not be available and ATSDR health assessments would not be required (see State deferral discussion).

As part of this option, EPA is also seeking comment on the appropriate method for identifying problem sites to the public if those sites are not proposed for the NPL because of deferral to a CERCLA enforcement agreement. One alternative is to publish a notice in the *Federal Register* identifying sites that are to be deferred prior to proposal on the NPL. Another alternative is to notify the affected public of the deferral by publication in a local newspaper(s) of general circulation. Of course, once a consent decree is lodged, the public will be notified (pursuant to 28 CFR 50.7), and will have an opportunity to comment on the remedy that EPA ultimately selects.

ii. Option 2—Proposal and deferral based on an agreement to conduct RI/FS. EPA is also considering an option under which EPA would propose a site for listing on the NPL, but would defer final listing of the site if the PRPs agree to perform the RI/FS under an enforceable CERCLA agreement (administrative order or consent decree). The site would remain on the proposed NPL (in a stayed, deferred status) until the RI/FS is completed, the public comments on the remedy are received, and the record of decision is issued. If the PRPs agree to implement the remedy selected in the record of decision under an enforceable consent decree or order under CERCLA, the site would be dropped from the proposed list; if they do not, EPA would proceed to list the site on the final NPL. Adoption of this option would make the final NPL a list of sites where CERCLA Fund-financed

action appears to be warranted, rather than a list of sites where CERCLA action, whether Fund-financed or enforcement lead, appears to be warranted.

Because sites would be formally proposed for listing, the PRPs would be fully informed of the opportunity of entering into an enforceable CERCLA agreement. This approach may encourage PRP performance of RI/FSs and RD/RAs thus freeing CERCLA Fund monies for other sites. In addition, because deferral candidates would remain on the proposed NPL until a final consent decree is entered, EPA can proceed rapidly to final listing and site remediation using the Fund in the event the PRPs do not agree to implement the selected remedy. This option would also ensure that EPA has substantial input into, and control over, the PRP-conducted RI/FS or RD/RA, since both efforts would be completed under the terms of enforceable agreements under CERCLA, and with EPA oversight.

The process contemplated in this option would allow a PRP to avoid listing on the final NPL by agreeing to undertake a remedial response pursuant to an enforceable agreement under CERCLA. In addition, in contrast to the first option (defer prior to proposal), the PRPs are entering into agreements in a stepwise fashion and are not committing to final site remediation until the remedial options have been fully explored if necessary.

If the PRP does not consent to implement the remedy identified as a result of the RI/FS, Federal funds could not be spent for the remedial action until the site was listed as final on the NPL. However, additional planning or removal actions under section 104 could take place if necessary.

A variation on this option would be that, rather than proposing the site for listing on the NPL, the site would be included on a special list pending the PRPs entering into a consent decree. This variation presents a greater risk of delay in remedial action because if the PRP fails to sign a consent decree for cleanup, the site must be first placed on the proposed NPL, comment taken on HRS scoring, and then placed on the final list. Additionally, because sites would not be listed or proposed for listing on the NPL under this option, TAGs would not be available and ATSDR health assessments would not be required, and the possibility of mixed funding settlements for remedial actions at such sites would be precluded (see State deferral discussion).

EPA will consider comments on the current policy and the two options for deferral to enforcement authorities. If

EPA determines that it is appropriate to revise the current policy of not deferring to PRPs entering into enforcement agreements, EPA may adopt one of the options described above or a combination of both.

7. Deletion of proposed and final sites based upon deferral to other authorities.

In today's notice, EPA is requesting comment on deferring the placement of sites on the NPL when Federal or State authorities are available to address contamination at the site, as well as deferring sites where the PRPs have signed enforceable CERCLA consent orders for remedial action. EPA is also considering whether this policy should be applied to sites on the final NPL, i.e., whether final NPL sites should be deleted if they are being addressed by another authority or under a CERCLA consent order. On August 9, 1988 (53 FR 30005), EPA announced that it would not systematically apply the RCRA deferral policy in certain limited circumstances. As with the general deferral policies discussed in today's notice, the deletion of final sites would tend to free CERCLA's resources for use in situations where another authority is not available, and thus may help maximize the overall number of response actions.

As stated with respect to the RCRA deferral policy, EPA does not believe it is appropriate to systematically review the final sites already on the NPL to see whether any are being addressed, or may be addressed, under another statute or under a CERCLA consent order. It is EPA's opinion that such a review would be time consuming, thereby detracting from the more important work of the CERCLA program, and could disrupt work at sites where CERCLA actions have already begun. However, in certain limited circumstances, EPA believes that it may be appropriate to remove a site from the final NPL before a cleanup is complete if EPA is satisfied that the site is being or will be addressed under another statute or authority.

EPA believes that it is appropriate to apply different and more stringent criteria in actions to delete based on deferral to other authorities for sites that are on the final NPL, as compared to sites that are merely candidates for deferral prior to NPL listing. For final NPL sites, EPA has completed its listing process, identified the site as a potential problem requiring further attention, and has often commenced CERCLA actions. In addition, the listing itself has created public anticipation of a response under CERCLA. Thus, EPA and the public have a significant interest in seeing that these sites are addressed. EPA does not believe that applying different criteria to

final sites that may be deleted will cause any significant prejudice to any party; as EPA has stated repeatedly in the past, inclusion on the NPL does not determine the liability of any party for the cost of any response actions that may be taken at a site (48 FR 40659, September 8, 1983).

Therefore, EPA is considering applying this policy on a case-by-case basis in the following limited circumstances. A site may be an acceptable candidate for deletion based upon deferral to another authority where EPA is presented with evidence that:

- i. A site on the NPL is currently being addressed by another regulatory authority under an enforceable order or permit requiring corrective action or the PRPs have entered into a CERCLA consent order to perform the RD/RA;
- ii. Response is progressing adequately;
- iii. Deletion would not otherwise disrupt an on-going CERCLA response action; and
- iv. All criteria for deferral to that authority have been met (i.e., the requesting party must meet all conditions for deferral to that authority in addition to the three specific criteria set out above for deletion based upon deferral).

EPA would generally consider it to be a disruption of a CERCLA remedial action to defer a final NPL site in situations where funds and/or personnel have been committed for further action such as an RI/FS, remedial design or remedial construction activity.

To date, sites have been deleted from NPL only "where no further response is appropriate," such as where remedial actions have been completed either by the PRPs or through Fund-financed response, or where no remedial measures have been deemed necessary (current NCP § 300.66(c)(7), repropoed today as § 300.420(e)(1)). In order to delete sites for deferral, it may be necessary to adopt additional deletion criteria or to reinterpret the existing criteria to apply to instances where another authority is addressing the site, and thus, no further response is appropriate under CERCLA (or, alternatively, that no further response is necessary using CERCLA funds). As with any deletion, a deletion based upon a decision to defer would be entered only after a notice of intent to delete (and defer) is filed in the Federal Register and comment is taken. If EPA later determines that CERCLA remedial action is necessary at the site, the site would remain eligible for CERCLA Fund-financed remedial action and relisting on the NPL without the

requirement to reapply the HRS (current NCP § 300.66(c)(8), repropounded today as § 300.420(e)(2)).

EPA requests comment on the policy of deleting final sites based upon deferral to other authorities, and on the criteria that should be applied in reviewing petitions for such deletions.

8. *Effective date of policy.* No deferral policy being considered today will be implemented until public comments have been considered. EPA intends to keep the current deferral policies (e.g., RCRA and Nuclear Regulatory Commission) in effect while such comments are being reviewed.

Section 300.430 Remedial Investigation/Feasibility Study (RI/FS) and Selection of Remedy.

Today EPA is proposing major revisions to Subpart E to incorporate the new requirements of the 1986 CERCLA reauthorization amendments into existing procedures, and to reflect program management principles EPA intends to follow in order to promote the efficiency and effectiveness of the remedial response process. Chief among these principles is a bias for action.

The 1986 CERCLA amendments include a number of requirements related to the remedial alternatives development and remedy selection process. Section 121 of the statute retains the original CERCLA mandates to select remedies that are protective of human health and the environment and that are cost-effective. In addition, today's proposed revisions address the new statutory requirements for remedial actions to attain the applicable or relevant and appropriate requirements of other Federal and State environmental laws, the mandate to utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable, and the preference for remedies that employ treatment that permanently and significantly reduces the toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants as their principal element over those that do not.

The overarching mandate of the Superfund program is to protect human health and the environment from the current and potential threats posed by uncontrolled hazardous waste sites. This mandate applies to all remedial actions and cannot be waived. The mandate for remedies that protect human health and the environment can be fulfilled through a variety of means, including the destruction, detoxification, or immobilization of contaminants through the application of treatment

technologies, and by controlling exposure to contaminants through engineering controls (such as containment) and/or institutional controls which prevent access to contaminated areas.

The CERCLA amendments emphasize achieving protection that will endure over long periods of time by mandating the use of permanent solutions to the maximum extent practicable and by specifying long-term effectiveness factors that must be assessed under section 121(b)(1) (A-G). The amendments also express a clear preference for achieving this protection through the use of treatment technologies as the principal element of remedies. These provisions reflect the belief that treatment that destroys or reduces the hazardous properties of contaminants (e.g., toxicity or mobility) frequently will be required to achieve solutions that afford a high degree of permanence. The highest degrees of permanence are clearly afforded by remedies that are not heavily reliant on long-term operation and maintenance following the completion of an implemented action.

In addition to these new mandates, the amended CERCLA retained the mandate for selecting remedies that are cost-effective. Although cost-effectiveness cannot be used to select a nonprotective remedy, this mandate does require EPA to evaluate closely the costs required to implement and maintain a remedy and to select protective remedies whose costs are proportionate to their overall effectiveness. This mandate establishes efficient use of resources as a standard for Superfund remedial actions and reflects Congress' intent to maximize the use of the Fund across a large number of sites. EPA intends to focus available resources on selection of protective remedies that provide reliable, effective response over the long-term.

This combination of mandates (i.e., remedies that provide permanent solutions to the maximum extent practicable, the preference for treatment as a principal element, and cost-effectiveness) creates dynamic tensions for the Superfund program. In today's proposal EPA extends some of the fundamental features of the current NCP in proposing to resolve these competing goals through a process that examines the characteristics of sites and alternative approaches for remediating the problems those sites pose. This process evaluates alternative hazardous waste management strategies using nine criteria related to CERCLA's mandates to determine advantages and disadvantages of the various remedial

action alternatives. This analysis identifies site-specific trade-offs between options, and facilitates the risk management decision which is the fundamental nature of remedy selection decisions at CERCLA sites. In balancing trade-offs among options and selecting the protective alternative which seems to offer the best combination of attributes in terms of the nine criteria and is thus most appropriate for a given site, EPA is exercising the discretion granted by CERCLA to determine the maximum extent to which permanent solutions and treatment or resource recovery technologies can be practicably utilized in a cost-effective manner.

EPA believes that the solutions that are most appropriate for a given site will vary depending on the size, complexity, and location of the site, the magnitude of the threats posed, the timing of the availability of suitable treatment technologies, and the proximity of human and environmental receptors, among other factors. While the CERCLA amendments strongly encourage the use of treatment technologies in CERCLA remedial actions, they allow for discretion in dealing with site circumstances and technological, economic, and implementation constraints that place practical limitations on the use of treatment technologies. Treatment is most likely to be practicable for wastes that cannot be reliably controlled in place, such as liquids, highly mobile materials (e.g., solvents), and high concentrations of toxic compounds (e.g., several orders of magnitude above levels that allow for unrestricted use and unlimited exposure). Treatment is less likely to be practicable where sites have large volumes of low concentrated material, or where the waste is very difficult to handle and treat (e.g., mixed waste of widely varying composition). Specific situations that may limit the use of treatment could include sites where: (1) Treatment technologies are not technically feasible or are not available within a reasonable timeframe; (2) the extraordinary size or complexity of a site makes implementation of treatment technologies impracticable; (3) implementation of a treatment-based remedy would result in greater overall risk to human health and the environment due to risks posed to workers or the surrounding community during implementation; or (4) severe effects across environmental media resulting from implementation would occur. In addition, there are CERCLA sites or portions of sites where the concentrations of the wastes are at low

levels or are substantially immobile, and where the wastes can be reliably contained over a long period of time through the use of engineering controls. In these situations, treatment may not always offer a sufficient degree of increased permanence and long-term protection to be cost-effective.

CERCLA sites are frequently complex and involve a number of different problems. EPA believes that it often will be the case that the most appropriate solution for a site will involve a combination of methods of achieving protection of human health and the environment. Most frequently, EPA expects that treatment of the principal threats posed by a site, with priority placed on treating highly toxic, highly mobile waste, will be combined with engineering controls (such as containment) for treatment residuals and untreated waste.

As appropriate, institutional controls such as water use and deed restrictions may supplement engineering controls for short- and long-term management to prevent, or limit exposure, to hazardous substances, pollutants, or contaminants. Institutional controls will be used routinely to prevent exposures to releases during the conduct of a remedial investigation and feasibility study, during remedial action implementation, and as a supplement to engineering controls designed to manage wastes over time. The use of institutional controls to restrict use or access should not, however, 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. These trade-offs, based on the nine criteria, are identified during the analysis of alternatives.

EPA recognizes that the approach presented in today's proposed rule is not the only approach possible for resolving the competing goals and requirements of the Superfund program. Therefore, later in this preamble EPA presents four alternative approaches. Two of those alternatives are site-specific balancing approaches that, while similar to the one proposed in today's rule, differ primarily in terms of how they organize the evaluation criteria, and how they incorporate the statutory requirements to select remedies that are cost-effective and that use permanent solutions and treatment technologies to the maximum extent practicable. The two additional alternatives presented later represent

different approaches to remedy selection, based on different views of the goals and purposes of the Superfund program. EPA solicits comments on these four alternative approaches as well as the approach presented in today's proposed rule.

A. Program Management Principles

Today's proposal also includes revisions to the 1985 NCP that are not mandated by CERCLA. These revisions reflect principles by which EPA intends to manage the Superfund remedial program. These principles stem from experience gained over the first eight years of the program. In managing CERCLA sites, EPA must balance the goal of definitively characterizing site risks and analyzing alternative remedial approaches for addressing those threats in great detail, and the desire to implement protective measures quickly. EPA intends to balance these goals with a bias for initiating response actions necessary or appropriate to eliminate, reduce, or control hazards posed by a site, as early as possible. EPA will promote the responsiveness and efficiency of the Superfund program by encouraging action prior to or concurrent with conduct of an RI/FS as information is sufficient to support remedy selection. While the bias for action promotes multiple actions of limited scale, the program's ultimate goal continues to be to implement final remedies at sites.

Early action may be taken at a site via enforcement or Fund-financed activities taken under removal or remedial authorities. In deciding between using removal and remedial authorities, the lead agency should consider: (i) The criteria and requirements for taking removal actions in § 300.415 of today's proposed rule; (ii) the statutory limitations on removal actions and the criteria for waiving those limitations; (iii) the availability of resources; and the (iv) urgency of the site problem. Specific actions that may be taken under removal authorities include emergency action, non-time-critical removals, and expedited response actions. A discussion of these activities is included in the § 300.415 preamble section. Early actions using remedial authorities are initiated as operable units.

The Superfund program has long permitted remedial actions to be staged through multiple operable units. Operable units are discrete actions that comprise incremental steps toward the final remedy. Operable units may be actions that completely address a geographical portion of a site or a specific site problem (e.g., drums and tanks, contaminated ground water) or

the entire site. Operable units include interim actions (e.g., pumping and treating of ground water to retard plume migration) that must be followed by subsequent actions which fully address the scope of the problem (e.g., final ground water operable unit that defines the remediation level and restoration timeframe). Such operable units may be taken in response to a pressing problem that will worsen if unaddressed, or because there is an opportunity to undertake a limited action that will achieve significant risk reduction quickly.

The appropriateness of dividing remedial actions into operable units is determined by considering the interrelationship of site problems and the need or desire to initiate actions quickly. To the degree that site problems are interrelated (e.g., contaminated soils and ground water), it may be most appropriate to address the problems together. However, where problems are reasonably severable, phased responses implemented through a sequence of operable units may promote more rapid risk reduction.

Related to the bias for action is the principle of streamlining, which EPA intends to emphasize in managing the Superfund program as a whole and in conducting individual remedial action projects. On a project-specific basis, recommendations to ensure that the RI/FS and remedy selection process is conducted as effectively and efficiently as possible include:

a. Focusing the remedial analysis to collect only additional data needed to develop and evaluate alternatives and to support design;

b. Focusing the alternative development and screening step to identify an appropriate number of potentially effective and implementable alternatives to be analyzed in detail. Typically, a limited number of alternatives will be evaluated that are focused to the scope of the response action planned;

c. Tailoring the level of detail of the analysis of the nine evaluation criteria (see below) to the scope and complexity of the action. The analysis for an operable unit may well be less rigorous than that for a comprehensive remedial action designed to address all site problems;

d. Tailoring selection and documentation of the remedy based on the limited scope or complexity of the site problem and remedy. In particular, operable units initiating interim remedies may require less complex justifications because they are limited actions that will only require minimum

documentation of statutory findings based on the presumption that additional response will further address the site problem;

e. Accelerating contracting procedures and collecting samples necessary for remedial design during the public comment period.

Although the level of effort and extent of analysis required for an RI/FS will vary on a site-specific basis, the procedural steps needed for remedy selection do not. These steps, however, may be less extensive depending on the complexity and scope of the problem being addressed. Regardless of the level of effort and analysis on a specific RI/FS, the lead agency is responsible for ensuring that all procedural requirements are met, including support agency participation, soliciting public comment, developing an administrative record, and preparing a record of decision.

Circumstances that may be particularly conducive to a more streamlined analysis during an RI/FS include:

(1) Site problems are straightforward such that it would be inappropriate to develop a full range of alternatives. For example, site problems may only involve a single group of chemicals that can only be addressed in a limited number of ways, or site characteristics (e.g., fractured bedrock) are such that available options are limited. To the extent that obvious, straightforward problems exist, they may create opportunities to take actions quickly that will afford significant risk reduction;

(2) The need for prompt action to bring the site under initial control outweighs the need to examine all potentially appropriate alternatives;

(3) ARARs, guidance, or program precedent indicate a limited range of appropriate response alternatives (e.g., PCB standards for contaminated soils, Superfund Drum and Tank Guidance, BDAT requirements);

(4) Many alternatives are clearly impracticable for a site from the outset due to severe implementability problems or prohibitive costs (e.g., complete treatment of an entire large municipal landfill) and need not be studied in detail; and

(5) No further action or extremely limited action will be required to ensure protection of human health and the environment over time. This situation will most often occur where a removal measure previously has been taken.

The bias for action and principles of streamlining are considered throughout the life of a remedial project but begin to be evaluated as site management

planning is initiated. Site management planning is a dynamic, ongoing, and informal strategic planning effort that generally starts as soon as sites are proposed for inclusion on the NPL and continues through the RI/FS and remedy selection process, remedial design and remedial action phases, to deletion from the NPL. This strategic planning activity is the means by which the lead and support agencies determine the types of actions and/or analyses necessary or appropriate at a given site and the optimal timing of those actions. At the RI/FS stage, this effort involves review of existing site information, consideration of current and potential risks the site poses to human health and the environment, an assessment of future data needs, understanding of inherent uncertainties in the process, priorities among site problems and the program as a whole, and prior program experience. The focus is on taking action at the site as early as site data and information make it possible to do so.

B. Major Revisions to the RI/FS and Selection of Remedy Process

The RI/FS process proposed today incorporates statutory requirements, reflects the program management principles of the bias for action, streamlining, and site management planning, and builds on the engineering and analytical steps established in the current NCP. The RI/FS remedy selection process is portrayed in the following specific steps: (1) Project scoping which includes developing workplans; (2) a remedial investigation that typically includes gathering basic site data for site characterization and the baseline risk assessment, and conducting treatability studies; (3) a feasibility study, which includes the development of alternatives, a screening step, as necessary, and a detailed analysis of the alternatives; (4) remedy selection; and (5) documentation. As presented in today's proposal, these steps appear highly articulated and distinct. In practice, the steps are usually highly interactive. The RI/FS process should be tailored to match the scope and nature of the site problems.

The steps in the process are intended to ensure that remedial alternatives are formulated to be protective of human health and the environment and designed to meet the applicable or relevant and appropriate requirements of other Federal and State environmental laws. Judgments as to the cost-effectiveness of the alternatives and the extent to which permanent solutions and treatment or resource recovery technologies can be practicably utilized at a given site are

made in the remedy selection process, as trade-offs between protective alternatives are balanced.

1. *Project scoping.* The purpose of scoping is to define more specifically the appropriate type and extent of investigative and analytical studies that should be undertaken for a given site. Scoping is distinct from site management planning in that it entails formal planning for both the remedial investigation and feasibility study. Scoping has been separated from the remedial investigation section to which it is attached under the current NCP simply to highlight the workplan development process and the development of other project plans such as the sampling and analysis plan (SAP), the health and safety plan (HSP), and the community relations plan (CRP).

During scoping, to assist in evaluating the possible impacts of releases from the site on human health and the environment, a conceptual understanding of the site should be established considering in a qualitative manner the sources of contamination, potential pathways of exposure, and potential receptors. This preliminary characterization is initially developed with readily available information and is refined as additional data are collected. A site-specific baseline risk assessment with additional qualitative and/or quantitative aspects will be performed during the RI to build on this conceptual understanding by characterizing further the type and magnitude of potential risks. The identification of potential ARARs and other criteria, advisories and guidance to be considered (TBCs) will begin during scoping as lead and support agencies initiate a dialogue on potential requirements during planning meetings or discussions that occur between agencies. Under CERCLA section 121(d)(2)(A)(ii), State requirements must be identified in a timely manner in order to be considered ARARs. Sections 300.430 (d) and (e) and 300.510(d) in today's proposed rule describe the process for identification of ARARs by the lead and support agencies.

The main objectives of scoping are to identify the types of decisions that need to be made, to determine the types (including quantity and quality) of data needed, and to design efficient studies to collect these data. The scope and detail of the investigative studies and alternative development and analysis should be tailored to the complexity of site problems. This will require a consideration of how the phases of the remedial process could most appropriately be conducted and the

level of effort and analysis required for each phase. The greatest opportunities to streamline the analysis generally will occur when the scope of the study and remedial action are limited to a small part of the site, or when the threats are clearly defined and technical solutions are straightforward.

2. *Remedial investigation (RI).* The RI includes: (i) The collection of data identified during project scoping as necessary to characterize the site and evaluate remedial alternatives; (ii) the characterization of current and potential risks through a baseline risk assessment; and (iii) treatability studies, as appropriate. Today's proposed revisions emphasize that the program management principle of streamlining will be applied to determinations of what is necessary to adequately characterize a site. Site-specific judgments are required to determine how much additional information is necessary to support decisions, taking into consideration the added time and costs of collecting and analyzing the data.

During site characterization, site-specific data are collected and assessed to determine what, if any, types of response actions are warranted. In light of CERCLA's mandate to assess permanent solutions, alternative treatment technologies, and resource recovery technologies, EPA is proposing to collect, as appropriate, data about treatment technologies, such as characteristics of the waste or the site that affect the types of treatment possible and the effectiveness of treatment approaches, the extent to which substances on-site may be reused or recycled, and the potential for future releases if any substances or treatment residuals remain on-site. The RI may also include treatability studies that are needed to better evaluate potential technologies.

Once the contaminants of concern at a site have been identified, the baseline risk assessment is initiated to determine whether the site poses a current or potential risk to human health and the environment in the absence of any remedial action. It provides the basis for determining whether or not remedial action is necessary and the justification for performing remedial actions. The Superfund baseline risk assessment process may be viewed as consisting of an exposure assessment component and a toxicity assessment component, the results of which are combined to develop an overall characterization of risk. As indicated above, these assessments are site-specific and therefore may vary in both detail and

the extent to which qualitative and quantitative analyses are utilized, depending on the complexity and particular circumstances of the site, as well as the availability of pertinent ARARs and other criteria, advisories, and guidance.

An exposure assessment is conducted to identify the magnitude of actual or potential human or environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. This assessment involves developing for each site a current exposure scenario as well as a reasonable maximum exposure scenario. The current exposure analysis is used to determine whether a health or environmental threat exists based on existing site conditions. The reasonable maximum exposure scenario is used to provide decisionmakers with an understanding of potential future exposures and should include an assessment of the likelihood of such exposures occurring. This exposure scenario will provide the basis for the development of protective exposure levels.

The toxicity assessment component of Superfund risk assessment considers: (a) The types of adverse health or environmental effects associated with chemical exposures; (b) the relationship between magnitude of exposures and adverse effects; and (c) related uncertainties such as the weight of evidence for a particular chemical's carcinogenicity in humans. Typically, the Superfund risk assessment process relies heavily on existing toxicity information or profiles developed on specific chemicals. These are generally estimated carcinogen exposures that may be associated with specific lifetime cancer risk probabilities (risk-specific doses or RsDs), and noncarcinogen exposures that are not likely to present appreciable risk of significant adverse effects to humans (including sensitive subgroups) over lifetime exposures (reference doses or RfDs).

During risk characterization, chemical-specific toxicity information is compared both against measured contaminant exposure levels and those levels predicted through fate and transport modeling to determine whether levels at or near the site are of potential concern. Results of this analysis are presented with all critical assumptions and uncertainties so that significant risks can be readily identified.

3. *Feasibility study (FS).* The purpose of the FS is to provide the decisionmaker with an assessment of alternatives, including their relative

strengths and weaknesses, and the trade-offs in selecting one alternative over another. The FS process involves developing a reasonable range of viable remedial alternatives and analyzing these alternatives in detail using nine evaluation criteria. Because the RI and FS are conducted concurrently, this is an interactive process in which potential alternatives and remediation goals are continually refined as additional information from the RI becomes available.

i. *Establishing protective remedial action objectives.* The first step in the FS process involves developing remedial action objectives for protecting human health and the environment which should specify contaminants and media of concern, potential exposure pathways, and preliminary remediation goals. The preliminary remediation goals, by establishing initially acceptable contaminant levels for each exposure route, assist in setting parameters for the purpose of evaluating technologies and developing remedial alternatives. Because these preliminary remediation goals typically are formulated during project scoping or concurrent with initial RI activities (i.e., prior to completion of the baseline risk assessment), they are initially based on readily available environmental or health-based ARARs (e.g., MCLs, WQC) and other criteria, advisories, or guidance (e.g., RfDs). As new information and data are collected during the RI, including the baseline risk assessment, and as additional ARARs are identified during the RI, these preliminary remediation goals may be modified as appropriate to ensure that remedies comply with CERCLA's mandate to be protective of human health and the environment and comply with ARARs.

During the development and analysis of alternatives, the risks associated with potential alternatives, both during implementation and following completion of remedial action, are assessed, based on the reasonable maximum exposure scenario and any other controls necessary to ensure that exposure levels are protective and can be attained. These are generally assessed for each exposure route unless there are multiple exposure routes where combined effects may have to be considered. For noncarcinogenic chemicals, EPA has concluded that protection is achieved when exposures are such that no appreciable risk of significant adverse effects to individuals over a lifetime of exposure exist. For carcinogens, EPA uses health-based ARARs to set remediation goals when

they are available. When an ARAR does not exist, EPA guidance has been to select remedies resulting in cumulative risks that fall within a range of 10^{-4} to 10^{-7} individual lifetime excess cancer risk. EPA is willing to continue using this range in the future as it provides flexibility in developing protective remedies suitable to site-specific conditions. However, EPA is interested in receiving comment on a risk range of 10^{-4} to 10^{-6} since this risk range is used in certain other EPA programs.

The risk range is important because it is a standard used by EPA to comply with CERCLA's mandate to protect human health. Furthermore, the choice of risk range will continue to be important as the Superfund program matures and as related science and policy evolve.

EPA, therefore, solicits comment on two potential risk ranges in particular—the current 10^{-4} to 10^{-7} range and an alternative 10^{-4} to 10^{-6} range—and on issues related to these or alternative risk ranges. Commenters are requested to provide as much supporting information as practical for any alternatives suggested. Issues that commenters may want to consider include the following:

(1) The potential impact of improvements in the understanding of cancer risk assessment, including biological mechanisms, interpretation of data, measures of exposure, etc.

(2) The ability of available analytical methods to measure chemical substances at concentrations associated with low levels of risk.

(3) Possible advantages or disadvantages of a narrower or broader risk range, or of a single risk value.

(4) The desirability of using a risk range for cleanup at these sites to protect current and potential sources of drinking water that is more stringent than the 10^{-4} to 10^{-6} range that characterizes drinking water standards and that is more stringent than what is considered de minimis risk under other programs.

(5) The ability of treatment technologies to achieve cleanups at specified levels of risk. This may include technologies that are unable to achieve removal of contaminants to very low levels, as well as other technologies that can only achieve low levels of risk.

(6) Whether available funds should be used to attain very low levels of risk at a limited number of sites, or to achieve cleanup at more sites (at somewhat higher levels of risk for some sites) with a greater reduction in overall risk.

(7) The effect of achieving particular risk levels on the time needed to complete the remedial action and the

extent to which this should be considered when selecting remedies.

(8) The relationship between EPA's risk range and those used in State Superfund programs, including the impact of EPA's range on the development of State programs.

(9) The evolving issue of public perception of relative risks in our society.

Commenters are invited to address these and other issues related to either the Superfund program's risk range or alternatives that they may suggest.

In general, chemical-specific ARARs are set for a single chemical or closely related group of chemicals. These requirements typically do not consider the mixtures of chemicals and other conditions (e.g., multiple pathways of exposure) that may be found at CERCLA sites. Therefore, due to site-specific factors, remediation goals set at the level of single chemical-specific requirements may not adequately protect human health or the environment at that site. In these instances, remediation goals may be set below the chemical-specific requirements (i.e., at more stringent levels) in order to obtain a remedy that is protective. Remedies resulting in cumulative risks that fall within the generally acceptable risk range for carcinogens (10^{-4} to 10^{-7}) or meet acceptable levels for noncarcinogens are said to be protective of human health.

Superfund remedies will also be protective of environmental organisms and ecosystems. However, "protectiveness" in this context is often considerably less quantitative.

During selection of remedy, the final remediation goals, and resulting exposure levels, will be determined by balancing the major trade-offs among protective, ARAR-compliant alternatives, using specified evaluation criteria (see sections 3.iii. and 4., below).

During the FS, pertinent factors for modifying the remediation goals within the acceptable risk range can be divided into three broad categories: (a) Exposure factors, (b) uncertainty factors, and (c) technical factors. Included under exposure factors are: the cumulative effect of multiple contaminants, the potential for human exposure from other pathways at the site, population sensitivities, potential impacts on environmental receptors, and cross media impacts of alternatives. Factors related to uncertainty may include: the reliability of alternatives, the weight of scientific evidence, and the reliability of exposure data. Technical factors may include: detection/quantification limits for contaminants, technical limitations to restoration, the ability to monitor and

control movement of contaminants, and background levels of contaminants.

Remediation levels should be set for appropriate environmental media, and performance standards established for selected engineering controls and treatment systems including controls implemented during the response measure. For ground water, remediation levels should generally be attained throughout the contaminated plume, or at and beyond the edge of the waste management area when waste is left in place. For air, the selected levels should be established for the maximum exposed individual, considering reasonably expected use of the site and surrounding area. For surface waters, the selected levels should be attained at the point or points where the release enters the surface waters.

ii. *Development and screening of alternatives.* Once remedial action objectives have been developed, general response actions, such as treatment, containment, excavation, pumping, or other actions that may be taken to satisfy those objectives should be established. Technologies potentially applicable to each general response action are then identified, briefly evaluated to verify their suitability, and assembled into remedial alternatives. In the event a large number of alternatives are developed, a screening step may be conducted.

For most sites, the initial range of alternatives should represent distinct, promising alternative approaches to managing the site problems. The major change in this step from the current NCP is the organizing scale along which the alternatives are to be arrayed.

The current NCP requires alternatives to be developed, as appropriate, from the following categories: (a) An off-site alternative; (b) an alternative that attains ARARs; (c) an alternative that exceeds ARARs; (d) an alternative that does not attain ARARs; and (e) a no-action alternative. These categories tested on the implicit assumption that alternatives would share the same potential ARARs and that the ability to meet or exceed those requirements corresponded to different levels of protection. Program experience has shown that while alternatives will usually share chemical- and location-specific ARARs, each will have a unique set of action-specific requirements. Additionally, it is now clear that ARARs do not by themselves necessarily define protectiveness. First, ARARs do not exist for every contaminant, location, or waste management activity that may be encountered or undertaken at a CERCLA site. Furthermore, in those

circumstances where multiple contaminants are present, the cumulative risks posed by the potential additivity of the constituents may require cleanup levels for individual contaminants to be more stringent than ARARs to ensure protectiveness at the site. Finally, determining whether a remedy is protective of human health and the environment also requires consideration of the acceptability of any short-term or cross-media impacts that may be posed during implementation of a remedial action.

In light of these determinations and in response to the new statutory emphasis on utilizing permanent solutions and treatment technologies to the maximum extent practicable, EPA is proposing a major change in the range of alternatives required to be developed.

The initial range of alternatives should represent distinct, promising alternative approaches to managing the site problems. In light of the statutory preference for treatment remedies, this range typically will include alternatives that feature, as a principal element, treatment that reduces the toxicity, mobility, or volume of the hazardous substances at the site. Typically, treatment alternatives range from remedies that treat the principal threats at the site, to remedies that completely destroy, detoxify, or immobilize the hazardous substances and leave materials that require no long-term management. Principal threats will be defined on a site-specific basis and may include a discrete area of the site that consists of highly toxic and/or highly mobile waste (e.g., a lagoon filled with highly concentrated organic contaminants and surrounded by slightly contaminated soils), or a single environmental medium (e.g., highly contaminated ground water).

In developing alternatives, the lead agency should consider whether the prospective remedy should be developed as an on-site alternative, an off-site alternative, or both. While CERCLA clearly states that off-site disposal without treatment is the least preferred alternative, it does not express any preference for or bias against off-site disposal with treatment. In evaluating off-site actions, however, EPA's requirements related to the off-site transfer of CERCLA wastes must be taken into account.

In addition to treatment alternatives, the lead agency should develop, as appropriate, alternatives that control the threats posed by hazardous substances and/or prevent exposure, such as containment technologies and institutional controls. Containment options typically provide a baseline for

comparison with other actions and provide alternatives in case the lead agency concludes that remedies featuring treatment are not practicable.

A no-action alternative will always be developed, although analysis of this option frequently will be more limited than for other alternatives unless information suggests that indeed no action is necessary. In the remedial context, this option is often "no further action," since removals or enforcement actions frequently will have taken place prior to the FS or maintenance activities may be ongoing. The no-action alternative involves leaving the site essentially as it is. Analyzing the no-action alternative provides another useful baseline for evaluating the costs of and protection provided by the other alternatives being considered.

The statutory preference for treatment must be considered in developing a reasonable number of options that have real potential for addressing site problems. The appropriate number of alternatives to be developed will vary by site depending on the nature of the site and the risks posed by the contaminants. For example, while treatment technologies encompass a range of options, there might be only one viable technology that can be applied to the hazardous substances at a particular site. Thus, the variation within the treatment range might involve only the amount of waste treated, or the levels to which the contaminants are reduced by the single technology. In other instances, such as large municipal landfills or mining waste sites, comprehensive treatment options are less likely to be practicable, and therefore the universe of viable alternatives might be reduced to a limited number of remedies involving treatment of the principal threats, engineering controls, institutional controls, or combinations of those approaches.

For an operable unit that does not constitute the complete response action for the site or a particular site problem, it may not be necessary or appropriate to develop the full array of alternatives discussed above. In the event the risk assessment indicates no action is required, few, if any, alternatives will be developed. In summary, a lengthy list of remedial alternatives is not required to fulfill the purpose of this phase of the CERCLA process. The number and type of remedial alternatives should be tailored to fit the site problems being addressed and established remedial action objectives.

CERCLA grants EPA flexibility to examine and select technologies that have not yet been proven in practice, in order to address certain types of sites

and to promote the development of new methods of treatment of hazardous substances. Therefore, EPA today proposes that innovative technologies be carried through to the detailed analysis, if there is a reasonable belief that those technologies will offer significant advantages over other options being considered (e.g., better performance or implementability, fewer or lesser adverse impacts, or lower costs).

A screening step may be conducted in those situations where a wide array of alternatives are available in order to reduce the number of alternatives that will be analyzed in detail. Although the screening will reduce the number of alternatives being considered, a range of choices should be preserved. Screening will not be necessary where only a few choices have emerged from the development of alternatives phase. When the screening step is conducted, the most promising subset of alternatives that are suitable to the site in question should be identified through a preliminary evaluation of the relative effectiveness, implementability, and cost of the alternatives. The effectiveness of the alternatives relates to their overall performance in eliminating, reducing, or controlling the current and potential risks posed by the site, both during implementation and over time. The implementability of the alternatives involves the degree of difficulty associated with their actual construction, including technical, administrative, and logistical problems that affect the time necessary to complete the remedy. Cost considerations include construction costs and the costs of operating and maintaining the remedy over time.

Data at this stage in the remedial process may be incomplete due to ongoing field investigations and treatability studies, but they should be sufficient to assess the major relative strengths and weaknesses of the alternatives. The primary focus during screening is on identifying those alternatives that are clearly ineffective or unimplementable, or that are clearly inferior to other alternatives being considered in terms of their effectiveness, implementability, or cost.

Cost generally will not be the sole reason for eliminating an alternative from further consideration at the screening phase. The primary function of cost at this point in the process is to help identify alternatives that provide levels of effectiveness similar to those of other options being considered, but at substantially higher cost. Cost can also be considered in conjunction with other

factors to determine whether or not an option is likely to yield results in terms of implementability and effectiveness that are in proportion to its costs, relative to other alternatives under consideration. For example, cost may be considered along with implementability factors to determine whether treatment of the principal threats posed by a large municipal landfill would be cost-effective and practicable, relative to other remedial options.

When utilized, the screening step provides another opportunity to tailor the remaining analysis to the identified site problems, ensuring that the number and the types of alternatives carried forward matches the nature and complexity of the site problems.

The lead agency should coordinate with the support agency when developing and/or screening alternatives. The lead agency and support agency should begin to identify action-specific ARARs and TBCs for alternatives that remain for the detailed analysis.

iii. *Detailed analysis.* The purpose of the detailed analysis is to objectively assess the alternatives with respect to nine evaluation criteria that encompass statutory requirements and include other gauges of the overall feasibility and acceptability of remedial alternatives. This analysis is comprised of an individual assessment of the alternatives against each criterion and a comparative analysis designed to determine the relative performance of the alternatives and identify major trade-offs (i.e., relative advantages and disadvantages) between them. This analysis should focus on those subfactors under each criterion that are most pertinent to the circumstances of the site and the scope of the action. Information gathered during this analysis will be used by the decisionmaker to select a remedial action.

These nine criteria can be categorized into three groups, each with distinct functions in selecting the remedy. During the selection process, the decisionmaker will consider these criteria as follows. Overall protection of human health and the environment and compliance with applicable or relevant and appropriate requirements (or invoking a waiver) are threshold criteria that must be satisfied in order for an alternative to be eligible for selection. Long-term effectiveness and permanence, reduction of toxicity, mobility, or volume, short-term effectiveness, implementability, and cost are the primary balancing factors used to weigh major trade-offs between alternative hazardous waste

management strategies. State and community acceptance are modifying considerations that are formally taken into account after public comment is received on the proposed plan and RI/FS report.

Threshold Criteria

(1) *Overall protection of human health and the environment.* Protectiveness is the primary requirement that CERCLA remedial actions must meet. A remedy is protective if it adequately eliminates, reduces, or controls all current and potential risks posed through each pathway by the site. A site where, after the remedy is implemented, hazardous substances remain without engineering or institutional controls, must allow for unrestricted use and unlimited exposure for human and environmental receptors. For those sites where hazardous substances remain such that unrestricted use and unlimited exposure is not allowable, engineering controls, institutional controls, or some combination of the two must be implemented to control exposure and thereby ensure reliable protection over time. In addition, implementation of a remedy cannot result in unacceptable short-term risks to, or cross-media impacts on, human health and the environment.

(2) *Compliance with applicable or relevant and appropriate requirements (ARARs).* Compliance with ARARs is one of the statutory requirements for remedy selection. Alternatives are developed and refined throughout the CERCLA process to ensure either that they will meet all of their respective ARARs or that there is good rationale for waiving an ARAR. During the detailed analysis, information on Federal and State action-specific ARARs will be assembled along with previously identified chemical-specific and location-specific ARARs. Alternatives will be refined to ensure compliance with these requirements, or to begin to identify waivers that might be invoked.

Primary Balancing Criteria

(3) *Long-term effectiveness and permanence.* This criterion reflects CERCLA's emphasis on implementing remedies that will ensure protection of human health and the environment into the future as well as in the near term. In evaluating alternatives for their long-term effectiveness and the degree of permanence they afford, the analysis should focus on the residual risks that will remain at the site after the completion of the remedial action. This analysis should include consideration of the following: the degree of threat posed

by the hazardous substances remaining at the site; the adequacy of any controls (e.g., engineering and institutional controls) used to manage the hazardous substances remaining at the site; the reliability of those controls; and the potential impacts on human health and the environment, should the remedy fail based on assumptions included in the reasonable maximum exposure scenario. This evaluation criterion incorporates the statutory requirements to take into account the following: The uncertainties associated with land disposal; the goals, objectives, and requirements of RCRA; the persistence, toxicity, mobility, and propensity to bioaccumulate of the hazardous substances and their constituents; the long-term potential for adverse health effects from human exposure; the potential for future remedial action costs if the remedy were to fail; and the potential threat to human health and the environment associated with redispersion or containment of the hazardous substances.

(4) *Reduction of toxicity, mobility, or volume.* This criterion addresses the statutory preference for remedies that employ treatment as a principal element by ensuring that the relative performance of the different treatment alternatives in reducing toxicity, mobility, or volume will be assessed. Specifically, the analysis should examine the magnitude, significance, and irreversibility of reductions.

(5) *Short-term effectiveness.* This criterion includes the short-term impacts of the alternatives—i.e., impacts during implementation—on the neighboring community, the workers, or the surrounding environment, including the potential threats to human health and the environment associated with excavation, treatment, and transportation of hazardous substances. The potential cross media impacts of the remedy and the time to achieve protection of human health and the environment should also be analyzed.

(6) *Implementability.* Implementability considerations include the technical and administrative feasibility of the alternatives, and the availability of the goods and services (e.g., treatment, storage, or disposal capacity) on which the viability of the alternative depends. Implementability considerations often affect the timing of various remedial alternatives, e.g., limitations on the season in which the remedy can be implemented, the number and the complexity of materials-handling steps that must be followed, the need to obtain permits for off-site activities, and the need to secure

technical services such as well drilling and excavation.

(7) *Cost.* Cost encompasses all construction and operation and maintenance costs incurred over the life of the project. The focus during the detailed analysis is on the net present value of these costs. EPA intends to continue to rely on OMB Circular A-94 for determining the discount rate for Federal projects, while retaining the option provided in A-94 of using sensitivity analyses. EPA believes that the discount rate represents an important aspect of developing a realistic accounting of the future costs of remedial alternatives and an accurate comparison of the total costs, and the cost-effectiveness, of treatment and nontreatment remedies.

Modifying Criteria

(8) *State acceptance.* This criterion, which is an ongoing concern throughout the remedial process, reflects the statutory requirement to provide for substantial and meaningful State involvement. State comments may be addressed during the development of the FS, as appropriate, although formal State comments usually will not be received until after the State has reviewed the draft RI/FS and the draft proposed plan prior to the public comment period. The proposed plan that is issued for public comment along with the RI/FS report should indicate whether or not the State has commented on or concurred with EPA's preferred alternative or that State comments have not been received. The ROD should specifically address State concurrence or nonconcurrence with the response action that is selected, particularly noting State views on compliance or noncompliance with State ARARs.

(9) *Community acceptance.* This criterion refers to the community's comments, where community is broadly defined to include all interested parties, on the remedial alternatives under consideration. These comments are taken into account throughout the RI/FS process through the communications that occur as the community relations plan is implemented. Again, EPA can only preliminarily assess community acceptance during the development of the FS, since formal public comment will not be received until after the public comment period for the proposed plan and the RI/FS is held. The detailed analysis, however, may summarize preliminary comments on components of the alternatives received up to that point.

4. *Selecting remedial actions.* The selection of a CERCLA remedial action from among alternatives is a two-step

process. First, the lead agency, in conjunction with the support agency, will review the results of the RI/FS to identify a preferred alternative, which will be presented to the public in a proposed plan along with the supporting information and analysis, for review and comment. Second, the lead agency, will review the public comments, consult with the support agency in order to evaluate whether the preferred alternative is still the most appropriate remedial action for the site or site problem, and make a decision.

While the decisionmaking steps, in general, are similar for all types of response actions, the information, analysis, and criteria upon which response action decisions are based will vary depending on the scope of the action and complexity of the decision.

The identification of the preferred alternative, and subsequently the remedy selection, is based on an evaluation of the major trade-offs among alternatives in terms of the evaluation criteria, focusing on specific factors most relevant to site circumstances, and the overall practicability of each alternative. The decisionmaker should first determine whether all alternatives meet the threshold criteria. Those alternatives that provide adequate protection of human health and the environment, and either comply with all of their ARARs, or provide grounds for invoking a waiver of an ARAR, satisfy the threshold criteria. Any alternative that does not satisfy both of these requirements is not eligible for selection.

The preferred alternative is then selected by determining which alternative appears to provide the best combination of attributes with respect to the five primary balancing criteria: Long-term effectiveness, short-term effectiveness, reduction in toxicity, mobility, or volume, implementability, and cost. Generally, at this point only informal and perhaps incomplete comments of the State and community are known. These two modifying criteria are typically considered after the public comment period on the proposed plan.

Total costs of each alternative should be compared to the overall effectiveness they afford and the relationship between costs and overall effectiveness across alternatives should be examined to determine which alternatives offer results proportional to their costs such that they represent a reasonable value for the money. The lead agency will choose the alternative that represents the best combination of those factors that are deemed most important to the site. In performing the balancing necessary to make that decision, the decisionmaker must weigh the

preference for remedies involving treatment as a principal element.

The proposed plan will identify the alternative that appears to offer the best balance of trade-offs among alternatives in terms of the criteria, summarize the position of the State resulting from its formal comments on the RI/FS and the draft proposed plan, and state the lead agency's expectation that the preferred alternative will satisfy all statutory requirements. The proposed plan will be issued for public review and comment.

In making the final selection, the lead agency reassesses 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 community during the public comment period. The decisionmaker will consider State and community comments regarding EPA's evaluation of alternatives with respect to the other criteria (e.g., potential short-term impacts associated with implementation). These comments may help EPA determine whether to modify aspects of the preferred alternative, or whether another alternative provides a more appropriate balance. If the preferred alternative is determined to be the most appropriate remedy, in that it offers the best balance among the factors evaluated, the lead agency will select that alternative. If not, the lead agency, in conjunction with the support agency, will select another protective, cost-effective alternative that provides a better combination of long- and short-term effectiveness, reduction of toxicity, mobility, or volume, implementability, and cost. This may require a discussion of significant changes in the ROD or the development of a new proposed plan to be made available for additional public comment prior to selection of remedy. (See § 300.430 preamble section below, "H. Community Relations.")

For Fund-financed actions, EPA may consider the need to use Fund monies at other sites in selecting a less costly remedy over a more desirable but substantially more expensive alternative as the most practicable, cost-effective solution.

In selecting a remedy, the statutory requirements discussed below must be satisfied. These requirements will be addressed differently depending on the scope of the action being taken.

i. The selected remedy is protective of human health and the environment, by eliminating, reducing, or controlling risks posed through each pathway such that human and environmental receptors are no longer threatened. The protectiveness evaluation of an operable

unit may be limited to that unit itself; at a minimum, the protectiveness determination should show that conditions at a site are not exacerbated as a result of the action.

ii. The selected remedy at least attains all ARARs, unless use of a waiver or waivers is justified. For an operable unit, the ARAR determination will be limited to the wastes being actively managed. CERCLA section 121 allows EPA to waive ARARs for actions that are a portion of a more comprehensive remedy that will attain ARARs when completed. Only Federal and State requirements that are applicable or relevant and appropriate to the operable unit must be addressed. Justification must be provided if a waiver is being invoked.

iii. The selected remedy is cost-effective in that its overall effectiveness is proportionate to its total costs.

iv. The selected remedy utilizes permanent solutions, treatment technologies, or resource recovery technologies to the maximum extent practicable. In making this determination for an operable unit, the need or opportunity to take expeditious action at the site may be considered.

5. *Documenting decisions.* Remedies selected under Superfund are documented in a record of decision (ROD). The general process of documenting decisions is similar for both operable units and comprehensive remedial actions, however, the content and level of detail will vary depending on the scope of the action. A ROD serves several purposes. It summarizes the problems posed by a site, the technical analysis of alternative ways of addressing those problems, and the technical aspects of the selected remedy that are later refined into design specifications. A ROD is also a legal document that demonstrates that the lead and support agency decisionmaking has been carried out in accordance with statutory and regulatory requirements and that explains the rationale by which remedies were selected. EPA's decisions will be supported on the basis of the ROD and other materials in the administrative record in cases that challenge remedy selection decisions. Finally, RODs are important documents that summarize key facts discovered, analyses performed, and decisions reached by the lead and support agencies. A notice of availability of a signed ROD will be published in a major local newspaper of general circulation. In addition, the lead agency will make the ROD available for public inspection and copying at or near the site, before remedial action begins.

All RODs will have the following common features:

i. A brief summary of the problems posed by the site, the alternatives evaluated as potential remedies, the results of that analysis, the rationale for the remedial action being selected, and the technical aspects of the selected action.

ii. A demonstration that the decision was made in accordance with statutory and regulatory requirements. The ROD should discuss how the requirements of section 121 of CERCLA have been addressed, including whether or not the preference for treatment as a principal element is satisfied or an explanation in those cases in which the selected remedial action does not satisfy this preference.

iii. A description of the remediation level(s) and/or other performance levels that the remedial action is expected to achieve.

iv. A statement of whether or not hazardous substances, pollutants, or contaminants will remain at the site such that a five-year review of the response action will be required (see section 6. below).

v. A discussion of significant changes in the final selected remedy from the preferred alternative. A responsiveness summary that identifies and responds to significant comments should be available with the record of decision.

6. *Five-year review.* The CERCLA amendments require periodic reviews—at least every five years—at sites where the remedial action leaves hazardous substances, pollutants, or contaminants on-site. EPA interprets this requirement to mean that a review is required at those sites where such substances remain on-site above levels that allow for unrestricted use and unlimited exposure for human and environmental receptors. This means that whenever a remedy is selected that assumes limited uses of the land or relies on institutional controls to ensure attainment of protective exposure levels, a review will be conducted. In addition, a review will be conducted at sites where substances remain on-site if the standards initially used to define protective exposure levels are subsequently changed. If the periodic review shows that a remedy is no longer protective of human health and the environment, additional action will be evaluated and taken to mitigate the threat.

In addition to the statutorily required five-year reviews, EPA might specify in its record of decision more frequent reviews, or specific reviews of the remedy selected, such as assessments of remedial technologies that might not

have been available at the time the decision was made.

C. Alternative Selection Of Remedy Approaches

1. *Variations on the site-specific approach.* EPA has considered two major variations on the site-specific balancing approach laid out in today's proposed rule, each of which establishes a somewhat different structure. EPA has considered the potential advantages and disadvantages associated with the kind of structure these variations would afford. After analysis of public comment, EPA may include in the final NCP rule any or a combination of the options discussed here.

i. *Variation Number 1: Site-specific balancing with a cost-effectiveness screen.* The first variation would follow the process as laid out in the proposed rule through the screening of alternatives. However, this approach would: (a) Retain the organization of evaluation criteria used during screening through the detailed analysis and selection; (b) not include State and community acceptance as evaluation criteria; (c) establish an explicit step by which cost-effectiveness would be determined that would screen alternatives before the final determination of the practicable extent to which permanent solutions and treatment technologies will be utilized.

The detailed analysis would focus on the three categories of criteria first examined in the screening step: effectiveness (long- and short-term), implementability, and cost. While individual protectiveness and ARARs factors would be examined in the detailed analysis of effectiveness and implementability, the protectiveness finding and final determination of ARAR compliance (or justification of a waiver) would not be addressed until the selection step. Reductions in toxicity, mobility, or volume would also be analyzed under effectiveness, rather than as a separate criterion. Under this approach, State acceptance also would not be an explicit evaluation criterion. This approach would not ask for an explicit characterization of State comments unless there were a disagreement between EPA and the State over the preferred alternative in the proposed plan or at the time of final remedy selection. In the case where the State is the lead agency, this approach would consider State acceptance to be built into the process. Where the State is serving as the support agency, this approach would rely on the support agency comment period on the completed RI/FS and proposed plan to

provide an adequate opportunity for formal comments. Similarly, community acceptance would not be an evaluation criterion but a consideration in the final selection phase as public comments received on the proposed plan and RI/FS are factored into the lead and support agencies' thinking. Thus, the detailed analysis would be limited to producing an organized presentation of the trade-offs among alternatives in terms of effectiveness (short- and long-term, including toxicity, mobility, or volume reduction), implementability and cost, highlighting those trade-offs of primary importance for this particular site.

The selection phase under this alternative approach would be conducted very similarly to the proposed rule with the exception that the determination of the cost-effectiveness of the alternatives would be made as an explicit screening step prior to selection of the alternative which represents the best balance of factors and utilizes permanent solutions and treatment technologies to the maximum extent practicable. Following a check that all alternatives afford adequate protection and attain their ARARs (or provide grounds for invoking a waiver), the cost-effectiveness of the alternatives would be determined by examining the long-term effectiveness achieved by each alternative in relation to its costs and comparing this long-term effectiveness/cost relationship among alternatives. Those alternatives which do not offer long-term effectiveness proportionate to their costs relative to the other alternatives would not be considered to be cost-effective and would be eliminated from further consideration. This step would function as a threshold screen to determine whether the alternatives are cost-effective, not which is "the only" or "the most" cost-effective option. Relative degrees of cost-effectiveness could be taken into account in the final balancing step by which the remedy is selected.

This approach retains a consistent organization of criteria throughout the screening, detailed analysis, and selection steps of the process. Limiting the balancing to three broader categories of criteria, as opposed to nine, may simplify and streamline the analysis and focus the rationales for remedy selection. This approach would not include State and community acceptance as formal criteria to be balanced along with effectiveness, implementability, or cost factors. This approach also establishes a step which more clearly separates the cost-effectiveness finding from the finding

that permanent solutions and treatment technologies or resource recovery technologies have been used to the maximum extent practicable.

ii. *Variation Number 2: Sequential decisionmaking approach.* Another variation on a site-specific balancing approach involves breaking the final remedy selection into multiple, sequential decision steps. Again, the steps of the process through the screening of alternatives are the same as under the previously described approaches. The detailed analysis is conducted using the effectiveness, implementability, and cost categories of criteria proposed in Variation No. 1. Differences arise in the selection phase, which is conducted in five steps under this approach.

First, using the results of the detailed analysis, the alternatives are qualitatively ranked for overall effectiveness. The preference for treatment is addressed by favoring options that afford better long-term reliability and permanence, other factors being equal, and by giving this factor increased emphasis if factors are not equal. Other considerations are emphasized on a site-specific basis. Following (or concurrent with) this effectiveness ranking, the alternatives are qualitatively ranked for their overall implementability. Clearly unimplementable or impracticable alternatives would be eliminated from further consideration. Again, individual implementability factors would be emphasized on a site-specific basis. The effectiveness and implementability rankings would then be combined into a joint effectiveness/implementability ranking, also performed qualitatively. This step would require a balancing of all noncost factors, again giving long-term effectiveness and permanence extra emphasis.

After an overall noncost ranking is determined, the relative costs of the alternatives would then be considered. Unlike the previous approach, which determines the cost-effectiveness of alternatives by focusing on the relationship between their cost and their long-term effectiveness only, this approach would focus on the relationship between cost and all noncost factors. Specifically, this approach would isolate and compare the differences in cost and the differences in combined effectiveness and implementability across remedial alternatives. Alternatives whose incremental costs were out of proportion to incremental effectiveness/implementability would be deemed not cost-effective. All other alternatives

would be deemed cost-effective and would therefore be eligible for final selection.

The final step involves selecting from the remaining (cost-effective) options the one that received the highest effectiveness/implementability ranking. The option that utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable would be the alternative that offers the best balance of noncost factors (effectiveness and implementability) that is also cost-effective.

This approach adds more structure to the process by separating the final remedy selection into a series of steps, and by specifying the sequence in which those steps would take place. Each step would be presented in detail and justified in the record of decision. An advantage that may derive from this second variation is more consistent documentation of the rationale for remedy selection. Alternatively, the compartmentalization of decisionmaking steps may not allow sufficient flexibility for decisionmakers to synthesize all of the different kinds of information they must bring to bear on a remedy selection.

EPA solicits comments on these alternative site-specific balancing approaches, specifically on potential advantages or disadvantages related to the type of criteria considered in the detailed analysis, the steps by which the statutory findings are made, and the degree of structure they propose.

2. *Alternative strategies—i. Point of departure strategy.* A different type of strategy would adopt a point of departure analysis. This approach would differ from those previously described as early as the development of alternatives phase. Aggressive treatment options that could result in absolute destruction, detoxification, or immobilization of all waste above health- or risk-based levels would be identified. Initially, containment technologies or treatment/containment combinations might also be considered but would not pass the screening step if any viable alternatives involving full treatment existed. The detailed analysis would focus on identifying the most effective alternatives with effectiveness here defined primarily by technical feasibility and the long-term results each treatment process could achieve. Short-term impacts that might be caused by an alternative would be a secondary consideration.

Effective treatment options would then be put through an implementability

screen. The implementability screen would be used primarily to eliminate clearly unimplementable options, although alternatives that were significantly less implementable than other options and offered no gain in long-term effectiveness and permanence would also be screened out. The least costly of the most effective options, defined primarily in terms of toxicity, mobility, or volume reduction achieved, would be selected.

This approach places the greatest emphasis on treatment, virtually equating the degree of effectiveness, permanence, and/or protectiveness with the degree of toxicity, mobility, or volume reduction attained. This is a fundamentally different assumption than that which underlies the other three approaches previously discussed. It is a point of departure approach in that it presumes that the alternative employing the most aggressive form of treatment of all waste typically will be selected unless unimplementable. This approach gives much less weight to short-term impacts of the technologies, site-specific implementability considerations, and the relative cost-effectiveness of alternatives than any of the site-specific balancing approaches. This approach implicitly interprets the mandate to "utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable" as a mandate to use the maximum amount of treatment possible.

Variations of this point of departure approach could be fashioned that would retain the initial presumption that the analysis of alternatives should begin with those that achieve the greatest toxicity, mobility, or volume reduction through treatment, but would allow broader consideration of implementability factors and cost-effectiveness to permit consideration of other alternatives employing less treatment. Modifications could avoid the presumption that full treatment is the necessary means to achieving protection of human health and the environment.

One potential implication of this approach, particularly with respect to the way it defines cost-effectiveness and the mandate to utilize permanent solutions and alternative treatment or resource recovery technologies to the maximum extent practicable, is that it may jeopardize EPA's ability to ensure an efficient use of Trust Fund monies. Application of maximum treatment to each site as it is addressed in turn may prevent EPA from distributing resources across sites in a manner that ensures that treatment can be applied to the

worst problems first. In addition, under this option, other mandates in CERCLA section 121, including protection of human health and the environment, compliance with ARARs, and cost-effectiveness, might not be accorded sufficient consideration during the selection of remedy process.

ii. *Site stabilization strategy.* Another wholly different strategy would assume the objective of maximizing the number of sites that could be addressed by the Superfund program. To stretch the resources of the trust fund, the vast majority of sites initially would be addressed in conjunction with the Superfund removal program with only interim remedial measures. Only those sites or portions of sites for which treatment was immediately necessary to protect human health and the environment might be addressed with treatment. This strategy would envision two phases of CERCLA implementation: the first, a series of interim remedies to stabilize sites and to prevent further degradation; the second, implementation of "permanent" remedies most often involving substantial treatment. This second and final phase of remediation would address the sites posing the worst risks first.

EPA seeks comments on the appropriateness and desirability of pursuing one of these alternative strategies.

3. *Analytical tools and techniques.* In addition to these overall approaches and strategies, there are a number of different analytical tools and methodologies that could be employed in the detailed analysis and/or selection phases in a variety of ways and combinations to come up with additional variations. These tools and techniques include screening against threshold criteria, pairwise comparison, and ranking of alternatives or criteria. These techniques are represented in some of the approaches previously described. Additional tools that could be employed include scoring, which would involve measuring alternatives against a consistent scale, weighting of alternatives or criteria in an explicit fashion, and the techniques of decision analysis which could be used to construct a multi-attribute model that incorporates the assumptions of exactly how different criteria should be considered in relation to one another in assessing the attributes of alternatives. This could be done on a programmatic or site-specific basis.

EPA solicits comments on the potential advantages and disadvantages associated with these techniques, the appropriateness of establishing them in

regulations or guidance, and recommendations regarding alternative approaches that might be established using different combinations of these methods.

D. Special Notice and Moratoria

A fundamental goal of the CERCLA enforcement program is to facilitate settlements, i.e., agreements securing the voluntary performance or financing of response actions by PRPs. EPA believes that settlements are most likely to occur and will be most effective when EPA interacts frequently and early in the process with PRPs. The special notice procedures in CERCLA section 122(e) provide an important means of encouraging interaction and improving the prospects for settlement.

Section 122(e) provides EPA with the discretion to issue special notice letters when to do so would facilitate agreement and expedite remedial action. Issuance of a special notice triggers a moratorium during which EPA may not commence a response action under section 104(a) or an RI/FS under section 104(b), or initiate an enforcement action under section 106. This moratorium provides a "formal" period for EPA and PRPs to negotiate a settlement.

Initially, the length of the special notice moratorium is 60 days. If EPA receives a good faith offer during this 60 day period, the moratorium is extended an additional 30 days for RI/FS negotiations as well as 60 days for RD/RA negotiations, non-time-critical removal negotiations, and enforcement actions under section 106.

While "formal" negotiations pursuant to a special notice will play a central role in the settlement process, "formal" negotiations should not be viewed as the sole vehicle for reaching settlement. To assure that "formal" negotiations are productive, frequent interaction between EPA and PRPs, through exchange and "informal" discussions may be appropriate outside of the "formal" special notice moratorium. "Informal" discussions are communications that can occur between EPA and PRPs throughout the response process.

The "Interim Guidance on Notice Letters, Negotiations, and Information Exchange," dated October 19, 1987, includes guidance to the Regions on the use of the special notice procedures and on managing negotiation deadlines for removal and remedial actions. In addition, the "Interim Guidance: Streamlining the CERCLA Settlement Decision Process," dated February 12, 1987, includes guidance on managing negotiation deadlines for the RI/FS and RD/RA.

E. EPA's Approach for Ground-Water Remediation Under the Superfund Program

It has been the policy of EPA's Superfund program for several years to operate within the framework of EPA's Ground-Water Protection Strategy in determining the appropriate remediation for contaminated ground water at CERCLA sites. EPA's Ground-Water Protection Strategy establishes different degrees of protection for ground waters based on their vulnerability, use, and value. EPA's Superfund program has applied this concept in looking to characteristics of vulnerability, use, and value, among other factors, in formulating and evaluating remedial alternatives for contaminated ground water. This section summarizes the approach EPA has presented in the "Preliminary Review Draft Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites" (April, 1988).

The goal of EPA's Superfund approach is to return usable ground waters to their beneficial uses within a timeframe that is reasonable given the particular circumstances of the site. The Superfund remedial process assesses the characteristics of the affected ground water as the first step toward making three decisions: the level to which the ground water will be restored; the timeframe within which the restoration will occur; and the most appropriate technology or approach for attaining these goals. Using the "EPA Guidelines for Ground-Water Classification" (Draft, December 1986) as a guide, a determination is made as to whether the contaminated ground water falls within Class I, II, or III.

Class I ground waters are resources of unusually high value that are highly vulnerable to contamination because of the hydrological characteristics of the areas where they occur. They are characterized as follows:

1. The ground water is irreplaceable because no reasonable alternative source of drinking water is available to substantial populations; or

2. The ground water is ecologically vital, providing the base flow for a particularly sensitive ecological system that supports a unique habitat.

Class II ground waters are all non-Class I ground waters that are currently used or are potentially available for drinking water or other beneficial uses. Class II-A ground waters are currently used as a source of drinking water; Class II-B ground waters are potential drinking water sources.

Class III ground waters are not considered to be potential sources of

drinking water and are of limited beneficial use. These are ground waters which are highly saline, or are otherwise contaminated beyond levels that allow restoration using methods reasonably employed in public water treatment systems. This condition must not be the result of a release that is attributable to a specific site. Class III is further distinguished by the degree of interconnection with adjacent water. Class III-A ground waters are highly to moderately interconnected; Class III-B ground waters have a low degree of interconnection and are typically at greater depths. CERCLA sites will rarely involve Class III-B ground waters.

The lead agency will use the EPA Guidelines for Ground-Water Classification to assist in classifying the ground water at a CERCLA site. Such classifications are site-specific and limited in scope to the Superfund remedial action that will be undertaken. Classifications performed by EPA's Superfund program do not apply to that geographical area in general, to any other actions that may be undertaken under any other State or Federal program, or to private actions. The classification scheme described above may be superseded by other classification schemes which may have been promulgated by a State and are applicable or relevant and appropriate to the CERCLA response. This approach may also be modified by State ARARs that derive from wellhead protection programs which may require protection of a municipal water source, or replacement if that source is contaminated.

The Superfund program's approach to ground-water remediation calls for development of a limited number of ground-water remediation alternatives expressed in terms of a remediation level (i.e., cleanup concentration in the ground water), a time period for restoration to the preliminary remediation goals for all locations in the area of attainment, and the technology or approach that will be used to achieve those goals.

Preliminary remediation goals are established based on the analysis of ARARs and other pertinent standards, criteria, and advisories identified by the lead and support agencies. For ground water that is or may be used for drinking water (Class I or II), the maximum contaminant levels (MCLs) set under the Safe Drinking Water Act or more stringent promulgated State standards are generally the applicable or relevant and appropriate standard. (For a fuller discussion regarding when MCLs are relevant and appropriate, see Subpart E, § 300.430 preamble section, F.13,

CERCLA-specified relevant and appropriate requirements.) When MCLs or State standards do not exist for contaminants identified in the ground water at the site, the Superfund program looks to other ARARs, standards, criteria, or advisories including: proposed MCLs, health advisories, drinking water equivalent levels, reference doses, risk specific doses, water quality criteria, MCLGs, proposed MCLGs, or State health advisories. As noted in the earlier discussion of establishing protective remediation goals during the RI/FS, it may be necessary to make adjustments to these levels when ARARs and other standards, criteria, and advisories are outside the 10^{-4} to 10^{-7} risk range which EPA generally considers as protective at CERCLA sites.

It should be noted that although MCLs are generally the cleanup standards, as described above, the remedial action necessary to attain an MCL level for the most predominant chemical (or a protective level for a chemical without an MCL) usually results in other chemicals achieving levels that are more protective than their respective MCLs.

It should also be noted that the Superfund program achieves consistency with 40 CFR 264.94 of RCRA Subpart F which may be ARAR to CERCLA actions. These provisions offer the choice of establishing cleanup standards at background, MCLs, or alternate concentration limits (ACLs). In setting remediation levels, the Superfund program generally uses the MCL or other health-based standards, criteria, or advisories which are the equivalent of a health-based ACL under RCRA.

Restoration time periods refer to the period of time needed to achieve established remediation levels within the entire area of attainment, defined as the area from the edge of any waste that, as the final remedy, will be managed on-site to the limits of the contaminant plume. Restoration time periods may range from very rapid (one to five years) to relatively extended (perhaps several decades). EPA's preference is for rapid restoration of contaminated ground water that can be used for drinking water wherever practicable, particularly for Class I ground waters and ground waters associated with drinking water supplies described in CERCLA section 118 (i.e., where the release of hazardous substances, pollutants or contaminants has resulted in the closing of drinking water wells or has contaminated a principal drinking water supply). The most appropriate timeframe must,

however, be determined through an analysis of alternatives. The minimum restoration timeframe will be determined by hydrogeological conditions, specific contaminants at a site, and the size of the contaminant plume. Once a determination of the practical limits on the restoration timeframe has been made, the restoration timeframes for remedies can be evaluated relative to these limits based on the following factors:

- i. Feasibility of providing an alternative water supply;
- ii. Current use of ground water;
- iii. Potential need for ground water;
- iv. Effectiveness and reliability of institutional controls;
- v. Ability to monitor and control the movement of contaminants in ground water;
- vi. Cost; and
- vii. Other environmental impacts.

If there are other readily available drinking water sources of sufficient quality and yield that may be used as an alternative water supply, the importance of rapid restoration of the contaminated ground water is reduced. Where a future demand for drinking water from ground water is likely and other potential sources are not sufficient, those remedies which achieve more rapid restoration should be favored.

The effectiveness and reliability of institutional controls to prevent the utilization of contaminated ground water for drinking water purposes during the restoration period should be evaluated. If these controls are not clearly effective, more rapid restoration may be necessary. The availability of good management and institutional controls may provide a basis to extend the period of response. Institutional controls will usually be used as supplementary protective measures during implementation of ground-water remedies as well.

The third variable in formulating and evaluating ground water alternatives is the technology or method that will be used to achieve the remediation level within the desired timeframe. EPA expects that most ground water remedies at CERCLA sites will involve at least some pumping and treating. Variation among alternatives often stems from the aggressiveness of the pumping scheme (e.g., number of wells, rate of extraction, whether or not reinjection is included), the type of treatment applied (e.g., air stripping), and what is done with the residuals from the treatment process. Typical options for the treated effluent include reinjection, discharge to surface water, or discharge to a publicly owned treatment works (POTW). Other more

passive methods, such as gradient control and slurry walls may be appropriate to prevent the further spread of contamination. In limited cases, natural attenuation, which can involve either the dispersion or actual biodegradation of contaminants, may be the most appropriate solution for a site.

There are special situations where it may not be practicable to actively restore ground water including sites where there are: (a) Widespread plumes resulting from non-point sources (e.g., some mining, pesticide, or industrial areas); (b) Hydrogeological constraints (e.g., aquifers with very low transmissivity, or aquifers in fractured bedrock or karst formations); (c) Containment constraints (e.g., the presence of dense, non-aqueous phase liquids which collect in "puddles" at the base of an aquifer); and (d) Physiochemical limitations (e.g., interactions between contaminants and the aquifer material which limit the rate at which they can be removed). In these cases, the lead agency may provide wellhead treatment and/or rely on natural attenuation with institutional controls as the final remedy.

The 1986 amendments to CERCLA state a preference for treatment that reduces the toxicity, mobility, or volume of hazardous substances as a principal element. This preference applies to ground water as well as source control actions. Wherever ground water poses one of the principal threats at a site, the Superfund program will seek to pump and treat if practicable. However, site characteristics, such as fractured bedrock or karst topography, may preclude or severely hinder aggressive pumping and treating options in certain cases and dictate other ground-water restoration methods. In other situations, natural attenuation may achieve site cleanup goals in a reasonable period of time.

For Class I and II ground waters, the Superfund program will consider several different alternative restoration time periods (including five years) and methodologies to achieve the preliminary remediation level and select the most appropriate option (including the final cleanup level) by balancing trade-offs of long-term effectiveness, short-term effectiveness, reductions of toxicity, mobility, or volume, implementability, and cost.

CERCLA section 121(d)(2)(B)(ii) allows the use of ACLs if specified conditions are met. EPA proposes to use ACLs for the Class I and II ground water when these conditions are met and cleanup to MCLs or other protective levels is determined not to be practicable. When the likely point of

human exposure has been set beyond the facility boundary, this provision requires an analysis at the end of the remedial action to determine whether the ground water discharging into surface water will cause a statistical increase of contaminants in the surface water. Moreover, such a remedial action must include enforceable measures to prevent use of any contaminated ground water. In using this provision, the lead agency would also consider an alternative remedy that would partially restore ground water to levels that could reasonably be treated by public water treatment systems.

For Class III ground water (i.e., ground water that is unsuitable for human consumption due to high salinity or widespread contamination and does not have the potential to affect drinkable ground water), drinking water standards are neither applicable nor relevant and appropriate. Likewise, restoration timeframes and cleanup methods for these ground waters will not be formulated on the same basis as drinkable ground waters. Rather, alternatives should be developed based on the specific site conditions. First, a determination must be made as to whether the ground water has any beneficial use (e.g., agricultural or industrial). If so, a remediation level, restoration time period, and method can be tailored to returning the ground water to that designated use. More typically, concerns with Class III ground waters will center on potential discharge of the contaminated ground water to surface waters or "higher class" ground waters and Superfund will establish a level consistent with exposure-based ACLs under RCRA Subpart F. Environmental receptors and systems may well determine the necessity and extent of ground-water remediation. In general, alternatives for Class III ground waters will be relatively limited and the evaluation less extensive than for Class I or II ground waters and the focus will be on preventing adverse spread of the contamination.

Complex fate and transport mechanisms of contaminated ground waters often make it difficult to accurately predict the performance of the ground-water remedial action. Therefore, the remedial process must be flexible and allow for changes in the remedy based on the performance of several years of operation. If the chosen remedial action does not meet performance expectations after a period of operation, the decisionmaker should decide the extent to which further or different action is necessary and

appropriate to protect human health and the environment.

Widespread contamination due to multiple sources is handled in a special way by the Superfund program. At most NPL sites, program policy is to determine contributors to the aquifer contamination, and involve them in the overall response action. EPA will take the lead role in managing the overall response if the NPL site is the primary contributor to the multiple-source problem. To the extent it can be determined, Superfund participation in the overall ground-water remediation will be proportional to the contribution the NPL site(s) makes to the areawide problem. EPA may also take any action necessary to protect human health and the environment such as providing alternate water supplies or wellhead treatment if there is a reasonable belief that the NPL sources in and of themselves pose a threat to human health and the environment.

EPA solicits comment on this approach toward ground-water remediation at NPL sites.

F. Compliance with the Applicable or Relevant and Appropriate Requirements of Other Laws

CERCLA mandates that remedial actions be in compliance with other environmental and public health laws. Compliance with other laws is a key consideration throughout the remedial selection process. This section discusses achieving compliance with applicable or relevant and appropriate requirements (ARARs) under other laws in the following order:

1. The history of EPA's Compliance Policy.
2. Codification of the Compliance Policy in CERCLA reauthorization.
3. The definition of ARARs and Other Information To Be Considered (TBC).
4. The difference between applicable requirements and relevant and appropriate requirements.
5. Resolving ARAR disputes.
6. Types of ARARs.
7. State ARARs.
8. Methods for identifying ARARs.
9. Compliance with ARARs and the development and selection of remedies.
10. Circumstances in which ARARs may be waived.
11. When and where ARARs and TBCs associated with cleanup levels must or should be attained.
12. Addressing new ARARs or other information after the initiation of the remedial action.
13. CERCLA-specified relevant and appropriate requirements.
14. ARARs for investigation-derived waste.

15. Substantive versus administrative requirements.

16. Potential ARARs of the Resource Conservation and Recovery Act (RCRA).

17. Hypothetical examples of relevant and appropriate requirements.

[The relationship between ARARs and determining remediation levels is discussed in the § 300.430 preamble section above, B.3.]

1. *The history of EPA's Compliance Policy.* The November 20, 1985 revisions to the NCP stated that, as a general rule, EPA's policy is to attain or exceed applicable or relevant and appropriate requirements under Federal environmental and public health laws in CERCLA response actions. At that time EPA revised existing § 300.68(i) of the NCP to require that, for all remedial actions, the selected remedy must attain or exceed the Federal ARARs identified for that site. In the preamble to the 1985 revisions to the NCP, EPA stated that ARARs could only be determined on a site-by-site basis, gave examples of how this would work, and reprinted from EPA's October 2, 1985 Compliance Policy a list of Potentially Applicable or Relevant and Appropriate Requirements, as well as a list of Other Federal Criteria, Advisories, Guidance, and State Standards To Be Considered (TBC). TBCs are non-promulgated criteria, advisories, etc., that can be consulted along with or in addition to ARARs. From these lists, the lead agency could select ARARs or TBCs, based upon the circumstances at a particular site. Furthermore, EPA provided five limited circumstances in which remedies that did not attain all ARARs could be selected.

2. *Codification of the Compliance Policy in CERCLA Reauthorization.* On October 17, 1986, CERCLA was reauthorized with additional new requirements. Section 121 of CERCLA requires that remedial actions comply with Federal and more stringent State requirements that are legally applicable or relevant and appropriate under the circumstances of the release or threatened release with respect to any hazardous substance or pollutant or contaminant that will remain on-site. EPA's policy is to attain or exceed such ARARs during the implementation of the remedial action (where pertinent to the action itself) as well as at the completion of the action, unless a waiver is justified.

The term ARAR refers to an applicable or relevant and appropriate requirement; a single requirement cannot be both applicable and relevant and appropriate. However, when reference is made to compliance with

ARARs, the term refers to such requirements collectively and means compliance with both applicable requirements and relevant and appropriate requirements.

Although section 121(d) basically codified EPA's 1985 policy regarding compliance with other laws, this section does add some requirements to the pool of potential ARARs. The 1986 CERCLA amendments provide that promulgated State standards that are more stringent than Federal standards are also potential ARARs for CERCLA remedial actions. Where no Federal ARAR exists for a chemical, location, or action, but a State ARAR does exist, or where a State ARAR is broader in scope than the Federal ARAR, the State ARAR is considered more stringent.

Furthermore, the CERCLA amendments provide that Federal water quality criteria established under the Clean Water Act (CWA), and maximum contaminant level goals (MCLGs) established under the Safe Drinking Water Act, must be attained when found to be relevant and appropriate under the circumstances of the release (see ARARs preamble section below, "13. CERCLA-specified relevant and appropriate requirements").

CERCLA retains the basic concept of compliance with ARARs for any remedy selected (unless a waiver is justified). ARARs will be determined by the lead agency based upon its analysis of which requirements are applicable or relevant and appropriate to the distinctive set of circumstances and actions contemplated at a specific site.

The requirements of CERCLA section 121 generally apply as a matter of law only to remedial activities occurring on-site. However, as a matter of policy, EPA will attain ARARs to the extent practicable considering the exigencies of the situation when carrying out removal actions (see § 300.415 preamble section, C.1.).

3. *The definition of ARARs and TBCs (§§ 300.5 and 300.400(g)).* EPA is proposing nonsubstantive clarifications to the definition of applicable requirements.

i. *Applicable requirements.* EPA proposes that applicable requirements are "those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or State law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site." (See the discussion of definition revisions in today's Subpart A preamble section.)

Applicable requirements may be identified on a site-specific basis by determining whether the jurisdictional prerequisites of a requirement fully address the circumstances at the site or the proposed remedial activity. Some typical jurisdictional prerequisites follow:

- a. Who, as specified by the statute or regulation, is subject to its authority;
- b. The activities the statute or regulation requires, directs, or prohibits;
- c. The substances or places within the authority of the requirement; and
- d. The time period for which the statute or regulation is in effect.

Basically, in determining applicability, the question is whether a regulation would be legally enforceable at the site (or for the contaminant or action) if a private party were remediating the site apart from any CERCLA authority.

The word "substantive" in the proposed definitions of "applicable" and "relevant and appropriate" is not meant to imply a necessary level of "significance" or "weight" for a requirement to be an ARAR. Rather, "substantive" is used to distinguish the universe of ARARs from administrative requirements, which are not considered potential ARARs. (See ARARs preamble section below, "15. Substantive versus administrative requirements.")

ii. *Relevant and appropriate requirements.* If a requirement is not applicable, one must consider whether a requirement is both relevant and appropriate. EPA is also proposing nonsubstantive clarifications to the definition of relevant and appropriate requirements. EPA proposes that relevant and appropriate requirements are "those cleanup standards, standards of control, or other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or State law that, while not 'applicable' to a hazardous substance, pollutant, or 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."

Relevant and appropriate requirements are also determined on a site-specific basis by determining their jurisdictional prerequisites and comparing them to the circumstances at a CERCLA site. Once the decisionmaker determines that a requirement is not applicable, the decisionmaker compares the circumstances at the site to the purpose and subject matter addressed by the requirement in question to determine if there is sufficient similarity

to find that the requirement is both relevant and appropriate for the site.

Determining whether a requirement is both relevant and appropriate is essentially a two-step process. First, to determine relevance a comparison is made between the action, location, or chemicals covered by the requirement and related conditions of the site, release, or potential remedy; a requirement is relevant if the requirement generally pertains to these conditions. Second, to determine whether the requirement is appropriate, the comparison is further refined by focusing on the nature of the substances, the characteristics of the site, the circumstances of the release, and the proposed remedial action; the requirement is appropriate if, based on such comparison, its use is well-suited to the particular site. Only those requirements that are determined to be both relevant and appropriate must be complied with.

EPA proposes that the following criteria, where pertinent to the type of requirement in question, be used to determine whether there is sufficient similarity to find that a requirement is relevant and appropriate:

- a. Whether the purpose for which the requirement was created is similar to the specific objectives of the CERCLA action;
- b. Whether the media regulated or affected by the requirement are similar to the media contaminated or affected at the CERCLA site;
- c. Whether the substances regulated by the requirement are similar to the substances found at the CERCLA site;
- d. Whether the entities or interests affected or protected are similar to the entities or interests affected by the CERCLA site;
- e. Whether the actions or activities regulated by the requirement are similar to the remedial action contemplated at the CERCLA site;
- f. Whether any variances, waivers, or exemptions of the requirement are available for the circumstances of the CERCLA site or CERCLA action;
- g. Whether the type of place regulated is similar to the type of place affected by the CERCLA site or CERCLA action;
- h. Whether the type and size of structure or facility regulated is similar to the type and size of structure or facility affected by the release or contemplated by the CERCLA action; and
- i. Whether any consideration of use or potential use of affected resources in the requirement is similar to the use or potential use of the affected resource.

In determining which requirements are relevant and appropriate, the pivotal

criteria differ depending upon the type of requirement under consideration, namely chemical-specific, location-specific, or action-specific (see ARARs preamble section below, "6. Types of ARARs"). In general, for chemical-specific requirements the focal point for the relevant and appropriate determination is whether the requirement for the chemical at the CERCLA site sets a health- or environmental-based level based on an exposure scenario (including the medium) that is similar to the potential exposure at a CERCLA site. For location-specific requirements, generally the primary test for relevance and appropriateness is whether the location under consideration is sufficiently similar to the location upon which the requirement is based. For action-specific requirements, generally the test for relevance is whether the action contemplated at the CERCLA site is similar. In order to determine appropriateness, the decisionmaker may consider, among others, the following factors: whether the action contemplated at the site or the circumstances at the site which require an action, the substances involved, and the objectives of the action are sufficiently similar to the action-specific requirement itself.

iii. *Other information to be considered (TBC).* Other information that does not meet the definition of ARAR may be necessary to determine what is protective or may be useful in developing Superfund remedies. Criteria, advisories, or guidance developed by EPA, other Federal agencies, or States may assist in determining, for example, health-based levels for a particular contaminant for which there are no ARARs or the appropriate method for conducting an action. This other information to be considered (TBC) when developing CERCLA remedies generally falls within three categories:

- a. Health effects information with a high degree of creditability, e.g., RfDs;
- b. Technical information on how to perform or evaluate site investigations or response actions; and
- c. Policy, e.g., EPA's ground-water policy.

4. *The difference between applicable requirements and relevant and appropriate requirements.* Applicable requirements and relevant and appropriate requirements differ in the amount of discretion allowed in identifying them. Applicable requirements are identified by a largely objective comparison to the circumstances at the site; if there is a

one-to-one correspondence between the requirement and the circumstances at the site, then the requirement is applicable. There is little discretion involved in this determination. If a requirement is not applicable, the decisionmaker uses best professional judgment to determine whether the requirement addresses problems or situations that are generally pertinent to the conditions at the site (i.e., the requirement is relevant) and whether the requirement is well-suited to the particular site (i.e., the requirement is appropriate). However, once a regulation (or portion thereof) is identified as relevant and appropriate, it is applied as strictly as is an applicable requirement.

Statutes and regulations are sometimes made up of discrete requirements, each requirement having its own set of jurisdictional prerequisites. EPA has found that within these authorities often only some requirements within a regulation are relevant and appropriate. In contrast with an applicable requirement, flexibility exists to identify discrete "appropriate" portions of a regulation which may be mixed with "appropriate" portions of other regulations in a manner that makes good environmental sense for the site. (See hybrid closure example described in ARARs preamble section below, "16.vi. Hypothetical examples of compliance with RCRA: closure requirements.")

The other requirements in that same regulation may be relevant (in that they address in a broad sense the same problem as is faced at the CERCLA site) but not appropriate because the requirement is not well-suited to the circumstances at the CERCLA site.

An example of a requirement that may be relevant but not appropriate in certain situations is the requirement to cap landfills upon closure. This requirement is designed to apply to specific types of discrete units. This requirement for closure of hazardous wastes deposited on land may be relevant because it addresses the same kinds of wastes and action proposed at a CERCLA site, but may be inappropriate because of the physical size and character of the contamination at the CERCLA site. Although capping may be appropriate for smaller areas, it may not be appropriate in some circumstances for large dispersed areas of low-level soil contamination, such as may be found at many large municipal landfill facilities. (Other examples are described in the ARARs preamble section below, "16. Potential ARARs of RCRA.")

5. Resolving ARAR disputes. Because judgment is involved in determining which requirements are relevant and appropriate, Federal, State, and potentially responsible parties may on occasion arrive at different conclusions. EPA, operating in its oversight role for CERCLA enforcement actions, will resolve ARAR disputes between the lead agency and the potentially responsible parties. An ARAR dispute between a State and EPA may be submitted to the dispute resolution process described in today's preamble discussion of Subpart F on State Involvement. If a State strongly desires attainment of a substantive requirement that has been determined by the dispute resolution process not to be an ARAR, such a requirement will be met if the State demonstrates an ability and willingness to pay for the additional increment of expense associated with attaining such a requirement. Moreover, as discussed in today's preamble Subpart F section, States may be required to take the lead in the remedial design and remedial action necessary to meet such additional requirements.

6. Types of ARARs. For ease of identification, EPA divides ARARs into three categories: chemical-specific, location-specific, and action-specific. Chemical-specific ARARs are usually health- or risk-based numerical values or methodologies which, when applied to site-specific conditions, result in the establishment of numerical values. These values establish the acceptable amount or concentration of a chemical that may remain in, or be discharged to, the ambient environment. For example, the Safe Drinking Water Act requires the establishment of maximum contaminant levels (MCLs), the maximum permissible level of a contaminant in water which is delivered to any user of a public water system. MCLs are generally relevant and appropriate as cleanup standards for contaminated ground water that is or may be used for drinking. (See ARARs preamble section below, "13. CERCLA-specified relevant and appropriate requirements.")

Location-specific ARARs generally are restrictions placed upon the concentration of hazardous substances or the conduct of activities solely because they are in special locations. Some examples of special locations include floodplains, wetlands, historic places, and sensitive ecosystems or habitats. Examples of location-specific ARARs are the substantive requirements of the Coastal Zone Management Act and the Wild and Scenic Rivers Act. Consideration must

also be given to whether locational restrictions are prospective only (e.g., siting requirements) or whether they are intended for existing situations.

Action-specific ARARs are usually technology- or activity-based requirements or limitations on actions taken with respect to hazardous wastes, or requirements to conduct certain actions to address particular circumstances at a site. Remedial alternatives which involve, for example, closure or discharge of dredged or fill material may be subject to ARARs under RCRA and the Clean Water Act, respectively.

These categories were developed to assist in identifying ARARs and are not necessarily precise. Some ARARs may not fit into any one of these categories while other ARARs may fit into two or more of these categories. For example, RCRA land disposal regulations can be considered both chemical and action-specific. (See EPA's draft "CERCLA Compliance with Other Laws Manual," OSWER Directive No. 9234.1-01, which provides detailed guidance on identification of and compliance with ARARs. The manual includes matrices which group ARARs into the chemical-specific, location-specific, and action-specific categories.)

7. State ARARs (§ 300.400(g)(4)). Section 121(d)(2)(A) of the amended CERCLA states that remedies must comply with "any promulgated standard, requirement, criteria, or limitation under a State environmental or facility siting law that is more stringent than any Federal standard, requirement, or limitation" if applicable or relevant and appropriate to the hazardous substance or release in question.

In § 300.400(g)(4), EPA proposes to define promulgated State requirements as those laws or regulations that are of general applicability and are legally enforceable. State advisories, guidance, or other non-binding guidelines as well as standards that are not of general applicability will not be considered potential ARARs.

EPA's treatment of State ARARs is fully consistent with the way EPA has treated Federal requirements under the current NCP, in which Federal advisories and nonpromulgated guidelines are put in a separate category ("other information to be considered") from potential ARARs. Like their Federal counterparts, State advisories and other nonpromulgated guidelines may still be considered in determining an appropriate, protective remedy; but neither Federal nor State advisories should be treated as potential ARARs.

Further, unless limitations found in site-specific State permits are based on promulgated ARARs, such limitations will not be considered potential ARARs, however widely they may be used in the State. However, frequently used permit limitations may be considered in fashioning a protective remedy for a site.

The phrase "legally enforceable" refers to State regulations or statutes which contain specific enforcement provisions or are otherwise enforceable under State law. EPA expects that State laws or standards which are considered potential ARARs have been issued in accordance with State procedural requirements. The phrase "of general applicability" is meant to preclude consideration of State requirements promulgated specifically for one or more CERCLA sites as potential ARARs. EPA believes that Congress did not intend CERCLA actions to comply with requirements that would not also apply to other similar situations in that State. This interpretation is consistent with the statutory qualification on State siting requirements banning land disposal in CERCLA section 121(d)(2)(C)(iii)(I) and the waiver for inconsistently applied State standards in CERCLA section 121(d)(4)(E). For a State requirement to be a potential ARAR it must be applicable to all remedial situations described in the requirement, not just CERCLA sites.

General State goals that are contained in a promulgated statute and implemented via specific requirements found in the statute or in other promulgated regulations are potential ARARs. For example, a State antidegradation statute which prohibits degradation of surface waters below specific levels of quality or in ways that preclude certain uses of that water would be a potential ARAR. Where such promulgated goals are general in scope, e.g., a general prohibition against discharges to surface waters of "toxic materials in toxic amounts," compliance must be interpreted within the context of implementing regulations, the specific circumstances at the site, and the remedial alternatives being considered.

8. Methods for identifying ARARs. The preamble sections above regarding RI/FS and selection of remedy generally describe when ARARs and TBCs are identified and analyzed (e.g., during "project scoping," "remedial investigation," etc.). This section explains how ARARs can be identified during those stages.

The identification of ARARs necessarily begins with a review of the universe of Federal and State requirements to determine the potential

ARARs that may be applied at a site (see Subpart F preamble regarding identification of State ARARs). Examples of potential Federal and State ARARs and TBCs are included in the next Subpart E, § 300.430 preamble section, "G." As more is learned about the site and as remedial alternatives are considered, Federal and State requirements can be narrowed to those which are potential ARARs for each alternative.

ARARs are identified with increasing certainty as the RI/FS process proceeds. For example, the purpose of site characterization during the remedial investigation phase is to provide data regarding contaminants or chemicals present in the release, the extent of contamination, and the specific location and characteristics of the site. These data assist in identifying more specifically the potential chemical- and location-specific ARARs. Likewise, as more details regarding remedial alternatives are developed, potential action-specific ARARs can be identified. During the detailed analysis and selection of remedy phases, the decisionmaker must compare the potential ARARs to the known information regarding conditions at the site and the remedial alternatives to determine if the potential ARARs are, in fact, actually applicable or relevant and appropriate to the response action. More ARARs may need to be identified during remedial design as the specific details of the remedial action are developed. (See also ARARs preamble section below, "12. Addressing new ARARs or other information after the initiation of the remedial action.")

9. Compliance with ARARs and the development and selection of remedies. In the 1985 revisions to the NCP, EPA required the development of five remedial alternatives, primarily based upon their relative attainment of ARARs. As discussed in today's preamble section regarding RI/FS and selection of remedy, remedies would no longer be developed along this scale although all remedies, except those invoking a waiver, must attain ARARs.

EPA proposes, however, to continue to rely on ARARs to guide the lead agency in formulating appropriate hazardous waste response alternatives. For example, an ARAR may indicate an acceptable concentration of a contaminant in soil. An alternative that includes excavation of contaminated media at a site would use that ARAR to determine the extent of excavation. Additionally, ARARs may indicate the amounts of hazardous substances that can be emitted or discharged during or after treatment. EPA recognizes,

however, that there may be situations in which ARARs will not exist or will not be sufficient to protect human health and the environment.

Nonetheless, a proposed remedial alternative's attainment of ARARs does not determine whether that alternative should be chosen over another alternative that attains a different set of ARARs (or qualifies for waivers from ARARs). The decision on which alternative to select is made at the end of the process and is based on the balancing of the selection of remedy criteria. ARARs will differ depending upon the specific actions and objectives of each alternative being considered, e.g., an alternative that would remove and treat all contaminants from the site would invoke clean closure and treatment ARARs whereas an alternative that leaves waste in place would invoke only landfill closure ARARs (see ARARs preamble section below, "16.vi. Hypothetical examples of compliance with RCRA: closure requirements").

10. Circumstances in which ARARs may be waived § 300.430(f)(3)). CERCLA reauthorization modified somewhat the current NCP's five limited circumstances in which all ARARs need not be attained. CERCLA eliminated the "enforcement exception," basically codified the remaining four waivers, and added two new waivers—one for circumstances in which a State standard has been inconsistently applied in other remedial actions within a particular State, and another for circumstances in which the same level of protectiveness offered by an ARAR may be achieved by using a different method or technology with an equivalent standard of performance. These waivers apply only to meeting ARARs with respect to remedial activities occurring on-site. A waiver must be invoked for each ARAR that will not be attained or exceeded. Other statutory requirements, such as that remedies are to be protective of human health and the environment, and that remedies must be cost-effective, cannot be waived. The waivers provided by CERCLA section 121(d)(4), some circumstances under which each waiver might be invoked, and criteria for invoking the waivers are discussed below.

i. Interim Measures.

[T]he remedial action selected is only part of a total remedial action that will attain such level or standard of control when completed. CERCLA section 121(d)(4)(A).

This waiver will generally be applicable to interim measures that are expected to be followed within a

reasonable time by complete measures that will attain ARARs. The interim measures waiver may apply to sites at which a total site remedy is divided into several smaller actions.

For example, the selected remedy at a site may include excavation and treatment of the source. However, the treatment method may require treatability testing or time for set-up or construction. During this time, an interim measure involving stabilization of the source, such as by use of a cap, may be appropriate. In such a circumstance, the interim measure waiver would allow the temporary stabilization actions at the site to constitute the initial components of a phased remedial response; these actions would not be required to attain landfill closure ARARs because the response would not be complete.

Factors that are appropriate for invoking this waiver include:

a. *Potential for exacerbation of site problems.* The interim measure should not directly cause additional migration of contaminants, complicate the site response, or present an immediate threat to human health or the environment; and

b. *Noninterference with final remedy.* The interim measure selected must not interfere with, preclude, or delay the final remedy, consistent with EPA's priorities for taking further action.

EPA invites comment on its interpretation of this waiver and on these factors.

ii. *Greater Risk to Health and the Environment.*

[C]ompliance with such requirement at the facility will result in greater risk to human health and the environment than alternative options. CERCLA section 121(d)(4)(B).

EPA suggests that this waiver be invoked when compliance with an ARAR poses greater risks than noncompliance with that ARAR. This waiver could be used for a remedial alternative that would otherwise cause greater environmental damage or health risks solely because a particular ARAR had to be attained. For example, an alternative may include cleanup of PCBs at a site. However, attaining the ambient concentration level for PCBs spread throughout river sediment might require widespread dredging of the sediments, causing an unacceptable release of the pollutant to the water body and damaging or disrupting the ecosystem. Waiving the ARAR for ambient PCB concentrations in the river sediment would eliminate the need to conduct such harmful dredging.

Meeting an ARAR could also pose greater risks to workers or residents. For

example, excavation of a particularly toxic, volatile, or explosive waste to meet an ARAR could pose high, short-term risks. If protective measures were not practicable for such excavation, use of this waiver might be appropriate.

Specific factors that may be considered in invoking the waiver for preventing greater risks include:

a. *Magnitude of adverse impacts.* The risk posed or the likelihood of present or future risks posed by the remedy using the waiver should be significantly less than that posed by the totally compliant remedy posing the risk;

b. *Duration of adverse impacts.* The more long lasting the risks from the totally compliant remedy, the more this waiver becomes appropriate; and

c. *Reversibility of adverse impacts.* This waiver is especially appropriate if the risks posed by meeting the ARAR could cause irreparable damage.

Remedies protective of human health and the environment but not meeting all ARARs should be compared to the remedy meeting ARARs that causes the minimum adverse impacts. The additional public health and environmental benefits of not meeting all ARARs must be weighed against the adverse impacts caused by meeting all ARARs. Only the ARARs that cause the greater risk are eligible to be waived.

iii. *Technical Impracticability.*

[C]ompliance with such requirement is technically impracticable from an engineering perspective. CERCLA section 121(d)(4)(C).

The term "impracticable" implies an unfavorable balance of engineering feasibility and reliability. EPA believes that the term "engineering perspective" used in the statute implies that cost, although a factor, is not generally the major factor in the determination of technical impracticability. However, a remedial alternative that is feasible might be deemed technically impracticable if it could only be accomplished at an inordinate cost.

Furthermore, the use of the term "impracticable" implies that remedies that are not demonstrated but that are thought to be feasible cannot be eliminated because of this waiver. Thus, EPA suggests using this waiver for cases where: (a) neither existing nor innovative technologies can reliably attain the ARAR in question, or (b) attainment of the ARAR in question would be illogical or infeasible from an engineering perspective.

EPA suggests that the technical impracticability waiver should be invoked when either of the following specific criteria are met:

(1) *Engineering feasibility.* The current engineering methods necessary

to construct and maintain an alternative that will meet the ARAR cannot reasonably be implemented.

(2) *Reliability.* The potential for the alternative to continue to be protective into the future is low, either because the continued reliability of technical and institutional controls is doubtful, or because of inordinate maintenance costs.

iv. *Equivalent Standard of Performance.*

[T]he remedial action selected will attain a standard of performance that is equivalent to that required under the otherwise applicable standard, requirement, criteria, or limitation, through use of another method or approach. CERCLA section 121(d)(4)(D).

EPA proposes to use this waiver in situations where an ARAR stipulates use of a particular design or operating standard, but equivalent or better remedial results (e.g., contaminant levels or reliability) could be achieved using an alternative design or method of operation. For instance, an alternative may involve reduction of either the mobility or toxicity of a hazardous substance through a specified form of treatment. The waiver may be invoked where a substitute form of treatment from that specified by an ARAR (e.g., fixation instead of incineration) achieves comparable reductions in either mobility or toxicity.

The CERCLA Reauthorization Conference Committee's Statement of Managers makes the following point with regard to this waiver:

Subsection [121](d)(4)(D) allows the selection of a remedial action that does not comply with a particular Federal or State standard or requirement of environmental law, where an alternative provides the same level of control as that standard or requirement through an alternative means of control. This allows flexibility in the choice of technology but does not allow any lesser standard or any other basis (such as a risk-based calculation) for determining the required level of control. However, an alternative standard may be risk-based if the original standard was risk-based. H. Rep. 99-962, 99th Cong., 2d Sess. 249.

EPA invites comments on the following necessary conditions for invoking this waiver:

a. Degree of protection of health, welfare, and the environment (e.g., environmental concentration achieved) is equal to or greater than that under the original ARAR;

b. The level of performance achieved is equal to or better than that specified by the ARAR (e.g., concentration of residual);

c. The potential for the alternative ARAR to continue to be protective into

the future is equal to or greater than that afforded by the ARAR to be waived; and

d. The time required to achieve beneficial results using the alternative remedy is not significantly more than the original ARAR. An alternative that achieves similar results in significantly less time should be considered as advantageous.

v. Inconsistent Application of State Requirements.

[W]ith respect to a State standard, requirement, criteria, or limitation, the State has not consistently applied (or demonstrated the intention to consistently apply) the standard, requirement, criteria, or limitation in similar circumstances at other remedial actions. CERCLA section 121(d)(4)(E).

This waiver is intended to prevent unjustified or unreasonable restrictions from being imposed on remedial actions. The issues raised by this waiver are closely tied to those involved in the definition of "promulgated" (see ARARs preamble section above, "7. State ARARs").

EPA envisions using this waiver in two situations. First, State requirements may have been developed and promulgated but never applied because of a lack of applicability in past situations. EPA believes that such requirements should not be applied in CERCLA actions where there is evidence that the State does not intend to apply them elsewhere. Second, State standards that have been variably applied or inconsistently enforced may give reason to invoke the inconsistent application waiver. A standard is presumed to have been consistently applied unless there is evidence to the contrary.

Consistency of application may be determined by:

- Similarity of sites or response circumstances (nature of contaminants or media affected, characteristics of waste and facility, degree of danger or risk, other hazardous waste management programs, etc.);
- Proportion of noncompliance cases (including enforcement actions);
- Reason for noncompliance;
- Intention to consistently apply future requirements as demonstrated by policy statements, legislative history, site remedial planning documents, or State responses to Federal-lead sites; newly promulgated requirements shall be presumed to embody this intention unless there is contrary evidence.

vi. Fund Balancing.

[I]n the case of a remedial action to be undertaken solely under Section 104 using the Fund, selection of a remedial action that attains such level or standard of control will not provide a balance between the need for

protection of public health and welfare and the environment at the facility under consideration, and the availability of amounts from the Fund to respond to other sites which present or may present a threat to public health or welfare or the environment, taking into consideration the relative immediacy of such threats. CERCLA section 121(d)(4)(F).

The Fund-balancing waiver may be invoked when meeting an ARAR would entail such cost in relation to the added degree of protection or reduction of risk afforded by that standard that remedial action at other sites would be jeopardized. (Even with this waiver, the remedy must still comply with the statutory requirement to be protective of human health and the environment.)

EPA suggests that the Fund-balancing waiver be used when attainment of the ARAR would significantly reduce the availability of Fund monies for other sites (considering the number of other sites and the expected cost of remediations). Projections should show that significant imminent threats from other sites may not be addressed under the current Fund if the ARAR were attained.

EPA intends to establish the use of a dollar threshold for routinely considering invoking the Fund-balancing waiver. The threshold would be based on an amount significantly higher than the average cost of remediating sites with problems similar to those at the site under consideration, e.g., large municipal landfills. Further, EPA intends to develop specific criteria for invoking the waiver. EPA solicits comment on the proposal to establish a dollar threshold and on what other specific criteria should be established for invoking the waiver.

11. *When and where ARARs and TBCs associated with cleanup levels must or should be attained.* This section discusses the place and the time EPA intends that ARARs or TBCs related to contaminant levels or performance or design standards be achieved, i.e., the point of compliance.

i. *When ARARs must and TBCs should be attained.* Although not compelled by statute, EPA is proposing that the applicable or relevant and appropriate requirements of other laws pertinent to a remedial action itself must be met during the conduct of the remedial action as well as at the completion of the remedial action unless a waiver is invoked (see § 300.435(b)(2)). Some examples of potential ARARs for the conduct of remedial activities include the RCRA treatment, storage, and disposal requirements, restrictions on emissions discharges based upon the Clean Air Act national ambient air

quality standards, and CWA effluent discharge limitations.

ii. *Where ARARs must and TBCs should be attained.* Sometimes the ARAR itself will specify where the requirement should be attained. For example, the Clean Water Act requirement to apply best available technology controls to discharges of toxic pollutants to receiving waters is measured for compliance at the discharge point (i.e., the "end-of-the-pipe").

However, at sites where an ARAR does not specify where it is to be attained or where a TBC value is used to set an acceptable level of exposure, the lead agency has the discretion to determine where the level shall be attained to ensure protectiveness.

Generally, EPA's policy is to attain ARARs and TBCs pertaining either to contaminant levels or to performance or design standards so as to ensure protection at all points of potential exposure. This means that any waste left in place should either be brought to levels that allow for unrestricted use and unlimited exposure or managed according to performance or design specifications; if active measures are not practicable and cost-effective, exposure to the waste must be controlled through legally enforceable institutional means. (See Subpart E, § 300.430 RI/FS and selection of remedy preamble introductory section for discussion regarding institutional controls.) Depending on the site circumstances, exposure pathways may include ingestion of ground or surface water, contact with or ingestion of soil, and inhalation. At each potential point of exposure, EPA assumes a maximum reasonable exposure scenario and sets the goals that will ensure protectiveness for each response. For instance, if any hazardous substances remain at a site, exposure by direct contact should be considered in fashioning a protective remedy. Hazardous substances that present a direct contact threat should be treated or covered to the appropriate degree. If a waste management area is left at a site, ground water should attain the appropriate cleanup levels at the edge of the area.

12. *Addressing new ARARs or other information after the initiation of the remedial action.* EPA recognizes that subsequent to the initiation of the remedial action new standards based on new scientific information or awareness may be developed and that these standards may differ from the cleanup standards on which the remedy was based.

EPA believes that such new ARARs or other information should be considered as part of the review conducted at least every five years under CERCLA section 121(c) for sites where hazardous substances remain on-site. The review requires EPA to assure that human health and the environment are being protected by the remedial action. Hence, the remedy should be examined in light of any new standards that would be applicable or relevant and appropriate to the circumstances at the site and in light of any other pertinent new information in order to ensure that the remedy is still protective. In certain situations, new standards or the information on which they are based may indicate that the site presents a significant threat to health or environment. If such information comes to light at times other than at the five-year reviews, EPA will consider the necessity of acting to modify the remedy at such times.

13. *CERCLA-specified relevant and appropriate requirements—i. Safe Drinking Water Act standards.* CERCLA section 121(d)(2)(A) states that a remedial action will attain a level or standard of control established under the Safe Drinking Water Act (SDWA), among other statutes, where such level or control is applicable or relevant and appropriate to any hazardous substance, pollutant, or contaminant that will remain on-site. The enforceable standards under the SDWA are maximum contaminant levels (MCLs), which represent the maximum permissible level of a contaminant in water which is delivered to any user of a public water system. Section 121(d)(2)(A) also states that such remedial action shall require a level or standard of control which at least attains Maximum Contaminant Level Goals (MCLG) established under the SDWA where relevant and appropriate under the circumstances of the release or threatened release. The following discussion addresses how to choose between these two standards.

Under the SDWA, MCLGs are health-based goals set at levels at which no adverse health effects may arise, with a margin of safety. An MCL is required to be set as close as feasible to the respective MCLG, taking into consideration the best technology, treatment techniques, and other factors (including cost). As the enforceable standard for public water supplies, MCLs are fully protective of human health and, for carcinogens, fall within an acceptable individual lifetime risk range of 10^{-4} to 10^{-7} . For noncarcinogens, which are the majority

of chemicals to be controlled, MCLs will nearly always be set at MCLGs. Therefore, in many cases, the MCL will be equivalent to the MCLG.

In a guidance document published last year in the *Federal Register*, "Superfund Program: Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements," 52 FR 32496 (August 27, 1987), EPA stated its policy that for surface or ground water that is or may be used for drinking, MCLs are generally relevant and appropriate as cleanup standards. The basis for this policy was that MCLs are protective of human health and represent the level of water quality that EPA believes is acceptable for over 200 million Americans to consume every day from public drinking water supplies.

EPA recognizes that there may be special circumstances where protection of human health requires more stringent standards than MCLs, as with multiple contaminants or pathways of exposure. In such cases, EPA will make a site-specific determination whether risk posed by such multiple contaminants or pathways is in excess of 10^{-4} and, therefore, of the need for more stringent standards, considering MCLGs, EPA's policy on use of appropriate risk ranges for carcinogens, levels of quantification, and other pertinent guidelines.

Many commenters agreed with EPA because MCLs are fully protective of human health. Comments in support of the guidance noted that the range of risk for MCLs is within EPA's acceptable risk range and that MCLGs are often not achievable given current technology because many MCLGs are set at the zero risk level. Further, requiring MCLGs at CERCLA sites would impose a more restrictive requirement than exists for the drinking water consumed by most households in the country. Also noted was that MCLs are legally applicable at the point of use, generally the tap or at a well used for supplying drinking water. Application of MCLs to cleanup of ground water at a CERCLA site that is or may be used for drinking, therefore, imposes a more stringent standard than exists under the SDWA.

Other commenters on the interim ARARs guidance disagreed with EPA's proposal and asserted that section 121 required that MCLGs generally be the cleanup standards for ground water at CERCLA sites. Some opponents argued that section 121 specifically prohibited consideration of cost-effectiveness in choosing a relevant and appropriate cleanup standard until after a standard that protects human health and the environment is selected. Therefore, they argued, application of MCLs as the

relevant and appropriate standard is inconsistent with the statute because cost and available technology factors are considered in the development of MCLs.

In summary, the commenters presented divergent opinions on this specific issue. After review of comments, EPA believes that the interpretation articulated in the interim ARARs guidance is correct and that section 121 permits the use of MCLs as generally relevant and appropriate cleanup standards for the following reasons. Under section 121, it is EPA's responsibility to determine what standards are applicable or relevant and appropriate at a site, a determination made on a case-by-case basis within general EPA program guidelines. Although section 121(d)(2)(A) does not specifically refer to cleanup of contaminated ground water to its beneficial uses, CERCLA actions will generally use SDWA standards for ground water that is or could be used for drinking. EPA believes that MCLs, the enforceable standards under the SDWA, are the appropriate standard because they represent the level of quality for the nation's drinking water supplies. (The application of SDWA standards to the cleanup of ground water is also discussed in the § 300.430 preamble section above, "E. EPA's Approach for Ground-Water Remediation under the Superfund Program.")

Using MCLs as relevant and appropriate standards is consistent with EPA's use of a risk range to determine acceptable levels of residuals of carcinogens. CERCLA does not require that EPA eliminate all risk. Therefore, EPA believes that generally a risk range of 10^{-4} to 10^{-7} incremental individual lifetime cancer risk for carcinogens fulfills its statutory mandate to protect human health and the environment. MCLs for carcinogens are set within this risk range. For noncarcinogens, MCLs will nearly always be set at MCLGs, thus assuring that even sensitive populations will experience no adverse health effects. Since the majority of chemicals encountered at sites are noncarcinogens, there will be no difference in the protectiveness of MCLGs and MCLs for most contaminants.

Furthermore, even though cost and available technology may be considered when setting an MCL, an MCL is protective and therefore achieving an MCL complies with CERCLA's mandate to protect human health and the environment.

(See also EPA's interpretation of CERCLA section 121(d)(2)(B)(ii)

regarding the use of alternate concentration limits (ACLs) as cleanup standards for ground water that is or may be used for drinking in the § 300.430 preamble section above, "E. EPA's Approach for Ground-Water Remediation under the Superfund Program.")

ii. *Federal Water Quality Criteria.* EPA develops two kinds of Federal Water Quality Criteria (FWQC), one for protection of human health and another for protection of aquatic life. FWQC are non-enforceable guidelines used by the States to set Water Quality Standards (WQS) for surface water. FWQC, which identify threshold level concentrations for noncarcinogens and concentrations equating to various risk levels for carcinogens, guide States in assessing the toxicity of a contaminant. States designate the use of a given water body based on its current and potential use and apply the FWQC to set pollutant levels that are protective of that use. State WQS, which can be narrative or expressed as a numerical concentration limit, are subject to EPA approval.

If a State has promulgated a numerical WQS that applies to the contaminant and the designated use of the surface water at a site, the WQS will generally be applicable or relevant and appropriate for determining cleanup levels, rather than an FWQC. A WQS represents a determination by the State, based on the FWQC, of the level of contaminant which is protective in that surface water body, a determination subject to EPA approval.

CERCLA 121(d)(2) requires that, in determining whether an FWQC is relevant and appropriate, the latest information available be considered. Thus, an FWQC may be relevant but not appropriate if its scientific basis is not current. EPA's recommended RfDs and cancer potency factors, which are based on the EPA's evaluation of the latest information, should be used when an FWQC does not reflect current information.

CERCLA 121(d)(2) also requires that the designated or potential use of the surface or ground water and the purposes for which the criteria were developed be considered in determining whether a FWQC is relevant and appropriate.

The purpose of the FWQC for human health is to identify protective levels from two routes of exposure—exposure from drinking the water and from consuming aquatic organisms, primarily fish. There are levels provided for exposure from both routes, and from fish consumption alone. Whether a FWQC is relevant and appropriate, and which form of the criteria is appropriate,

depends on whether exposure via either or both of these routes is likely to occur, and thus on the designated use of the water body.

As discussed in the section above, MCLs represent the level of quality EPA has determined to be safe for drinking and thus are generally relevant and appropriate for ground water that is or may be used for drinking and for surface water designated as a current or potential drinking water supply. Therefore, when a promulgated MCL exists, the FWQC for that constituent would not be relevant and appropriate. However, when MCLs are not available, a FWQC may be relevant and appropriate in water that is a potential drinking water source.

Since MCLs only reflect exposure from drinking the water, a FWQC for consumption of aquatic organisms may be appropriate in addition to the MCL, resulting in a more stringent cleanup level, when that route is also a concern at the site.

FWQC without modification are not relevant and appropriate in selecting cleanup levels in ground water, where consumption of contaminated fish is not a concern. However, a FWQC may be adjusted to reflect only exposure from drinking the water. Alternatively, the use of EPA-recommended RfDs and cancer potency factors, following a methodology similar to that used to develop the drinking water portion of the FWQC, could serve as a guideline for cleanup if the FWQC is not current.

A FWQC adjusted for drinking water could also be relevant and appropriate in surface water designated for drinking water purposes, since the FWQC is specifically designed to be protective of that use. Whether a FWQC that also includes fish consumption should be selected depends on the likelihood of exposure occurring from this route and on whether fishing is included in the State's designated use.

If the State has designated a water body for recreation, a FWQC reflecting fish consumption only, not drinking the water, may be relevant and appropriate if fishing is included in that designation.

Generally, FWQC are not relevant and appropriate for other uses, such as industrial or agricultural use, since exposures reflected in the FWQC are not likely to occur.

A FWQC for protection of aquatic life may be relevant and appropriate for a remedy involving surface waters (or ground-water discharges to surface water) when the designated use requires protection of aquatic life or when environmental concerns exist at the site. If protection of human health and aquatic life are both a concern, the more

stringent standard or criteria should generally be applied.

A State numerical WQS is essentially a site-specific adaptation of a FWQC, subject to EPA approval, and, when available, is generally the appropriate standard for the specific water body, rather than a FWQC. If both an MCL and numerical State WQS exist for the same constituent where the water is designated for drinking, the State WQS should be used if it is more stringent, as required by CERCLA section 121(d)(2)(A)(ii).

In sum, a FWQC, or component of the FWQC, may be relevant and appropriate when the FWQC is intended to protect the uses designated for the water body at the site, or when the exposures for which the FWQC are protective are likely to occur. To be considered relevant and appropriate, FWQC must also reflect current scientific information. In addition, whether a FWQC is relevant and appropriate depends on the availability of standards, such as an MCL or WQS, specific for the constituent and use.

14. *ARARs for investigation-derived waste.* EPA believes that the CERCLA section 121 requirement that remedial activities comply with Federal and State ARARs applies not only to the implementation of the remedy selected for a site, but also to the handling, treatment, or disposal of investigation-derived wastes produced during remedial activities, such as the SI or RI/FS.

Specifically, there are several ways that investigation-derived wastes may result from such remedial activities. Examples include the following: (i) Ground water or surface water samples that must be disposed of after analysis; (ii) drill cuttings or core samples from soil boring or monitoring well installations; (iii) purge water removed from sampling wells before ground water samples are collected; (iv) water, solvents, or other fluids used to decontaminate field equipment such as backhoes, drilling rigs, and pipes; (v) condensate from pipes used for gas sampling in landfills; and (vi) waste produced by on-site pilot-scale facilities constructed to test technologies best suited for remediation of the site.

The handling, treatment, or disposal of any such investigation-derived wastes must satisfy Federal and State requirements that are applicable or relevant and appropriate to the site location and the amount and concentration of the hazardous substances, pollutants, or contaminants involved. EPA intends that field investigation teams use best

professional judgment in determining when investigation-derived wastes may contain hazardous substances and to handle such substances in accordance with all Federal and State ARARs. For example, if ground-water samples containing hazardous substances are to be disposed of by discharge into surface water, they may require treatment before disposal so that water quality standards are not violated. Also, if it is known or suspected that purge waters are drawn from an area with significant dioxin contamination, EPA expects that such investigation-derived wastes will be containerized, tested, and disposed of in accordance with all ARARs. (Consistent with established practice, investigation-derived materials may remain on-site until the remedial action commences.) In contrast, the routine containerization and testing of large volumes of drilling muds and purge waters which are not suspected to contain hazardous substances may be unnecessary because they result only in delays to the investigation with no attendant public health or environmental benefit.

15. *Substantive versus administrative requirements.* CERCLA section 121(d) requires that remedial actions shall require a level or standard of control for hazardous substances, pollutants, or contaminants which attains ARARs. Levels or standards of control are basic performance objectives for the remedial action (e.g., acceptable exposure levels after the remedial action is completed). These basic performance objectives are defined by substantive ARARs. Examples of substantive ARARs include acceptable concentrations for specific chemicals under the Safe Drinking Water Act which define cleanup levels for ground water that is or may be used for drinking water, technology-based requirements under RCRA for the management of hazardous wastes which define, for example, the physical characteristics of a new landfill if waste is to be closed in place, and restrictions on activities in certain locations which define, for example, the conduct of excavation in order to minimize potential harm to wetlands.

Requirements which do not in and of themselves define a level or standard of control are considered administrative. Administrative requirements include the approval of, or consultation with, administrative bodies, issuance of permits, documentation, and, generally, reporting and recordkeeping. The Superfund program imposes its own reporting and recordkeeping requirements to ensure that substantive levels or standards of control are being

met. Compliance with similar requirements of other environmental statutes would be redundant and unduly burdensome.

This interpretation is consistent with CERCLA section 121(e) which exempts on-site activities from obtaining permits. The purpose of this exemption is to allow CERCLA response actions to proceed expeditiously without the delays that could result while waiting for other offices or agencies to issue a permit. The substantive requirements that would be imposed by a permit still must be stated in Superfund documents, but the redundancy of stating such standards in a permit issued by another office or agency is avoided.

In most cases, the classification of a particular requirement as substantive or administrative will be clear, but some requirements may fall into a gray area between the provisions related primarily to program administration and those concerned primarily with environmental and human health goals. Several factors may be considered when it is not readily apparent whether a requirement is substantive or administrative; for example, the basic purpose of the requirement, any adverse effect on the ability of the action to protect human health and the environment if the requirement were not met, the existence of other requirements (e.g., CERCLA procedures) at the site that would provide functionally equivalent compliance, and classification of similar or identical requirements as substantive or administrative in other situations. The determination of whether a requirement is substantive or administrative need not be documented.

16. *Potential ARARs of the Resource Conservation and Recovery Act (RCRA).* CERCLA compliance with the regulations promulgated pursuant to RCRA is a special concern within the broader context of CERCLA compliance with other environmental and public health laws. Because the RCRA Subtitle C regulations address the ongoing treatment, storage, and disposal of hazardous waste, and because CERCLA response actions often involve treatment, storage, and disposal of hazardous waste, many RCRA requirements will be applicable or relevant and appropriate to CERCLA response actions. The current RCRA Subtitle C regulations are codified at 40 CFR Subchapter I.

The purpose of this discussion is to provide a general overview of CERCLA compliance with the potential ARARs of RCRA, including the requirements of the Hazardous and Solid Waste Amendments of 1984 (HSWA). Although

the determination of which requirements are applicable or relevant and appropriate is always made on a site-by-site basis, it is possible to make some general statements about compliance with RCRA.

i. *The potential ARARs of RCRA Subtitle C.* RCRA Subtitle C is the authority for regulations which establish standards for hazardous waste management. Pursuant to RCRA Subtitle C, EPA has promulgated requirements and standards for generators and transporters of hazardous waste and for owners and operators of hazardous waste treatment, storage, and disposal facilities. These regulations contain numerous potential ARARs for CERCLA remedial actions, each requirement having its own unique set of jurisdictional prerequisites.

In general, RCRA Subtitle C requirements for the treatment, storage, or disposal of hazardous waste will be applicable if a combination of the following conditions is met:

a. The waste is a listed or characteristic waste under RCRA; and

b. Either: (1) The waste was treated, stored, or disposed after the effective date of the RCRA requirements under consideration; or (2) The activity at the CERCLA site constitutes treatment, storage, or disposal as defined by RCRA.

Listed hazardous wastes under RCRA are found in 40 CFR Part 261, Subpart D. Some RCRA requirements apply to hazardous wastes as defined in RCRA section 1004(5). Characteristic hazardous wastes under RCRA are described in 40 CFR Part 261, Subpart C. Testing methods and protocols for characteristic determinations are contained in Test Methods for Evaluating Solid Waste, 3rd edition, Volume 1C, Laboratory Manual (SW-846).

There are two scenarios under which RCRA requirements may be applicable to CERCLA sites. First, if the lead agency determines that RCRA listed or characteristic hazardous waste is present and the waste was treated, stored, or disposed at the site after the effective date of the requirements under consideration, then the pertinent RCRA requirements will be applicable to the waste activity. Generally, traditional RCRA regulated facilities that have been listed on the NPL may fall into this category, even if the proposed CERCLA action would not involve treatment, storage, or disposal. For example, if a RCRA landfill or a hazardous waste incinerator operated at the site after the effective date of the RCRA closure requirements, then the lead agency

would need to comply with the applicable closure requirements for those units in completing the remedial action. Second, if the lead agency determines that RCRA listed or characteristic hazardous waste is present at the site (even if the waste was disposed before the effective date of the requirement) and the proposed CERCLA action involves treatment, storage, or disposal as defined under RCRA, then RCRA requirements related to those actions would be applicable.

These two scenarios are contingent upon determinations that RCRA Subtitle C hazardous waste is present and on the identification of the period of waste management. To determine whether a waste is a listed waste under RCRA, it is often necessary to know the source. However, at many CERCLA sites no information exists on the source of the wastes nor are references available citing the date of disposal. The lead agency should use available site information, manifests, storage records, and vouchers in an effort to ascertain the source of these contaminants. When this documentation is not available, the lead agency may assume that the wastes are not listed RCRA hazardous wastes, unless further analysis or information becomes available which allows the lead agency to determine that the wastes are listed RCRA hazardous wastes. If the lead agency assumes the wastes are not listed RCRA hazardous wastes and it is determined that the wastes are not characteristic wastes under RCRA (see discussion below, 17.i.) RCRA requirements would not be applicable to CERCLA actions, but may be relevant and appropriate if the CERCLA action involves treatment, storage or disposal and/or if the wastes are similar or identical to RCRA hazardous waste.

Under certain circumstances, although no historical information exists about the waste and when it was treated, stored, or disposed, it may be possible to identify the wastes as RCRA characteristic wastes. With respect to hazardous characteristics, (ignitability, corrosivity, reactivity, or EP toxicity), it is the responsibility of the generator (in this case, the lead agency or PRP conducting the action) to determine if the wastes exhibit any of these characteristics (defined in 40 CFR 261.21 through 24). The lead agency must use best professional judgment to determine, on a site-specific basis, if testing for hazardous characteristics is necessary. Testing is required unless it can be determined, by "applying knowledge of the hazard characteristic in light of the materials or process used," that the

waste does not have hazardous characteristics (40 CFR 262.11(c)).

In determining whether to test for the toxicity characteristic using the Extraction Procedure (EP) Toxicity Test, it may be possible to assume that certain low concentrations of waste are not toxic. For example, if the total waste concentration is 20 times or less the EP Toxicity concentration, the waste cannot be characteristic hazardous waste. In such a case RCRA requirements would not be applicable and would not likely be relevant or appropriate unless the waste also contained other RCRA hazardous wastes and the CERCLA action involved treatment, storage, or disposal.

If the wastes exhibit hazardous characteristics, RCRA requirements are potentially applicable if the wastes also were either treated, stored, or disposed after the effective date of the applicable RCRA requirement or if the CERCLA actions will involve treatment, storage, or disposal.

ii. *Actions constituting treatment, storage, or disposal.* Many CERCLA actions occur in areas of contamination that contain waste treated, disposed of, or stored prior to November 19, 1980. If left untouched, wastes in such areas are not currently regulated under Subtitle C of RCRA. (Solid waste management units at RCRA facilities are regulated by the 3004(u) corrective action requirements.) However, certain physical movement, alteration, or disturbance of RCRA hazardous waste associated with a remedial action may meet the RCRA definition of treatment, storage, or disposal. For instance, treatment has occurred when the CERCLA remedial action uses "any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, dispose of; or amenable for recovery, amenable for storage, or reduced in volume." 40 CFR 260.10.

Similarly, storage occurs when a CERCLA remedial action involves the "holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere." 40 CFR 260.10.

Land disposal occurs when RCRA hazardous waste is placed into a land disposal unit, including a "landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation,

or underground mine or cave." RCRA section 3004(k).

Movement of hazardous waste entirely within a unit does not constitute "land disposal" under Subtitle C of RCRA. However, movement of hazardous waste into a unit (i.e., across the boundary of a unit) does constitute "land disposal."

In many cases CERCLA sites contain areas of contamination (with differing levels of concentration, including hot spots, of hazardous substances, pollutants, or contaminants) that may be characterized as a unit, usually a landfill, under RCRA. In such cases where RCRA hazardous waste is moved into the area of contamination, RCRA disposal requirements are applicable to the disturbed waste and certain land disposal requirements (such as for closure) may be applicable to the area where the waste is received.

Therefore, the following activities constitute land disposal under RCRA Subtitle C where the waste involved is RCRA hazardous waste:

- Wastes from different units are consolidated into one unit;
- Waste is removed and treated outside a unit and redeposited into the same or another unit; or
- Waste is picked up from the unit and treated within the area of contamination in an incinerator, surface impoundment, or tank and then redeposited into the unit (does not include in-situ treatment).

In contrast, an example of an activity that does not constitute "land disposal" is the mere consolidation of RCRA hazardous wastes within a unit. Similarly, the covering and sealing off of hazardous waste, called "capping with waste in place," is also not considered "land disposal" and RCRA Subtitle C requirements would not be applicable. If some of the waste at a site is moved into another unit, but other waste is left behind in the original unit (the unit in which such waste was found), "land disposal" applies only with regard to the waste that is moved into another unit. Under these examples, however, certain RCRA land disposal requirements might nevertheless be relevant and appropriate to such waste. (See ARARs preamble sections below, 16.iii. and 17.)

iii. *Hypothetical examples of compliance with RCRA: land disposal restrictions.* Land disposal restrictions under RCRA sections 3004 (d) through (k) are triggered whenever there is placement of RCRA hazardous wastes subject to land disposal restrictions ("banned waste") into a land-based unit. Such land disposal does not occur when

hazardous waste is merely moved around within a unit.

Certain activities, e.g., placement, involving specific wastes may be subject to the special restrictions on land disposal of hazardous wastes. (Placement into a unit is defined identically to land disposal, see above.) The land disposal restrictions (LDR) regulations establish treatment standards to be achieved based on the best demonstrated available treatment technology (BDAT) before specific wastes may be land disposed. For example, land disposal restrictions require that a remedial action that involves the excavation and movement of banned waste into a unit (i.e., placement) must meet BDAT levels before the waste is placed into the unit. Similarly, the land disposal restrictions also apply where the remedial action involves excavation of banned waste from its original unit, treatment of that waste at another unit, and placement of that waste back into the original unit or another unit. However, land disposal restrictions are not applicable where banned waste is moved, graded, stabilized, or treated in-situ, entirely within the original unit, because placement has not occurred. Furthermore, the temporary staging of waste within the unit prior to further remedial action is not placement (however, storage restrictions may apply). Land disposal restrictions are not applicable but may be relevant and appropriate where the remedial action involves placement of CERCLA waste similar in composition to RCRA banned waste. (See ARARs preamble section below, "17. Hypothetical Examples of Relevant and Appropriate Requirements.")

iv. *Hypothetical examples of compliance with RCRA: design and operating requirements.* The RCRA 40 CFR Part 264 regulations require certain design and operating standards (minimum technology requirements) for the construction of new land disposal units, and for the construction of replacements for, expansions of, or lateral extensions to existing land disposal facilities. If, for instance, the remedial action involves the placement of RCRA hazardous waste into a newly built or expanded landfill, then the 40 CFR Part 264 design and operating standards for landfills will be applicable to the remedial action, unless an exemption is justified under the provisions of the design and operating standards. Double liners and leachate collection and return systems will thus be required as a part of construction and operation.

v. *Hypothetical examples of compliance with RCRA: corrective action requirements.* EPA's ground-water protection regulations, 40 CFR Part 264, Subpart F, include corrective action requirements. EPA is currently developing regulations for corrective action requirements imposed by RCRA sections 3004 (u) and (v) (added by HSWA).

The Subpart F corrective action provisions require cleanup of ground water for each hazardous constituent to either the background level, a SDWA maximum contaminant level (MCL), or an alternate concentration limit (ACL) set by the Regional Administrator. The RCRA ground water protection standards (40 CFR Part 264 Subpart F) do not contain all of the current SDWA MCLs. Where no MCL exists under RCRA, the ground-water protection standard will be set at background or at an ACL if the proper ACL demonstrations can be made to the satisfaction of the Regional Administrator.

The Subpart F corrective action standards for regulated units are applicable where the release being addressed is from certain specified land disposal units to the environment and the unit received RCRA hazardous waste after July 26, 1982 (the publication date of Subpart F).

The RCRA corrective action requirements added by HSWA regulate releases of RCRA hazardous constituents to the environment from solid waste management units at RCRA facilities, regardless of the date on which the hazardous or solid waste was received by the unit. EPA is currently developing more detailed regulations to implement these HSWA requirements that will establish procedures and standards for corrective action. EPA expects that the existing and new regulations, when promulgated, will generally be applicable to Superfund actions whenever a remedial action involves treatment, storage, or disposal of RCRA hazardous waste. These regulations will be particularly significant for CERCLA because they will reflect standards EPA has found specifically appropriate to remedial actions.

EPA anticipates that, for the most part, only the requirements in the corrective action regulation that establish standards for cleanup and hazardous waste management will be applicable to CERCLA actions.

Some of the remedy selection standards may be equivalent to or subsumed by the standards for remedies established in the NCP. For these

standards, meeting the NCP standards would automatically ensure that the applicable RCRA requirements are met. A clear example of this is the protectiveness standard, since both RCRA corrective action rules and the NCP require that remedies must be protective of human health and the environment. Other standards may need to be addressed on a site-specific basis. A more specific determination of how the corrective actions standards must be addressed will be made when the RCRA regulations are promulgated.

The corrective action regulations are likely to establish a corrective action process. These parts of the rule will establish procedures, criteria, and definitions to implement corrective action. For example, the rule is likely to establish when investigations and detailed study of alternatives are required and how those assessments will be conducted. These requirements will not be applicable because they are the equivalent of administrative requirements in that they prescribe methods and procedures to implement the corrective action program.

EPA has, through the NCP, established procedures that it believes will achieve the same result as the RCRA corrective action process. For example, the use of action levels to trigger the full corrective action process parallels CERCLA's Hazard Ranking System, which brings sites under the remedial process. Another example is RCRA's definition of "facility," which differs from the statutory definition provided in CERCLA. Attempting to apply RCRA's distinct, but essentially equivalent, procedures and definitions would cause significant confusion and provide little environmental gain under the Superfund program.

vi. *Hypothetical examples of compliance with RCRA: closure requirements.* Although 40 CFR Part 264 includes potentially applicable or relevant and appropriate requirements addressing closure and post-closure care for the various types of units regulated in the several subparts of Part 264 (e.g., Subparts G, K, and N), these various subparts contain only two basic closure options that can be potentially applicable or relevant and appropriate to the completion of operable units during CERCLA response actions. The two closure options are best exemplified by the regulations for closure of surface impoundments. For instance, owners and operators desiring to decommission (i.e., close) an operating surface impoundment have two options. The first option, "closure by removal" (or "clean closure"), requires that all waste

residues and contaminated liners and subsoils be removed or decontaminated. A recent amendment to the interim status regulations for closure and post-closure care for hazardous waste surface impoundments, 52 FR 8704, March 19, 1987, further clarifies that this closure option involves the removal of enough contaminated soil such that contamination is reduced to concentration levels that attain promulgated standards and/or EPA's health-based advisory levels in the actual area of contamination (i.e., this does not allow for environmental fate and transport modeling to determine exposure levels outside the area of contamination). The level of cleanup required has been interpreted to be "drinkable leachate" and "edible soils." No post-closure requirements exist for an owner/operator who has chosen the closure option because EPA has adopted the strict clean standards. The strict standards ensure that the public and the environment will be safe from all exposure pathways (i.e., dermal, inhalation, and direct soil and water ingestion) after the owner/operator of a RCRA facility has left the RCRA regulatory system (the clean closure regulations allow an owner/operator to leave the RCRA regulatory system after verification of the attainment of clean closure levels for 180 days).

The second option, "closure with waste in place" or "landfill closure," where contaminated materials remain after closure, requires final cover over the unit and post-closure care, such as maintenance of the final cover, ground-water monitoring, and corrective action if the ground-water protection standards are violated. Thus, a significant difference between clean closure and landfill closure is that after landfill closure the unit must be maintained and monitored, corrective action taken if needed, a notice provided in the deed and plat that the site was used for hazardous waste, and permission must be obtained to build over the site. Clean closure does not include such additional requirements because hazardous constituents have been removed to sufficiently low levels that no further action is necessary to be protective.

Thus, the determination of whether clean closure or landfill closure requirements are potential ARARs depends upon the contemplated remedial activities, i.e., whether the activity is treatment, storage, or disposal of hazardous waste and whether all contamination will be removed from that unit or whether hazardous wastes will remain at the closed unit. (See also ARARs preamble section below, "17.

Hypothetical examples of relevant and appropriate requirements.")

Even where not applicable, portions of the closure requirements may be relevant and appropriate depending upon the site. If portions of the closure requirements are found relevant and appropriate, the lead agency may combine relevant and appropriate requirements from clean and landfill closure options that are suitable for a particular site. Rather than having only two options for addressing contaminated soil at a site (i.e., either excavate basically all of the waste and contaminated soil to clean closure levels, or cap), the lead agency may combine relevant and appropriate requirements to form a hybrid closure option. (EPA is considering a hybrid closure regulation for the RCRA program; however, the discussion below refers to the use of hybrid closure in the Superfund program.)

The Superfund program has been using several different types of hybrid closure (where RCRA closure is not applicable) that give the decisionmaker additional choices for the long-term management of hazardous substances as well as treated residuals. Alternate clean closure and alternate land disposal closure are the two hybrid closures most frequently used. The alternate clean closure approach is similar to clean closure in that engineering controls are not required. However, limited fate and transport modeling and site information may be used to establish cleanup levels for contaminated soils and waste materials remaining at the site. For example, the ground-water route of exposure would be protected by determining a level in the soils that would be consistent with the levels established for ground water. Typically, monitoring will be necessary after the completion of the remedial measure to verify that the levels established at the site are protective of ground water and other routes of exposure. After the verification period, no monitoring at the site would be required. A deed notice may be desirable in some cases.

The alternate land disposal closure is the second type of hybrid closure that is used by the Superfund program. This type of closure is identical to RCRA landfill disposal closure except that the cover requirements are relaxed because the wastes being contained do not pose a threat to ground water. Direct contact and surface water threats, as well as other threats, can be adequately addressed with a soil cover. This type of closure is usually appropriate for wastes at low concentrations but still above

"walk-away" levels. EPA has found this type of closure to be useful in addressing wide areas of contaminated soils in a relatively inexpensive but very reliable manner.

If clean closure or landfill closure requirements are applicable, alternate closure may be implemented only if an ARAR waiver can be invoked.

17. *Hypothetical examples of relevant and appropriate requirements.* The criteria to be used in determining whether a requirement is relevant and appropriate to a CERCLA remedial action are listed in § 300.400(g)(2). The discussion below illustrates the use of the criteria by providing hypothetical, but typical, situations where requirements from RCRA and other laws may be both relevant and appropriate, i.e., the circumstances addressed in the requirement are pertinent to those of the CERCLA action or release and the requirement is well-suited to the circumstances at the site.

i. *CERCLA waste similar to RCRA hazardous waste.* The source or prior use of many wastes at CERCLA sites cannot be positively identified. Yet the CERCLA waste may be similar in composition to a listed RCRA waste derived from a known source or use. If such a CERCLA waste would not otherwise exhibit the characteristics that would make it a RCRA hazardous waste under 40 CFR Part 261 Subpart C, the RCRA regulations for hazardous waste would not be applicable to management of the CERCLA waste. However, certain RCRA regulations, such as the design and operating requirements, may be relevant and appropriate to management of such CERCLA waste when warranted by the circumstances of the release or other site-specific factors (see ARARs preamble section above, "16.i. The potential ARARs of RCRA Subtitle C").

If, for example, CERCLA waste were to be disposed in a new land disposal unit, the minimum technology requirements in the RCRA design and operating requirements for land disposal facilities (set forth at 40 CFR Part 264, Subparts K, L, M, and N) would be relevant and could be appropriate, depending on the site-specific circumstances. The action or facility regulated by the requirement—construction of a new land disposal unit—is identical to the proposed remedial action, and the objective of creating secure containment facilities where land disposal is necessary is the same for both RCRA and CERCLA. If the CERCLA waste presents hazards that warrant secure disposal, the

minimum technology requirements may be appropriate for use at the site.

ii. *CERCLA situations similar to regulated situation.* Even where the substance found at a CERCLA site is legally identical to the substance addressed in a regulation, the situation at a CERCLA site may not technically match the situation addressed by the regulation. Nevertheless, if the two situations are sufficiently similar, such that the requirement is well-suited to the CERCLA situation, the regulation may still be both relevant and appropriate to the CERCLA site. Examples of such potentially relevant and appropriate requirements are given below from RCRA and other laws.

For example, if RCRA hazardous waste disposed of before the effective date is located on a CERCLA site in a unit of size and character similar to RCRA-type units, and the remedial action is designed essentially to leave the waste in place, a portion of one or more of the closure requirements may be relevant and appropriate. Depending on site circumstances, such as the extent and mobility of contamination and hydrogeologic characteristics, either disposal closure or "hybrid" closure (i.e., portions of the existing closure requirements) may be relevant and appropriate. The determination for either would be based on an evaluation of similarity between these additional pertinent factors: the objective of the RCRA requirement and the CERCLA action, and the action and facility under consideration at the CERCLA site and those regulated by the RCRA closure requirement for disposal units. If there is sufficient similarity between these factors so that the requirement suits the CERCLA site circumstances, the requirement is relevant and appropriate.

Taking landfill closure standards for the sake of simplicity, the objective of the closure requirements as stated above matches that of the CERCLA action: waste left at a site must be secured to prevent further releases or direct contact. The substances at the site in this example are RCRA hazardous wastes. The remaining pertinent criteria are whether the action and the facility contemplated at the CERCLA site are sufficiently similar to those regulated by the RCRA landfill closure requirements. Since hazardous waste above levels that allow for unrestricted use and unlimited exposure is being left at the site in a unit which, though not regulated under the landfill closure standards of RCRA, is similar in size and character to such a unit, the substantive closure requirements pertinent to the specific kind of unit on

the site (i.e., landfill) as contained in 40 CFR Part 264, Subpart N would directly suit the CERCLA action. Thus, it is relevant and appropriate to attain the specified cover system and post-closure care.

If, however, the waste is widely dispersed and not contained in a RCRA-type unit, use of RCRA closure may not be appropriate. For instance, RCRA Subtitle C covers may not be appropriate under certain circumstances for large municipal landfills or large mining waste sites, if the waste is generally of low toxicity and the contamination is dispersed over a large area that bears little resemblance to the discrete units regulated under RCRA Subtitle C. (See draft CERCLA Compliance with Other Laws Manual, Chapter 2, OSWER Directive No. 9234.1-01, for more discussion on this issue.) The administrative requirements in the closure regulations are not relevant and appropriate for on-site actions under any circumstances. (See ARARs preamble section above, "15. Substantive versus administrative requirements.")

Even if they are not applicable, portions of RCRA requirements for tanks (40 CFR Part 264, Subpart J) may be relevant and appropriate for sites where temporary storage in tanks is required. For example, the requirement that tanks have sufficient minimum shell thickness and pressure controls to prevent collapse or rupture may be relevant and appropriate, since the purpose of the requirement is to ensure that the tank does not create additional environmental problems due to its own failure. RCRA regulations also require that tanks have an inner lining or coating, or an alternative means of protection such as cathodic protection or corrosion inhibitors, in order to ensure that the tank is safe throughout its effective life. This requirement, although relevant, may not be appropriate in many situations. For example, if the tanks were to be used only for relatively short periods, the full RCRA Subpart J standards, which were designed for long-term storage, may not be appropriate.

Another example of a CERCLA situation which is similar to a regulated situation concerns the cleanup of certain kinds of asbestos waste. Emissions of asbestos fibers are controlled by a National Emission Standard for Hazardous Air Pollutants (NESHAP) under the Clean Air Act. The NESHAP in Subpart M of 40 CFR Part 61 includes requirements for inactive waste disposal sites for asbestos mills and manufacturing and fabricating

operations (40 CFR 61.153), for active waste disposal sites (40 CFR 61.156), and for waste disposal for demolition and renovation operations (40 CFR 61.152), but no requirements for inactive waste disposal sites for demolition and renovation operations. Therefore, the NESHAP will not be applicable to cleanup of an inactive waste disposal site unless it was owned or operated by an asbestos mill, manufacturer, or fabricator, or contains waste from such sources. However, the NESHAP specified in 40 CFR Part 61, Subpart M may be relevant and appropriate to the control of emissions and access under CERCLA at an inactive waste disposal site for demolition and renovation operations because the situations may be sufficiently similar.

The finding of relevance and appropriateness is based on several factors that are sufficiently similar in the NESHAP and the CERCLA situation and the suitability of the NESHAP to the specific site circumstances. Both the requirement and the remedial action are intended to protect human health from exposure to a hazardous substance; the specific remedial action, like the specific requirements in the NESHAP, seeks to control harmful emissions from or contact with asbestos materials at a disposal site through proper management and mitigation measures. The media of concern are the same for both air contamination and direct contact with waste. The activity and facility involve in both cases the management or disposal of asbestos waste at a land disposal site. The only difference between the CERCLA situation and the NESHAP concerns the regulated substance and entity, for the NESHAP does not cover asbestos from demolition and renovation operations at inactive sites. However, the problems from such asbestos may be very similar to those encountered at, for example, inactive sites for mills and manufacturing; fugitive emissions of asbestos particles may need to be eliminated and public access to the site controlled. Hence, it may be relevant and appropriate at the CERCLA site to comply with such NESHAP requirements as elimination of visible emissions (or capping of waste) and installation of warning signs and fencing.

G. Examples of Potential Federal and State ARARs and TBCs

Potential ARARs and TBCs include, but are not limited to, the following:

1. *Federal requirements which may be potential applicable or relevant and appropriate requirements.*

i. EPA's Office of Solid Waste administers, inter alia, the Resource Conservation and Recovery Act of 1976, as amended, (42 U.S.C. 6901). Potentially applicable or relevant and appropriate requirements pursuant to that Act are:

a. Open Dump Criteria Pursuant to RCRA Subtitle D criteria for classification of solid waste disposal facilities (40 CFR Part 257). Note: Only relevant to nonhazardous wastes.

b. RCRA Subtitle C requirements governing standards for owners and operators of hazardous waste treatment, storage, and disposal facilities (40 CFR Part 264, for permitted facilities, and 40 CFR Part 265, for interim status facilities):

- (1) Ground-Water Protection and Monitoring (40 CFR 264.90-264.101).
- (2) Closure and Post Closure (40 CFR 264.110-264.120).
- (3) Containers (40 CFR 264.170-264.178).
- (4) Tanks (40 CFR 264.190-264.200).
- (5) Surface Impoundments (40 CFR 264.220-264.249).
- (6) Waste Piles (40 CFR 264.250-264.269).
- (7) Land Treatment (40 CFR 264.270-264.299).
- (8) Landfills (40 CFR 264.300-264.339).
- (9) Incinerators (40 CFR 264.340-264.999).
- (10) Land Disposal Restrictions (40 CFR 268.1-268.50).
- (11) Dioxin-containing wastes (50 FR 1978).
- (12) Standards of performance for storage vessels for petroleum liquids (40 CFR Part 60, Subparts K and K(a)).
- (13) Codification rule for 1984 RCRA amendments (50 FR 28702, July 15, 1985; 53 FR 45788, December 1, 1987).

ii. EPA's Office of Water administers several potentially applicable or relevant and appropriate statutes and regulations issued thereunder:

a. Section 14.2 of the Public Health Service Act as amended by the Safe Drinking Water Act, as amended, (42 U.S.C. 300(f)).

(1) Maximum Contaminant Levels (for all sources of drinking water exposure) (40 CFR 141.11-141.16).

(2) Maximum Contaminant Level Goals (40 CFR 141.50-141.51, 50 FR 46936).

(3) Underground Injection Control Regulations (40 CFR Parts 144, 145, 146, 147).

b. Clean Water Act, as amended, (33 U.S.C. 1251).

(1) Requirements established pursuant to sections 301, 302, 303 (including State water quality standards), 304, 306, 307 (including Federal pretreatment requirements for discharge into a publicly owned treatment works), 308,

402, 403 and 404 of the Clean Water Act (33 CFR Parts 320-329, 40 CFR Parts 122, 123, 125, 131, 230, 231, 233, 400-469).

(2) Available Federal Water Quality Criteria documents are listed at 45 FR 79318, November 28, 1980; 49 FR 5831, February 15, 1984; 50 FR 30784, July 29, 1985; 51 FR 8012, March 7, 1986; 51 FR 22978, June 28, 1986; 51 FR 43665, December 3, 1986; 52 FR 6213, March 2, 1987.

(3) Clean Water Act section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230).

(4) Procedures for Denial or Restriction of Disposal Sites for Dredged Material (Clean Water Act section 404(c) Procedures, 33 CFR Parts 320-329, 40 CFR Part 231).

c. Marine Protection, Research, and Sanctuaries Act (33 U.S.C. 1401).

(1) Incineration at sea requirements (40 CFR Parts 220-225, 227, 228. See also 40 CFR 125.120-125.124).

iii. EPA's Office of Pesticides and Toxic Substances administers the Toxic Substances Control Act (15 U.S.C. 2601). Potentially applicable or relevant and appropriate requirements pursuant to that Act are:

PCB requirements generally: 40 CFR Part 761; Manufacturing, Processing, Distribution in Commerce, and Use of PCBs and PCB Items (40 CFR 761.20-761.30); Markings of PCBs and PCB Items (40 CFR 761.40-761.45); Storage and Disposal (40 CFR 761.60-761.79); Records and Reports (40 CFR 761.180-761.185). See also 40 CFR 129.105, 750.

iv. EPA's Office of External Affairs administers potentially applicable or relevant and appropriate requirements regarding requirements for floodplains and wetlands (40 CFR Part 6, Appendix A).

v. EPA's Office of Air and Radiation administers several potentially applicable or relevant and appropriate statutes and regulations issued thereunder:

a. The Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 2022) and Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings (40 CFR Part 192).

b. Clean Air Act (42 U.S.C. 7401).

(1) National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50).

(2) Standards for Protection Against Radiation (10 CFR Part 20). See also 10 CFR Parts 10, 40, 60, 61, 72, 960, 961.

(3) National Emission Standard for Hazardous Air Pollutants (40 CFR Part 61). See also 40 CFR 427.110-427.116, 763.

(4) New source performance standards (40 CFR Part 60).

vi. Other Federal requirements:

a. OSHA requirements for workers engaged in response activities are codified under the Occupational Safety and Health Act of 1970 (29 U.S.C. 651). The relevant regulatory requirements are included under:

(1) Occupational Safety and Health Standards (General Industry Standards) (29 CFR Part 1910).

(2) The Safety and Health Standards for Federal Service Contracts (29 CFR Part 1926).

(3) The Health and Safety Standards for Employees Engaged in Hazardous Waste Operations (29 CFR 1910.120).

b. National Historic Preservation Act (16 U.S.C. 470). Compliance with NHPA required pursuant to 7 CFR Part 650. Protection of Archaeological Resources: Uniform Regulations—Department of Defense (32 CFR Part 229), Department of the Interior (43 CFR Part 7).

c. D.O.T. Rules for the Transportation of Hazardous Materials, 49 CFR Parts 107, 171, 172.

d. The following requirements are also potentially ARAR for Fund-financed actions:

(1) Endangered Species Act of 1973 (16 U.S.C. 1531). Generally, 50 CFR Parts 81, 225, 402.

(2) Wild and Scenic Rivers Act (16 U.S.C. 1271).

(3) Fish and Wildlife Coordination Act (16 U.S.C. 661 note).

(4) Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135) 40 CFR Part 165.

(5) Wilderness Act (16 U.S.C. 1131).

(6) Coastal Barriers Resources Act (16 U.S.C. 3501).

(7) Surface Mining Control and Reclamation Act (30 U.S.C. 1201).

(8) Coastal Zone Management Act of 1972 (16 U.S.C. 1451). Generally, 15 CFR Part 930 and 15 CFR 923.45 for Air and Water Pollution Control Requirements.

(9) Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.).

(10) Marine Mammal Protection Act (16 U.S.C. 1361 et seq.).

2. *Examples of potential State ARARs.*

i. State requirements for disposal and transport of radioactive wastes.

ii. State approval of water supply system additions or developments.

iii. State ground-water withdrawal approvals.

iv. Requirements of authorized (Subtitle C of RCRA) State hazardous waste programs.

v. State Implementation Plans (SIPs) and delegated programs under the Clean Air Act.

vi. Approved State NPDES program under the Clean Water Act.

vii. Approved State underground injection control (UIC) programs under the Safe Drinking Water Act.

viii. Approved State wellhead protection programs.

ix. State water quality standards.

x. State air toxics regulations.

3. *Other Federal criteria, advisories, and guidance, to be considered.*

i. Federal Criteria, Advisories, and Procedures.

a. Health Effects Assessments (HEAs) and Proposed HEAs ("Health Effects Assessment for (Specific Chemical)"), ECAO, USEPA, 1985).

b. Reference Doses (RfDs), ("Verified Reference Doses of USEPA," ECAO-CIN-475, January 1986).

c. Carcinogen Potency Factors (CPFs), (Table 11, "Health Assessment Document for Tetrachloroethylene (Perchloroethylene)," USEPA, OHEA/600882/005F, July 1985).

d. Pesticide registrations and registration data.

e. Pesticide and food additive tolerances and action levels. **Note:** Germane portions of tolerances and action levels may be pertinent and therefore are to be considered in certain situations.

f. PCB Spill Cleanup Policy (52 FR 10688, April 2, 1987).

g. Waste load allocation procedures (40 CFR Parts 125, 130).

h. Federal sole source aquifer requirements (52 FR 6873, March 5, 1987).

i. Public health basis for the decision to list pollutants as hazardous under section 112 of the Clean Air Act.

j. EPA's Ground-Water Protection Strategy.

k. Guidance on Remedial Actions for Contaminated Ground Water at Superfund sites (Draft, October 1986) establishes criteria for the use of background concentrations and ACLs.

l. Superfund Public Health Evaluation Manual.

m. TSCA health data.

n. TSCA chemical advisories.

o. ATSDR Toxicological Profiles.

p. Advisories issued by FWS and NWFS under the Fish and Wildlife Coordination Act.

q. TSCA Compliance Program Policy ("TSCA Enforcement Guidance Manual Policy Compendium," USEPA, OECM, OPTS, March 1985).

r. Health Advisories, EPA Office of Water.

s. EPA/DOT Guidance Manual on Hazardous Waste Transportation.

ii. USEPA RCRA Guidance Documents.

a. Alternate Concentration Limits (ACL) Guidance (draft).

b. EPA's RCRA Design Guidelines

(1) Surface Impoundments—Liner Systems, Final Cover, and Freeboard Control.

(2) Waste Pile Design—Liner Systems.

(3) Land Treatment Units.

(4) Landfill Design—Liner Systems and Final Cover.

c. Permitting Guidance Manuals.

(1) Permit Applicant's Guidance Manual for Hazardous Waste Land Treatment, Storage, and Disposal Facilities.

(2) Permit Applicant's Guidance Manual for the General Facility Standards of 40 CFR Part 264.

(3) Permit Writer's Guidance Manual for Hazardous Waste Land Treatment, Storage, and Disposal Facilities.

(4) Permit Writer's Guidance Manual for the Location of Hazardous Waste Land Storage and Disposal Facilities: Phase I, Criteria for Location Acceptability and Existing Regulations for Evaluating Locations.

(5) Permit Writer's Guidance Manual for Subpart F.

(6) Permit Applicant's Guidance Manual for the General Facility Standards.

(7) Waste Analysis Plan Guidance Manual.

(8) Permit Writer's Guidance Manual for Hazardous Waste Tanks.

(9) Model Permit Application for Existing Incinerators.

(10) Guidance Manual for Evaluating Permit Applications for the Operation of Hazardous Waste Incinerator Units.

(11) A Guide for Preparing RCRA Permit Applications for Existing Storage Facilities.

(12) Guidance Manual on Closure and Post-Closure Interim Status Standards.

d. Technical Resource Documents (TRDs).

(1) RCRA Ground-Water Monitoring Technical Enforcement Guidance Document.

(2) Evaluating Cover Systems for Solid and Hazardous Waste.

(3) Hydrologic Simulation of Solid Waste Disposal Sites.

(4) Landfill and Surface Impoundment Performance Evaluation.

(5) Lining of Water Impoundment and Disposal Facilities.

(6) Management of Hazardous Waste Leachate.

(7) Guide to the Disposal of Chemically Stabilized and Solidified Waste.

(8) Closure of Hazardous Waste Surface Impoundments.

(9) Hazardous Waste Land Treatment.

(10) Soil Properties, Classification, and Hydraulic Conductivity Testing.

e. Test Methods for Evaluating Solid Waste.

(1) Solid Waste Leaching Procedure Manual.

(2) Methods for the Prediction of Leachate Plume Migration and Mixing.

(3) Hydrologic Evaluation of Landfill Performance (HELP) Model Hydrologic Simulation and Solid Waste Disposal Sites.

(4) Procedures for Modeling Flow Through Clay Liners to Determine Required Liner Thickness.

(5) Test Methods for Evaluating Solid Wastes.

(6) A Method for Determining the Compatibility of Hazardous Wastes.

(7) Guidance Manual on Hazardous Waste Compatibility.

iii. USEPA Office of Water Guidance Documents.

a. Pretreatment Guidance Documents.

(1) 304(g) Guidance Document on Revised Pretreatment Guidelines (3 volumes).

b. Water Quality Guidance Documents.

(1) Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters (1977).

(2) Technical Support Manual: Waterbody Surveys and Assessments for Conducting Use Attainability Analyses (1983).

(3) Water-Related Environmental Fate of 129 Priority Pollutants (1979).

(4) Water Quality Standards Handbook (1983).

(5) Technical Support Document for Water Quality-Based Toxics Control.

(6) Developing Requirements for Direct and Indirect Discharges of CERCLA Wastewater (1987).

c. NPDES Guidance Documents.

(1) NPDES Best Management Practices Guidance Manual (June 1981).

(2) Case studies on toxicity reduction evaluation (May 1983).

d. Ground Water/UIC Guidance Documents.

(1) Designation of a USDW.

(2) Elements of Aquifer Identification.

(3) Definition of major facilities.

(4) Corrective action requirements.

(5) Requirements applicable to wells injecting into, through, or above an aquifer that has been exempted pursuant to 40 CFR 146.104(b)(4).

(6) Guidance for UIC implementation on Indian lands.

e. Clean Water Act Guidance Documents.

f. Guidance for Applicants for State Well Head Protection Program Assistance Funds under the Safe Drinking Water Act (Office of Ground-Water Protection, June 1987).

iv. USEPA Manuals from the Office of Research and Development.

- a. EW 846 methods—laboratory analytic methods.
- b. Lab protocols developed pursuant to Clean Water Act section 304(h).
- v. Other.
- a. Data Quality Objectives, Volumes I and II.
- b. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (Draft).
- c. Guidance on Preparing Superfund Decision Document: The Proposed Plan and Record of Decision (Draft).
- d. Standard Operating Safety Guides.

H. Community Relations

By adding section 117, "Public Participation," to CERCLA, Congress clearly indicated its intention that affected communities be informed about and involved in the decisions regarding the Superfund program's response to hazardous releases. Congress directed EPA to ensure that affected communities would be involved from the outset in developing and selecting the actions necessary at a site. EPA strongly believes that community relations is an integral part of the Superfund program and encourages a coordinated effort among Federal agencies and States as well as among technical, enforcement, and community relations staff to ensure that the concerns of the public are considered and addressed.

Today, EPA proposes to revise the community relations requirements of the NCP to reflect the public participation provisions of CERCLA. The current NCP explains in a single section (§ 300.67) the requirements for community relations. EPA proposes to intersperse community relations requirements throughout the NCP in conjunction with the actions to which they apply: during removal actions (§ 300.415) and remedial actions (§§ 300.430 and 300.435), including enforcement-related community relations activities. The major substantive changes in these requirements, summarized below, are either dictated by the 1986 amendments to CERCLA or are the result of procedures developed under the community relations program over the past seven years. Guidance for meeting Superfund community relations requirements is contained in "Community Relations in Superfund: A Handbook," EPA No. 9230.0-3A (March 1986).

1. *Public comment period during removal actions (§ 300.415(n)).* The proposed rule provides for notice in a local newspaper of general circulation to announce a minimum 30-calendar day comment period for Fund-financed and enforcement sites where there is a planning period of at least six months

from the determination, based on the site evaluation, that a removal is appropriate. This gives the public, including PRPs, an opportunity to review and comment on the document describing the removal activities proposed for the site, i.e., the Engineering Evaluation/Cost Analysis (EE/CA) or its equivalent in non-time-critical situations. The lead agency shall prepare responses to significant comments. The proposed rule also provides for a comment period, where appropriate, for time-critical removal actions. (See Subpart I for administrative record requirements.)

2. *Other community relations requirements during removal actions (§ 300.415(n)).* EPA proposes to add a requirement that three major community relations activities be initiated for non-time-critical or time-critical removal actions where on-site removal activities will last longer than 120 calendar days. First, EPA proposes that interviews with State and local officials, residents, public interest groups, or other interested or affected parties, as appropriate, be conducted within the community. The purpose of the interviews is to identify firsthand the specific information needs and site-specific methods for encouraging dialogue with the community. Second, EPA proposes that a formal community relations plan (CRP) be developed from the information obtained during the community interviews. The CRP specifies the community relations activities the lead agency expects to undertake during the response action. Third, EPA proposes that at least one information repository be established at or near the facility. (See community relations preamble section below, "4. Information repository for removal and remedial actions.")

In the current NCP, a CRP must be developed if the response activities are expected to exceed 45 days; neither community interviews nor an information repository are required. The additional time allocation in the proposed regulation (120 days) provides more flexibility, allows for more effective use of lead agency resources, and also provides a more realistic time period for assessing the community's specific needs.

In the case of removals lasting less than 120 days, the lead agency is still responsible for ensuring that a spokesperson is designated, that accurate and timely information is provided to the public, and that public concerns are considered, whenever possible.

3. *Community interviews and Community Relations Plan during*

removal and remedial actions (§ 300.415(n) and § 300.430(c)). Community interviews have been required since 1983 as a matter of EPA policy and were discussed in the preamble to the proposed 1985 revisions to the NCP in relation to remedial actions. The requirement that community interviews be conducted for certain removals and all remedial actions is consistent with existing guidance for remedial actions and reflects EPA's experience that such interviews have considerable value in identifying community-specific interests that should be reflected in the CRP to assure that community concerns are considered in managing the response action. Experience has also shown that these interviews assist in gathering information that is useful in conducting the response action at the site, e.g., in identifying potentially responsible parties. However, EPA has deliberately chosen not to specify in the proposed NCP how the interviews should be conducted or who should be interviewed.

The lead agency, in consultation with the support agency, will decide the number and type of interviews that are appropriate to accomplish the objective of developing an accurate picture of community needs and concerns when preparing the CRP. How many and what kind of interviews to conduct generally depends on whether the lead agency is already aware of community concerns through prior interaction with the community and interested parties, e.g., through public participation related to permitting a unit of a facility which later requires CERCLA response action. Interviews may range from formal question and answer sessions requesting the opinions of many citizens about a variety of aspects of a site history and community values to only a few, informal discussions in person or by telephone with selected, well-informed individuals who clearly represent the community. Only a few selected interviews or informal discussions may need to be conducted to verify information and ask questions on specific issues where the lead agency already is largely aware of community concerns through prior interaction with the community and interested parties. In these cases, interviews with a local official, the facility owner/operator, or a leader of the local interest group, as appropriate, may be used to round out information already available to the lead agency.

4. *Information repository for removal and remedial actions (§§ 300.415(n) and 300.430(c)).* Items made available for

public information are to be kept in an information repository and shall be available for public inspection and copying at or near the facility at issue. EPA proposes that at least one information repository be established at or near each site in order to fulfill this requirement. The purpose of the information repository is to provide members of the community easier access to site-related documents. Further, one copy of the administrative record file for selection of response action may be kept in one of the information repositories, as specified in Subpart I.

For non-time-critical or time-critical removal actions where on-site removal activities will last longer than 120 days, at least one information repository will be established at or near the location of the action. For remedial actions, EPA is proposing that the information repository be established when the final remedial investigation/feasibility study workplan is available to the public. EPA proposes that the lead agency shall inform interested parties of the establishment of the information repository.

5. *Public participation during remedial actions (§ 300.430(f)).* Sections 117 (a) and (d) of CERCLA require that the proposed plan, which briefly analyzes the remedial action alternatives studied in the feasibility study (FS) and describes a preferred remedial action alternative, be made available to the public, including PRPs, at or near the facility at issue. The information repositories will be used to meet this requirement. The statute also requires that a notice of availability and a brief analysis of the proposed plan be published in a major local newspaper of general circulation. The notice of availability and brief analysis published in the newspaper shall include sufficient information to provide a reasonable explanation of the proposed plan and alternatives considered. EPA also proposes to require that the FS be made available to the public at the information repositories.

The proposed regulation also requires that the lead agency provide a reasonable opportunity for submission of written and oral comments and an opportunity for a public meeting regarding the RI/FS, the proposed plan, and any proposed waivers under section 121(d)(4) relating to cleanup standards. EPA is proposing that this public comment period shall be no less than 30 calendar days. This is consistent with comment periods for NPL additions, deletions, and consent decrees. This proposal is an extension of the 21-

calendar-day public comment period in the current NCP.

The proposed regulation further requires that the lead agency keep a transcript of the public meeting on the proposed plan and the supporting analysis and information held during the public comment period pursuant to section 117(a) and make the transcript available to the public. Transcripts are required for formal public meetings only. Additional formal and/or informal public meetings held pursuant to section 117(a) during the public comment period where the lead agency is present and there is a discussion of the FS, the proposed plan, and proposed waivers to cleanup standards should also be documented in an appropriate form. Any further substantive oral communications regarding these issues which are received by any other means such as phone calls or meetings with individuals or small groups during the public comment period should also be documented by the lead or support agency. In all cases where EPA receives documents or comments that are relevant to selection of the response action, the documents and a summary of the comments should be prepared and placed in the administrative record.

6. *Responsiveness summaries after public comment periods (§§ 300.415(n), 300.425(d), 300.425(e), 300.430(f), 300.815(b), 300.820(b)).* CERCLA requires the lead agency to develop a response to significant comments, criticisms, and new data received in written or oral form during the public comment period on the proposed plan pursuant to section 117(a). In the proposed regulation, EPA also requires public comment periods for removal actions (see above, paragraph 1.); proposed additions and deletions to the National Priorities List, issuance of a revised proposed plan, and ROD amendments.

The purpose of the requirement to respond is to document how public comments have been considered during the decisionmaking process and provide answers, if possible, to major questions. A responsiveness summary can be used to respond to comments. The responsiveness summary should be a concise summary of significant comments received during the comment period from the support agency and the public, and the lead agency's response to these comments. It should not be a point-by-point recitation and rebuttal of each comment. Rather, extensive comments should be summarized, and similar comments should be grouped together for a single response.

7. *Addressing significant changes prior to the adoption of the final*

remedial action plan (§ 300.430(f)). The lead agency will need to identify and address significant changes that may occur from the time that the preferred alternative was presented in the proposed plan to the adoption of the selected alternative in the Record of Decision (ROD). If significant changes do occur during this period, the lead agency shall provide, as required by section 117(b) of CERCLA, "a discussion of any significant changes (and the reasons for such changes)" in the ROD. In addition to this statutory requirement, today's proposal specifies the limited circumstances where additional public comment would be necessary prior to final adoption of the alternative in the ROD.

The determination of whether a significant change has occurred is a site-specific determination which shall be made by the lead agency. Typically, significant changes that occur after the public comment period will affect the scope, performance, or cost of the final alternative. Today's proposal focuses on significant changes affecting these aspects of the final remedial alternative.

In the event that a significant change has been identified, the lead agency will need to determine whether the public could have reasonably anticipated the significant change based on the information presented in the RI/FS report and the proposed plan. Where the lead agency determines that the public could have reasonably anticipated the change, the lead agency need only document the change in the ROD, as proposed in § 300.430(f)(2)(A). Where the lead agency determines that the change could not have been reasonably anticipated by the public, the lead agency will reissue the proposed plan and solicit further public comment in accordance with § 300.430(f)(2)(B). A responsiveness summary may also be developed to document comments and agency responses.

8. *Notice of availability of the ROD (§ 300.430(f)).* This section provides that a notice of the signed ROD shall be published in a major local newspaper of general circulation and that the ROD will be made available to the public at the information repositories before commencement of any remedial action.

9. *Changes to the ROD after its adoption (§ 300.435(c)).* This section incorporates the requirements of section 117(c) of CERCLA that the lead agency publish an explanation of the significant differences when significant changes occur after the ROD is signed and the section 117(d) requirement that a notice summarizing the significant changes be published in a major local newspaper of

general circulation. In addition, this section proposes to distinguish between an explanation of significant differences, which announces a significant change in the selected remedy, and a ROD amendment, which fundamentally alters the remedy selected in the ROD. The lead agency will need to make this determination whenever the remedial action under section 104 or 120, enforcement action under section 106, or settlement or consent decree under section 106 or 122, differs significantly from the selected remedy in the ROD. The lead agency will decide whether to issue an explanation of significant differences or to propose a ROD amendment, based on site-specific information and the impact the significant change has with respect to scope, performance, or cost on the remedy selected in the ROD. During this decision process, the lead agency should notify and consult with the support agency, as appropriate.

The lead agency must identify when a remedial action, settlement, or decree differs significantly from the ROD. If the identified remedial action, enforcement action, consent decree, or settlement does not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost, the lead agency will issue an explanation of significant differences to announce the significant change. For example, the lead agency may determine that the attainment of a newly promulgated ARAR is necessary, based on new scientific evidence, because the existing ARAR is no longer protective. Where this new ARAR would affect a basic feature of the remedy, such as timing or cost, but not fundamentally alter the remedy specified in the ROD, the lead agency would need to issue an explanation of significant differences announcing the change.

If the action, decree, or settlement fundamentally alters the ROD in such a manner that the proposed action, with respect to scope, performance, or cost, is no longer reflective of the selected remedy in the ROD, the lead agency will propose an amendment to the ROD. For example, the lead agency may have selected an innovative technology as the waste management approach in the ROD. Studies conducted during remedial design may subsequently indicate that the innovative technology will not achieve the remediation levels specified as protective of human health and the environment in the ROD. The lead agency, based on this information, may determine that a more conventional technology, such as thermal destruction, should be used at the site. In this event,

the lead agency will propose to amend the ROD.

Section 122(d)(1)(A) of CERCLA provides that whenever EPA enters into an agreement with any PRP to undertake a remedial action, the agreement shall be entered as a judicial consent decree. Section 122(d)(2) requires that DOJ provide the public with an opportunity to comment on the proposed consent decree at least 30 days prior to its entry. Where the proposed consent decree fundamentally alters the ROD, EPA contemplates that it will issue a proposed ROD amendment concurrent with the proposed consent decree, and that the public comment period provided pursuant to section 122(d)(2) shall satisfy the requirements for additional public comment for a ROD amendment.

When an explanation of significant differences is issued, the lead agency will consult with the support agency (unless a SMOA, cooperative agreement, or Superfund State contract requires concurrence) prior to notifying the public in a major local newspaper of general circulation. This public notice will summarize the explanation of significant differences by identifying the significant changes and the reasons for the changes. The lead agency will also place the explanation of significant differences and information supporting the decision in the information repository and administrative record file.

When the lead agency determines that the ROD should be amended, the lead agency will propose a ROD amendment and make this document and supporting information available for public comment, following the requirements specified in §§ 300.430(f) (1) and (2) of today's proposed rule. In addition, where the lead agency proposes to amend a ROD that was signed prior to the enactment of the 1986 amendments to CERCLA, the proposed amendment shall be subject to the requirements specified in CERCLA section 121.

EPA believes that the appropriate threshold for amending a ROD is when a fundamentally different approach to managing hazardous wastes at a site is proposed. As a result, EPA has determined that a ROD amendment decision should be made after consideration of public comments and should undergo the same public and support agency involvement as a proposed plan.

10. *Community relations during enforcement actions (§ 300.430(c)).* The proposed revisions clarify the respective roles of lead agencies and responsible parties during enforcement actions. The proposed regulation provides that the

lead agency for an enforcement action comply with the same community relations requirements as under Fund-financed actions (i.e., §§ 300.155, 300.415(n), 300.430 (c) and (f), and 300.435(c)). At the discretion of the lead agency, responsible parties may implement aspects of the government's community relations program under the oversight and direction of the lead agency. Responsible parties may, of course, initiate their own additional community relations activities, e.g., preparing fact sheets and/or conducting public meetings. However, the lead agency is still responsible for planning and implementing the government's community relations program.

For enforcement actions, EPA believes that it may be appropriate to hold meetings with the public, including PRPs, in order that concerns about the remedy can be raised and discussed among all parties.

Section 300.67(f) of the current NCP, which allows the community relations plan to be modified or adjusted at the direction of a Federal district court, has been deleted. The public participation requirements of sections 113(k) and 117 of CERCLA contemplate a community relations effort that is outside of the jurisdiction of the Federal district courts. In addition, CERCLA's statutory scheme of remedy selection is one of an administrative process with full public participation prior to the filing of an action under CERCLA section 106. Given those factors, EPA has determined that it is most appropriate to delete that section of the current NCP.

11. *Community relations during remedial design/remedial action (§ 300.435(c)).* It is EPA's intent to continuously undertake activities that involve affected communities and interested parties in actions taken at a site. To that end, EPA proposes in § 300.435(c) to add a requirement for community relations after adoption of the ROD, and solicits comment on other potential community relations requirements during the remedial design (RD) and remedial action (RA) phases of site activity.

EPA proposes that the lead agency shall revise the community relations plan (CRP) as necessary to address community concerns during the RD/RA phases of action, if not already addressed by the CRP. It is recommended that, whenever possible, this revision be based on interviews with local officials, citizens, interest groups, PRPs, or others in the affected community, as appropriate, based on the judgment and experience of the lead agency. Revising the CRP ensures that

citizen concerns about the remedy design and construction are addressed through appropriate community relations activities throughout the implementation of the final remedial action.

EPA is considering including other community relations requirements during RD/RA and solicits comments on the advisability of doing so. For example, the lead agency could be required to prepare a fact sheet or other public information document on the proposed remedial design which would inform the public about the design prior to its completion. The public could be notified of the availability of the fact sheet or document through a variety of techniques, such as a mailing to those on the site mailing list or an advertisement placed in a local newspaper of general circulation. Another example could be to require the lead agency to provide an opportunity for a public information briefing prior to the initiation of on-site activity. Construction activities and workplans could be explained with a discussion of any short- and long-term benefits and impacts of the construction and final remedy on the surrounding community. The public could be notified of such a meeting through a mailing, an advertisement, or other techniques chosen by the lead agency. Another example would be to require notification to the public of the beginning and end of the remedial action phase. Again, this notification could be done through the method determined by the lead agency to be most effective for reaching members of the public interested in the specific site.

12. Other person participation (§ 300.700). Section 300.700(c) proposes that private parties undertaking response actions shall, in order to be consistent with the NCP, comply with either the public participation requirements for Fund-financed response actions (including §§ 300.155, 300.415(n), 300.430 (c) and (f), and 300.435(c)) or State and local requirements which provide a substantially equivalent opportunity for public involvement in the choice of remedy.

Section 300.435 Remedial Design/Remedial Action/Operation and Maintenance.

This section is entirely new. EPA proposes to add this section to the NCP because, as discussed earlier, EPA is reorganizing the NCP to make it correspond more accurately with the order in which response actions are usually implemented. The current NCP does not address the activities discussed in this section. The purpose of remedial

design (RD) is to design and draft the specifications for the remedy selected under § 300.430. The purpose of remedial action (RA) is to implement the remedy selected. The purpose of operation and maintenance (O&M) is to maintain the integrity of remedial actions when the remedial action is complete. EPA today proposes to codify this last portion of the response process.

The following discussion generally follows the outline of the proposed regulatory language and explains significant points paragraph by paragraph.

1. General and RD/RA activities (§§ 300.435 (a) and (b)). Paragraph (a) of § 300.435 gives a general description of RD/RA and O&M to assist the reader in understanding these activities.

Paragraph (b)(1) states that RD/RA activities must be consistent with the language of the ROD regarding those activities. Although the ROD may not specify all of the details of RD/RA activities, the implementation of RD/RA activities must flow from the remedy selected in the ROD and not be inconsistent with, or substantively different from, the remedy and the intent stated in the ROD.

Paragraph (b)(2) states that all Federal and State ARARs identified for the specific site, or that the conditions of any waivers of ARARs must be met during the RD/RA. Note that the ARARs preamble section also discusses ARARs that may be identified during the RD (paragraph F.12).

2. Community relations. See Subpart E, § 300.430 preamble section "H. Community Relations," for discussion of § 300.435(c) and all other community relations requirements.

3. Contractor conflict of interest (§ 300.435(d)). This paragraph addresses remedial action contractors who are potentially responsible parties at a site. Frequently, these contractors will have a conflict of interest which prevents them from serving the best interests of the State or Federal government in the capacity of remedial action contractors carrying out CERCLA section 104 activities. This paragraph requires the lead agency to include in the bidding documents language requiring potential contractors to disclose all pertinent information regarding their status as potentially responsible parties, including the status of their parent companies, their affiliates, and their subcontractors. Furthermore, the potential contractors must certify that they have disclosed all such information or that no information exists regarding their status as potentially responsible parties.

The new paragraph also requires the lead agency to follow certain procedures during the awarding of remedial action contracts to safeguard against contractor conflict of interest. The lead agency must verify prior to awarding the contract that the potential contractor and subcontractors do not have any conflicts of interest that would affect their performance. The proposed regulatory language would allow the lead agency the discretion to opt for actions less severe than denial of the contract award for situations in which the contractor's role at the site has been very minor or is not yet determined. In such a situation, the lead agency may, in the interest of saving time and money, elect to proceed with a contract award, and ensure enhanced government oversight of the remedial action. The new paragraph provides that, in case the low bidder on a contract does have a conflict of interest that prevents the contractor from serving the best interests of the lead agency, the lead agency may declare the bidder nonresponsible.

4. Recontracting for additional work (§ 300.435(e)). EPA proposes this new language to conform to the CERCLA amendments. Occasionally, as new information is generated by the RD/RA process, changes need to be made to the scope of the work in the contract for Fund-financed remedial actions. Contract law generally requires the contract to be terminated when changes to the scope of work are needed. Section 300.435(e) incorporates the provisions of CERCLA section 104(c)(8) and applies to all Fund-financed remedial actions. The purpose is to avoid disruption of a remedial action when recontracting is required for remedial services, such as when additional contamination requiring a different response procedure is found. Situations requiring contract termination are handled differently, depending on whether EPA or the State has the lead for the site. Where EPA has the lead, EPA may extend the existing contract to conduct interim work necessary to address a hazard to human health or the environment until EPA can reopen the bidding process and recontract to complete the remedial action. Where a State has the lead, the State must consult with EPA, and the cooperative agreement must be amended to address the new situation. The paragraph also repeats the \$2 million statutory restriction of such interim actions.

5. Operation and maintenance (§ 300.435(f)). Section 300.430(f) addresses O&M, which is the final step in the remedial process. (See § 300.510(c))

for State assurances on O&M.) Most of paragraph (f) is proposed to focus on the O&M provision in CERCLA section 104(c)(6). This provision defines as remedial action the operation of measures to restore contaminated ground or surface water for a period of up to ten years after the commencement of operation of such measures (or until a protective level is achieved, if less than ten years). The practical effect of this is that the Fund will pay 90 percent (or 50 percent for a publicly operated site) of the costs of measures to restore the ground or surface water for a period of up to ten years.

EPA also proposes to clarify in the NCP that the 10-year provision does not apply in two situations. The first situation is where source control maintenance measures are initiated to prevent further contamination of ground or surface waters and continued O&M is needed to control the source. Source control maintenance, although it may prevent further contamination of ground and surface waters, is separate and distinct from ground and surface water restoration activities. For example, leachate control systems for containment units constitute a form of source control maintenance and do not constitute the restoration of an aquifer. EPA proposes that, upon completion of construction of a source control system, and once the system is operational and functioning properly, EPA's funding obligations cease.

To illustrate, suppose that a Fund-financed site has contaminated soil, surface impoundment sludge, and contaminated ground water. The remedy selected includes placing the soil and sludge in an on-site, RCRA compliant land disposal facility with a leachate collection/treatment system and operating a system to pump and treat the contaminated ground water. Under this scenario, EPA would pay 90 percent of the cost of pumping and treating the ground water for up to ten years but the State would be responsible for operating and maintaining the leachate system. It should be noted that this example assumes that the source control remedy has been completed and meets protective levels.

Source control measures that are ongoing and have not yet achieved the protective levels indicated in the ROD are remedial action, not O&M. If, for example, the selected remedy is to land-farm soils for several years, the land-farming costs would be paid for by the Fund until the cleanup levels in the soils stipulated in the ROD have been achieved. Only if O&M is required for the soils (e.g., erosion control) after

these cleanup levels have been achieved would the State be responsible for the costs.

The second situation where the 10-year provision does not apply is where measures are initiated for the primary purpose of providing a drinking water supply. Ground or surface water measures initiated for reasons other than restoration would not be subject to the 10-year provision. For example, in some situations a determination may be made that restoration of ground or surface water is infeasible or not cost-effective and, therefore, the drinking water source in the ground or surface water cannot be brought to drinking water standards. If the most cost-effective means of providing the drinking water is to pump and treat the contaminated water and directly supply it to the affected population, EPA would pay for the construction of a treatment system designed to meet the population's water needs and any operational costs up to one year to verify that the treatment system is operational and functional. Situations where the selected remedy is to pump and treat to restore the ground or surface water drinking water source as well as to provide drinking water will be addressed on a case-by-case basis. In making a determination in these cases EPA will take into account how separable the costs are and other relevant factors.

EPA solicits comments on its interpretation of "restore ground and surface water quality" and on the merits of the alternatives that EPA has not adopted. Specifically, EPA requests comment on whether the 10-year provision for Federal funding of O&M should extend to situations where the primary purpose of ground-water treatment is to provide drinking water supplies from water contaminated at the site without restoring it.

Subpart F—State Involvement in Hazardous Substances Response

Proposed Subpart F is completely new. It combines concepts described in the current NCP § 300.62 on State role and § 300.68 on State involvement in remedial action. The proposed new subpart codifies in one place all regulatory requirements for State participation and involvement in CERCLA-authorized response activities. It also includes the minimum requirements EPA will follow to ensure that all States are provided an opportunity for "substantial and meaningful" involvement in remedial and enforcement actions, as mandated by CERCLA section 121(f)(1). The

following preamble discussion gives an overview of the Subpart.

A. Summary of Subpart F Sections

1. *General overview and context* (§ 300.500). CERCLA section 104(d)(1) permits EPA to transfer Federal funds and to authorize States to undertake CERCLA response activities via a cooperative agreement. Under this agreement, the State is the lead agency for conduct of response actions at that site. For State-lead Fund-financed remedial and enforcement actions, the cooperative agreement is also used by EPA to obtain the required State cost-share and other CERCLA section 104(c) assurances. In a Federal-lead response, EPA leads the response with the State acting in a support agency role. For Federal-lead Fund-financed remedial actions, a Superfund State contract is the mechanism used by EPA to obtain the required State cost-share and other CERCLA section 104 assurances.

Regardless of the lead agency designation, CERCLA section 121(f)(1) requires State involvement in pre-remedial, remedial, and enforcement response activities. To meet the requirements of CERCLA and strengthen the EPA/State partnership, Subpart F establishes comparable processes for EPA's involvement in State-lead response and State involvement in EPA-lead response. Subpart F, therefore, is applicable both to EPA and the State when either is in a lead or a support agency role. The concept of lead and support agency as defined in Subpart A is integral to the approach taken in Subpart F to ensure close coordination and cooperation during response at all sites listed on the NPL. The term partnership does not imply that EPA and a State enter into formal legal partnership arrangements.

Subpart F introduces the EPA/State Superfund Memorandum of Agreement (SMOA) as a vehicle for establishing an effective EPA/State working relationship. SMOAs are intended to strengthen EPA/State interaction by specifying in advance how EPA and each State will conduct response activities in keeping with the concept of partnership. SMOAs are encouraged but they are not mandatory for a Fund-financed action unless the State wishes to recommend the remedy for EPA concurrence, or to be recognized as the lead agency for a non-Fund-financed action at an NPL site. The Region will enter into a SMOA if the State requests it to do so and the State has demonstrated the capability to take the lead for response. EPA solicits comments on the appropriateness of

requiring in the regulation that Regions enter into SMOAs if States request them and have demonstrated capability to take the lead for response action.

Specific provisions of a SMOA may vary or EPA Regions/States may find that SMOAs are not appropriate to their particular circumstances. However, in those situations where a cooperative agreement is not necessary or desired, the SMOA must be the mechanism for establishing the State as lead agency. States may still use a letter to recognize Federal lead for RI/FS and remedial design at privately operated sites. Such a letter is necessary for EPA to initiate action at a site if a site-specific agreement has not been signed and a SMOA does not exist.

SMOAs are intended to define and facilitate communication between EPA and a State on all aspects of the response process. SMOAs are not legally binding, do not delegate or transfer authorities, and do not convey funds. For example, a SMOA may address in general EPA/State interaction at Federal facilities but the SMOA cannot impose requirements nor obligations on the Federal agencies concerned or provide any authorities to States with respect to the Federal facilities. The SMOA is simply intended to delineate the procedures that EPA and the State will follow to ensure mutually satisfactory communications.

Subpart F does not establish specific oversight requirements for EPA's role during State-lead Fund-financed response, since all Fund-financed response actions must comply with CERCLA and the NCP. Instead, EPA expects technical oversight to be addressed by a SMOA or by site-specific documents, such as a cooperative agreement.

2. *Cross-references for various forms of State participation (§ 300.500(b)).* This paragraph provides cross-references to the specific paragraphs in Subpart F that address the different types of State participation.

3. *EPA/State superfund memorandum of agreement (§ 300.505).* This section of the NCP describes what EPA and a State may agree to include in a SMOA. The consultation process described in this section is the key to a strong EPA/State partnership dedicated to the remediation of as many hazardous waste sites as possible by utilizing the combined resources of States and EPA and avoiding duplication of effort while protecting the interests of both parties.

The primary goals of the SMOA are to: (i) Provide maximum flexibility to EPA and States in planning and implementing response actions; (ii) ensure an equitable EPA/State

partnership during response; (iii) reduce or eliminate misunderstandings by clarifying EPA and State expectations; and (iv) designate lead agency status for States in the absence of a cooperative agreement.

Although § 300.525 discusses State involvement in removals, the removal program is not included in the NCP discussion of the SMOA. There is concern that the nature of the removal program requires that there be maximum flexibility in determining how each removal activity will be conducted. EPA Regional offices and States agree that the current EPA/State removal interaction is effective.

However, where practicable, a SMOA may include general provisions for EPA/State interaction on removal actions by specifying: (a) The process to be followed by EPA and a State to notify each other of a determination that a removal action is necessary; (b) the procedures to be followed by EPA and a State to consult and comment upon the nature of any proposed removal action; and (c) the procedure to be followed to provide for post-removal site control as described in § 300.415(1). Generally, the SMOA provision should specify that responsibility for post-removal site control should be discussed and provided for before the implementation of the removal action. The definition of the consultation process is intended to facilitate EPA/State agreement on the nature and extent of any removal action before the removal action is initiated.

To ensure EPA and State accountability for adherence to the terms of the SMOA, the Regional Administrator and the responsible State agency head must sign this agreement. It is a State-specific, general agreement that should remain applicable for several years, needing modifications only as changes in legislation, regulation, policy, or guidance occur that affect the EPA/State partnership. The SMOA should be implemented through more detailed site-specific documents which should be updated or revised annually or otherwise as necessary. EPA and the State will meet annually to designate who will be the lead agency for specific sites.

The SMOA sets forth overall understandings that should be used as a base from which to operate when developing site-specific cooperative agreements and Superfund State contracts. Cooperative agreements and Superfund State contracts will continue to be the documents for delineating EPA and State site-specific responsibilities and obtaining State assurances as required by CERCLA section 104. However, because a cooperative

agreement will not exist for State-lead non-Fund-financed actions, a SMOA will be required for EPA to designate the State as lead agency for a non-Fund-financed response at an NPL site. The SMOA will be supplemented by site-specific enforcement agreements between EPA and the State which specify schedules and EPA involvement.

SMOAs may address both non-Fund-financed State response actions and Fund-financed actions at NPL sites. Non-Fund-financed State response actions do not have to comply with CERCLA, unless a State wishes to recover costs under section 107 of CERCLA or to receive credit per section 104(c)(5) of CERCLA for its remedial action expenditures if the site is on the NPL or subsequently listed on the NPL. However, it is EPA's opinion that non-Fund-financed State response actions at NPL sites should comply with CERCLA, as amended, to promote national consistency, avoid additional Federal response actions, and expedite deletion of a site from the NPL upon completion of the response action. Possible consequences of States not complying with section 121 of CERCLA or not being consistent with the NCP are discussed below in paragraph 9 of this Subpart F preamble.

The SMOA may identify which documents prepared in the course of response activities require review, comment, or approval by the support agency prior to the lead agency proceeding with further work at the site. Because of wide variations in complexity at site responses, the documents designated for support agency review, comment, or approval may be altered by mutual agreement in the cooperative agreement or Superfund State contract covering a specific site.

See Subpart F preamble, paragraph 11 below, for a description of requirements in the absence of a SMOA or if the SMOA does not address the requirements specified in § 300.515(h).

4. *State assurances (§ 300.510).* Section 300.510(b)(1) addresses State cost-share requirements, including the codification of the statutory provisions for use of credits to offset a State's required cost-share. CERCLA continues to authorize credit for State or political subdivision expenditures or obligations for cost-eligible response actions taken at NPL sites from 1978 to 1980. From October 16, 1986, forward, CERCLA section 104(c)(5) limits credit to State expenditures only for remedial action. States may now receive credit toward their cost-share obligation for remedial action expenditures at NPL sites when taken pursuant to a cooperative agreement

and remedial action expenditures at non-NPL sites which are later listed on the NPL and documented in a cooperative agreement or a Superfund State contract with EPA. States that contributed 50 percent toward Fund-financed response actions at publicly owned but not operated NPL sites pursuant to a cooperative agreement or Superfund State contract in effect between the enactment of CERCLA and the enactment of the 1986 amendments to CERCLA may receive a credit for that amount of the cost share supplied over 10 percent.

Sections 300.510 (c) and (d) read that States must provide assurances for operation and maintenance and off-site disposal, when required. Section 300.510(e) addresses the CERCLA section 104(c)(9) assurance on 20-year capacity on all hazardous wastes (not just hazardous waste from CERCLA sites) generated within a State. EPA will provide more details on how the assurance will be made and how EPA will determine the adequacy of a State's assurance at a later date. Currently, these issues are being addressed by an EPA task force.

Section 300.510(f) addresses the CERCLA section 104(j) assurance for acquiring an interest in real property in order to conduct a response action. In the case of permanent relocations and certain other response actions, where it is necessary to acquire ownership or some lesser interest in real property, EPA will determine when an acquisition of any property interest is necessary. Generally, the States will carry out the required acquisition and hold title to the property interest. However, there may be instances in which the State lacks authority to condemn or otherwise acquire property or is unable to do so in an expeditious manner. The United States Government may then agree to acquire the necessary interest, but only if the response cannot proceed without the acquisition and if the State first agrees to accept transfer of the acquired interest. The State must accept transfer at the conclusion of the response as earlier if EPA determines it to be necessary to facilitate the response, as appropriate under the particular circumstances.

5. Requirements for State involvement in remedial response (§ 300.515). This section combines existing language from §§ 300.62 and 300.68 of the current NCP with new language that describes how EPA intends to satisfy requirements for State involvement established by the 1986 amendments to CERCLA.

6. General (§ 300.515(a)). In order to determine whether the State is the appropriate agency to assume the lead

agency responsibilities at an NPL site, EPA is considering various criteria that would assist EPA Regional Offices and the States in making such decisions. Some of the criteria under consideration are: overall expertise, legal authorities, administrative and contracting capability, financial management systems (according to the applicable assistance agreement regulation), availability of general resources, complexity of the site, availability of site-specific resources, workload and expertise, past Federal or State actions at the site, and past State cleanup activities. EPA solicits comment on these possible criteria and whether further criteria should be added.

As described in the Subpart E, § 300.425 preamble section, "D. Deferral Policies," EPA is considering a policy which would provide the States with the opportunity to request that a site be deferred from listing on the NPL. Deferral to State authorities is part of an overall proposed policy to allow EPA to defer listing sites on the NPL where other Federal or State authorities and their implementing programs can address problems at those sites. As a part of this proposal, EPA describes criteria it is considering for deferring listing of sites on the NPL for response under State authorities. The deferral criteria are not identical to the above criteria for lead agency designation; the above criteria are intended solely for State-lead actions under CERCLA.

7. Applicability of State involvement requirements to Indian Tribes (§ 300.515(b)). CERCLA requires EPA to afford to Indian Tribes substantially the same treatment as it would to States. Therefore, an Indian Tribe may be authorized to undertake the lead for Fund-financed response activities via a cooperative agreement if: (i) The Indian Tribe is Federally-recognized; (ii) the Tribal governing body is currently performing governmental functions to promote the health, safety, and welfare of its affected population or environment; (iii) the Indian Tribe can demonstrate an ability to carry out the response actions (with the exception of criminal enforcement actions) which it seeks authority to perform in accordance with the criteria and priorities established by the NCP; (iv) the Indian Tribe can demonstrate that the functions to be performed are within the scope of its jurisdiction; and (v) the Indian Tribe can demonstrate a reasonable ability to effectively administer a cooperative agreement, including having accounting and procurement procedures that comply with the applicable assistance agreement regulation. The reason for

excluding criminal enforcement actions from Fund-financed response actions is that Tribes do not have criminal enforcement jurisdiction over non-Indians.

EPA proposes to provide for EPA interaction with Federally-recognized Indian Tribes when an NPL site is on Indian lands. When this occurs, a separate SMOA may be developed and, in some instances, the SMOA may be a three-party agreement between EPA, the State, and the Federally-recognized Indian Tribe. Under CERCLA section 104(c)(3), Federally-recognized Indian Tribes do not have to provide CERCLA 104(c) assurances. The definition of "State" in Subpart A of the NCP is proposed to include Indian Tribes and, therefore, unless specified otherwise, Federally-recognized Indian Tribes generally may have the same roles and responsibilities under the NCP as do States.

8. State involvement in the PA/SIs and NPL listing and deletion process (§ 300.515(c)). The intent of Subpart F is to ensure significant State involvement in the pre-remedial and remedial phases of Superfund responses. It is EPA's position that cooperation with the States throughout the response process will assist in meeting the national goal of maximizing the number of responses. One step in the response process where State involvement is necessary is at the pre-remedial phase of response in which potential sites are evaluated, scored, and listed on the NPL. States have the option of performing PA/SIs.

EPA proposes to ensure significant State involvement in the NPL listing process by requiring EPA to consult with the State on EPA-initiated draft Hazard Ranking System scoring packages. EPA would then provide a 20- to 30-day review period for States to comment on the proposed listing of sites in that State. The State's comments, which may include new or additional information on the site, would be reviewed by EPA and taken into consideration prior to publication of the proposed listing.

In addition, § 300.515(c)(3) contains requirements for State involvement in the NPL deletion process. In accordance with the amendments to CERCLA, EPA must obtain State concurrence in order to delete a site from the NPL.

9. EPA and State consultation in remedial planning and selection of remedy process (§§ 300.515 (d) and (e)). Section 300.515(d)(2) establishes a process for lead and support agency consultation and solicitation of their respective identified ARARs and other criteria, guidance, and advisories to be considered (TBC) which may be helpful

in establishing protective cleanup levels. (See general discussion of ARARs and TBCs in § 300.430 preamble section, "F. Compliance with applicable or relevant and appropriate requirements of other laws.") This process is ongoing throughout the remedial response process, and is effective only if lead and support agencies work together at each of several key points. This communication/consultation process should ensure that all responses comply with all ARARs and, where appropriate, that other criteria, guidance, and advisories are considered.

Sections 300.515(d) (1) and (2) make the lead agency responsible for: (i) Identifying its own ARARs and TBCs; and (ii) soliciting from the support agency its ARARs and TBCs. The lead agency is also responsible for providing to the support agency information about the site and nature of the contamination, as well as the remedial alternatives being considered. The support agency will identify its ARARs and TBCs for the lead agency in as detailed and comprehensive a manner as possible on a site-specific basis. Each agency is responsible for coordinating ARAR and TBC identification with other offices or agencies within its own organization. If a Region and State have entered into a SMOA, the SMOA may contain a provision on the process to be followed for identifying Federal and State ARARs as required in § 300.515(d)(2).

Furthermore, CERCLA section 121(d)(2) provides that State ARARs must be met if they are communicated to EPA in a timely manner. EPA proposes a general definition of timely manner in § 300.515(d)(1), which requires that the lead and support agencies identify their respective ARARs and TBCs and communicate them to each other so that sufficient time is available for the lead agency to consider and incorporate such ARARs and TBCs into the remedy selection process without inordinate delays and duplication of effort. EPA proposes to apply this requirement to both the lead and support agency because it is in keeping with the concept of a Federal/State partnership and will ensure that information is shared in a timely manner. EPA proposes that the SMOA may specify that the identification/solicitation process occur within certain mutually agreed upon timeframes. These timeframes may be modified as necessary on a site-specific basis in cooperative agreements or Superfund State contracts. The SMOA may also define lead and support agency roles in the ARARs identification process that are more comprehensive than what EPA has

proposed today for the new Subpart F. This allows more flexibility in soliciting ARARs and TBCs and will enable changes in the process to be made as experience is gained.

The ARARs solicitation process established in the SMOA will identify the appropriate EPA/State management staff level for communication and solicitation of ARARs and TBCs. This process should identify at least one written lead agency request for ARAR/TBC identification and requires a minimum of one written response from the support agency. This documentation should be included in the administrative record.

In the absence of a SMOA, EPA proposes in § 300.515(h)(2) to establish minimum points where the lead and support agencies must identify and communicate in writing their respective ARARs and TBCs. This will ensure that the lead agency has sufficient data and time to consider the ARARs and TBCs in developing and selecting the preferred remedy.

Whether or not a SMOA is in place, EPA expects that the focus of solicitations will be toward requesting the specific kinds of ARARs and TBCs needed at a specific time (e.g., contaminant- or location-specific ARARs/TBCs after site characterization information becomes available, and action-specific ARARs during the early stages of the comparative analysis of remedial alternatives). Alternatively, the lead agency could make a preliminary ARAR determination to which the support agency can respond and/or elaborate.

Procedures and time periods for State notification, review, and concurrence regarding a remedy that either waives State ARARs or that attains ARARs other than those identified by the State are proposed in §§ 300.515(d)(3) and (4). EPA expects its Regional offices and the States (with assistance from EPA Headquarters as necessary) to negotiate and resolve differences of opinion regarding ARARs, and all other areas of disagreement (e.g., preferred alternatives or alternatives to be evaluated). The dispute resolution process adopted by the Region and the State should be used to resolve any differences that might impede the response process. Differences should be addressed at the staff level first and raised to management if a mutually acceptable solution is not attained. If necessary, the Region and the State can jointly raise the dispute to the Assistant Administrator for Solid Waste and Emergency Response for a final determination. If the Region and the

State prefer to establish a different dispute resolution process in their SMOA, that process will be followed.

Section 300.515(e)(1) addresses lead agency responsibilities with respect to the proposed plan. The lead agency and support agency will consult and attempt to reach agreement on the proposed plan. The proposed plan will include a statement of the support agency's opinion on the proposed plan. Agreement between the lead and support agencies on the proposed plan is not required prior to publishing the public notice but such agreement is highly encouraged. If the State is the lead agency for a Fund-financed action but EPA cannot concur with the State's proposed plan after all efforts at resolving differences have failed, EPA will assume the lead for the proposed plan and preparation of the ROD. If EPA is the lead agency, and the State cannot support EPA's proposed plan, EPA may publish the plan, but must include the State's objection and concerns and state why EPA disagrees with the State.

Section 300.515(e)(2) discusses the roles of EPA and the State in the selection of remedy process. It reflects the evolution of the EPA/State partnership in recent years by providing the State, when it is the lead agency, with responsibilities in the selection of remedy process. This new concept would be applicable to both Fund-financed and non-Fund-financed actions (e.g., enforcement sites) in which the State as lead agency would recommend the remedy and provide EPA an opportunity to concur with and adopt the remedy. Concurrence is in keeping with the statutory requirement to provide substantial and meaningful involvement in the initiation, development, and selection of remedial actions.

The concept of concurrence by EPA is designed to further the EPA/State partnership, optimize the use of governmental resources, and increase the number of response actions. Under the current NCP, EPA has significant involvement in and oversight of activities at State-lead Fund-financed sites. Conversely, EPA has limited involvement at State-lead non-Fund-financed sites. States currently have limited responsibilities during selection of remedy at EPA-lead sites. Concurrence increases EPA involvement at State-lead non-Fund-financed sites and provides for a greater State role in the selection of remedy process at Fund-financed sites.

Under this approach, a State can recommend a remedy for EPA concurrence and adoption only when a

SMOA is established. Through the annual planning process, EPA and the States will designate at which State-lead Fund-financed and non-Fund-financed sites the State will prepare the ROD for EPA concurrence and adoption.

EPA intends to implement selectively the process of State preparation of RODs for EPA concurrence and adoption at State-lead Fund-financed sites, since this process is not necessarily applicable to all States, nor for all sites within a State. Moreover, States are not required to accept this responsibility. Sites will be selected where the circumstances at the particular site warrant less EPA involvement and the State has demonstrated its capability to conduct remedial response actions in an effective and responsible manner. EPA concurrence in and adoption of a remedy recommended by the State may not be appropriate at Fund-financed sites where the State has not demonstrated that it possesses the necessary capabilities or where the particular circumstances indicate that greater EPA involvement is necessary.

Under the proposed concurrence process, EPA can select the remedy at EPA-lead sites even when a State neither responds nor concurs with the recommended remedy. However, the State must provide the assurances required by CERCLA section 104 before EPA can proceed with the remedial action.

When a State is the lead agency at a Fund-financed site for developing the RI/FS and preparing the ROD, the State may prepare the proposed plan (if agreed to by EPA), publish the notice of availability, prepare the responsiveness summary, and develop the ROD, thereby recommending a remedy for EPA concurrence and adoption. Additionally, the State is responsible for compiling and maintaining the administrative record for selection of the response action and documenting and providing necessary information for cost recovery. A State cannot proceed with Fund-financed response without EPA's concurrence in and adoption of the remedy. Silence by EPA shall not be construed as concurrence or adoption.

EPA and a State may agree that certain sites will be designated as non-Fund-financed State-lead enforcement actions (i.e., the State is responding pursuant to its own authorities). At such sites, a State may proceed without further EPA concurrence. However, the State may select the remedy, prepare the ROD, and seek EPA concurrence with the remedy in order to: (a) Promote effective use of Federal and State resources; (b) promote national

consistency in responses; (c) avoid the need for additional Federal response actions; (d) induce PRPs to agree to perform necessary response actions; and (e) expedite deletion of the site from the NPL at the completion of the response action.

At non-Fund-financed State-lead enforcement sites, the State is responsible for proper implementation of the remedial action so that the site will meet criteria for deletion from the NPL. However, even when EPA concurs with the remedy selected and implemented by the State, EPA may still proceed under its own CERCLA authorities if necessary to ensure compliance with CERCLA section 121 and other pertinent provisions of CERCLA.

Subpart F does not require that States select remedies for non-Fund-financed State-lead enforcement sites in conformance with CERCLA section 121 and the remedy selection process specified in the NCP. However, where a State-selected remedy does not so conform, States and/or PRPs may be at risk in several ways, including, but not limited to the following: (1) EPA will not concur with the recommended remedy; (2) EPA may refuse to designate the State as lead agency for any subsequent response activities; (3) States and PRPs may be deprived of the assurance that EPA will not find it necessary later to seek to compel further response actions; (4) EPA may be unable to delete a site from the NPL and/or (5) State cost recovery efforts may be hindered.

If disputes arise with respect to concurrence, the dispute resolution procedure discussed above or, as otherwise specified in a SMOA, should be invoked so that EPA and the State can reach a mutually acceptable decision on the appropriate remedy.

Section 300.515(f) addresses State funding of substantive requirements beyond the scope of the selected remedy, including procedures for attainment of State standards which EPA has determined not to be ARARs or which EPA has determined to waive. EPA intends this section to apply to State-funded additional elements of the basic remedy selected or concurred upon by EPA. The State may be required to assume the lead for remedial design and implementation of such remedial actions or EPA may maintain the lead if the EPA Region determines that financial responsibility and related issues do not present obstacles to EPA-lead remedial action. Another option is State assumption of the lead for only the State-funded addition if those additional requirements can be done as a separate operable unit.

EPA encourages States to participate in EPA-lead enforcement negotiations as provided for in section 121(f)(1) of CERCLA and proposed in § 300.520 of the NCP and to conduct State-lead enforcement actions consistent with CERCLA and the NCP. To maximize PRP responses through State-lead enforcement actions, Federal financial assistance may be provided to support these actions.

During EPA-lead enforcement actions, EPA intends to provide States with opportunities for review, consultation, and concurrence. As with Fund-financed response, the general degree of State involvement in EPA-lead enforcement actions should be outlined in SMOAs. Although opportunities for State involvement are provided in this subpart, EPA may determine that substantive State standards are not ARARs, or may waive State ARARs pursuant to CERCLA section 121(d)(4) for remedies proposed by EPA during a Federal-lead enforcement action. In those circumstances, pursuant to CERCLA section 121(f)(2)(A), States are provided an opportunity to concur or nonconcur with the remedy selected by EPA. Procedures for seeking the modification of the remedy to conform to State ARARs are found in section 121(f)(2)(B) of CERCLA.

During State-financed or State-lead enforcement actions at NPL sites, States should provide EPA with an opportunity for the review of key documents and consultation during the remedial response process. For State-lead enforcement sites, the State will prepare the ROD (generally, EPA will not prepare the ROD at State-lead enforcement sites unless the State and EPA agree otherwise). The general degree of EPA involvement may be outlined in the SMOA. EPA's oversight and involvement in State-lead enforcement actions where EPA is providing financial assistance will be delineated in site-specific cooperative agreements. EPA does not intend to be routinely involved in negotiations at State-financed enforcement sites; however, EPA expects that States will notify EPA of negotiations with potentially responsible parties and provide opportunities for involvement to facilitate EPA concurrence with recommended remedies when the State seeks EPA concurrence. It is recognized that due to workload and resource constraints associated with EPA-lead projects, EPA may not have adequate staff or resources to review certain plans and that EPA will not be bound to any decisions made by the State if EPA fails to respond. Settlements achieved

will normally be between the State and potentially responsible parties. Also, the requirements outlined in § 300.515 for Fund-financed remedial response will be applicable to Fund-financed State-lead enforcement actions. For State-lead enforcement sites, the State should request that EPA provide: (A) Identified Federal ARARs; (B) a review of the State or potentially responsible parties' FS and proposed plan; (C) a response to comments on waivers to, or disagreements about, Federal ARARs; and (D) concurrence in RODs.

10. *State involvement in remedial action (§ 300.515(g)).* A key point for EPA/State interaction during Fund-financed remedial action will be the joint inspection of the remedy as specified in § 300.515(g). The purpose of this inspection is to ensure that the remedy has been constructed in accordance with the ROD and the remedial design.

11. *Requirements for State involvement in the absence of a SMOA (§ 300.515(h)).* Section 300.515(h) describes categories of requirements that must be met in the absence of a SMOA: annual consultations; identification of ARARs and TBCs; and State review and comment on EPA-lead RI/FS, proposed plan, ROD, ARAR/TBC determinations, and remedial design. These requirements also apply where a SMOA is negotiated but does not address a specific category. For example, a SMOA may include requirements for annual consultations and State review but not identification of ARARs and TBCs. In this case, the requirements in § 300.515(h) regarding identification of ARARs and TBCs must be complied with. If a SMOA does address a particular category, the SMOA may specify requirements different from those stated in § 300.515(h) except that, at a minimum, the SMOA must include the ARARs identification requirements specified in § 300.515(h)(2). For example, a SMOA may include requirements regarding State review of EPA-lead documents but specify shorter or longer timeframes for that review.

12. *Administrative record (§ 300.515(i)).* The administrative record is an important aspect of the response process. The purpose of this paragraph is to remind the reader that the SMOA can address the procedures for compiling and maintaining the administrative record. It also directs the reader to Subpart I for more information.

13. *State involvement in EPA-lead enforcement negotiations (§ 300.520).* CERCLA section 121(f)(2) requires EPA to provide notice to States regarding negotiations with PRPs. Accordingly,

EPA is proposing this section to implement the CERCLA mandate. Although this section focuses on State notification and involvement in remedial investigations/feasibility studies (RI/FS) and remedial design and remedial action (RD and RA) PRP negotiations, EPA does not intend to preclude notification to and involvement of States as appropriate in other enforcement actions.

14. *State involvement in removal actions (§ 300.525).* This section addresses State involvement with EPA in the removal program. Although the USCG also works closely with the States when undertaking CERCLA response, Subpart F requirements do not apply to State involvement in USCG responses. Statutory requirements for removals are not the same as those for remedial and enforcement response; therefore, State involvement differs significantly. Although § 300.515(a) is generally applicable to State-lead removals, § 300.525 notes the specific differences in State involvement in removals from remedial actions. Except as provided in § 300.525, the rest of § 300.515 on pre-remedial and remedial response is not generally applicable to EPA-lead removals.

Although EPA and States actively coordinate during removal actions to assure timely and efficient response, most Fund-financed removal actions are EPA-lead. However, in some circumstances States are required to share in the cost of the removal. (See § 300.510(b)(1).) Proposed Subpart F encourages States to undertake Fund-financed removal actions via cooperative agreements, if EPA determines that it will result in the most efficient method of threat mitigation. In either situation, States are encouraged to assume responsibility for post-removal site control activities, if required (see § 300.415(1)).

EPA will encourage State-lead removals to the extent practicable. The statutory limits for removals, now \$2,000,000 and twelve months, will apply to State-lead, Fund-financed removal actions unless the second statutory exemption (consistency with the remedial action to be taken) is invoked. The first exemption (continuing emergency) for extending the removal action beyond the statutory limitation will generally not be applicable to State-lead removals because of their less critical nature. (See § 300.415.)

15. *Consultation with States regarding removal actions (§ 300.525(e)).* This paragraph contains a general statement that EPA will consult with the State when conducting removal actions within that State.

B. Points of Clarification

1. *Applicability of State involvement requirements to political subdivisions.* Subpart F does not address EPA interaction with political subdivisions of a State, although a political subdivision may take the lead for certain response actions via a cooperative agreement if the State provides the required assurances at the time of remedial action. EPA, the State, and the political subdivision are required to establish a written agreement that sets forth roles and responsibilities of each party. The cooperative agreement will specify the requirements associated with a political subdivision lead. Such Fund-financed actions must comply with CERCLA and the NCP.

2. *Applicability of Subpart F to Federal facility responses.* As provided in CERCLA section 120(f), the substantive requirements of Subpart F do apply to Federal facility responses, and the Federal facility must meet the requirements for involving the States in remedial response actions taken at Federal facilities. EPA intends to further address State involvement at Federal facilities in the proposed Subpart K to be drafted. Note that CERCLA section 120(g) does not allow the transfer of the EPA's authority to the States.

3. *State requirements or siting laws.* CERCLA section 121(d)(2)(C) specifically limits the applicability of State requirements or siting laws for hazardous waste facilities that could result in a State wide ban on land disposal. In order to be treated as potential ARARs, such laws must:

- Be of general applicability and be formally adopted;
- Be based only on technical (e.g., hydrogeologic) or other relevant considerations; and
- Not be intended to preclude land disposal for reasons other than protection of health or the environment.

In addition, the State must arrange and pay for additional costs for out-of-State or other disposal made necessary by such a law. EPA believes that the factors used in evaluating such criteria should include the nature of the technical considerations and the history of health and environmental legislation in the State.

Subpart G—Trustees for Natural Resources

Section 107(a)(4)(C) of CERCLA imposes responsible party liability for the injury, destruction, or loss of a natural resource, including the costs of a natural resources damage assessment. Section 107(f)(1) of CERCLA provides

that only properly designated Federal trustees, authorized representatives of an affected State, or Indian Tribes can pursue a section 107(a)(4)(C) action.

Subpart G designates Federal trustees to act on behalf of the President in assessing damages to natural resources from discharges of oil or releases of hazardous substances, pollutants, or contaminants, and outlines the responsibilities of trustees under the NCP. Although the CERCLA amendments necessitated few changes to Subpart G, the major objective for this proposed revision is to make the subpart more readable and understandable to those who are not familiar with trustee agency authorities. Because the primary purpose of this subpart is to designate trustees, the proposed changes reflect an overriding concern that trustee jurisdictions be described as accurately as possible.

Section 301(c) of CERCLA requires the promulgation of rules for the assessment of damages for injury to, destruction of, or loss of natural resources resulting from a discharge of oil or a release of a hazardous substance under CERCLA and the Clean Water Act. The responsibility to promulgate these regulations has been delegated to the Department of the Interior (DOI). The use of the procedures described in DOI's rule, 43 CFR Part 11, is optional. However, the results of an assessment performed in accordance with the DOI rule by a Federal or State trustee, or Indian Tribe, if reviewed by a Federal or State trustee, shall be given the status of a rebuttable presumption in an action to recover damages for injuries to, destruction of, or loss of natural resources. Whether or not the procedures in 43 CFR Part 11 are followed, a trustee should proceed in conformance with the responsibilities described in this subpart.

A. Major Revisions

1. *Specific designation of trustees and consultation (§ 300.600).* In the proposed revisions, EPA has attempted to clarify and define as accurately as possible the Federal agencies responsible for specific resources. EPA has attempted to do this by delineating in the paragraph headings the Federal agency or type of Federal agency responsible for natural resources. In addition, EPA has changed the narrative to describe in more detail the resources that agencies manage and to give examples of the types of resources that might be under an agency's trusteeship.

It should be noted that although the Departments of Commerce and the Interior are listed under separate headings, the division of authorities

between them, and that between them and other agencies, is complex. For this reason, parallel construction of the sections describing trustee designations is not possible. The proposed revisions use the terms of the authorities under which each trustee operates.

A related change is made to § 300.600(b)(1), which designates the Secretary of Commerce as a trustee. The revision explains that the Secretary will act with the concurrence of other Federal agencies when the resources or authorities of other agencies are involved. This situation may arise because the trusteeship of the Secretary of Commerce is sometimes described geographically, i.e., within certain marine and coastal areas. However, specific natural resources in these same areas may also be managed or protected under statutes administered by other Federal agencies. Thus, the regulation states that the Secretary of Commerce will act with the concurrence of other Federal agencies when any of their resources are affected. It is appropriate that Federal trustees seek concurrence when they plan to act with respect to resources under the management or protection of other agencies. The concurrence need not be lengthy or cumbersome. A similar provision is not included in the regulatory section describing the Secretary of the Interior's trusteeship because DOI's authority is not defined in terms of particular geographical areas. Rather, Federal statutes administered by the Secretary of the Interior describe the specific natural resources to be managed or protected by DOI.

Another major change involves the description of certain natural resources. Section 300.72 of the current NCP designates the Secretary of Commerce as trustee for "waters of the contiguous zone and parts of the high seas * * *". In the proposed revision, the following are included as under the Secretary's jurisdiction: "waters of the contiguous zone, the exclusive economic zone, and the outer continental shelf * * *". The contiguous zone includes the area from three to twelve miles from the shore. The exclusive economic zone, defined by Proclamation 5030 (March 10, 1983) and subsequently incorporated in the Magnuson Fishery Conservation and Management Act, is the area up to two hundred miles from the shore. The outer continental shelf extends beyond two hundred miles in some places.

The current NCP's exclusions of lands or resources in or under U.S. waters (§ 300.72 (a) and (b)) are proposed to be deleted. Federal trusteeship derives from authority to manage or protect the affected resources regardless of where

these resources are located. To the extent that these resource management jurisdictions are concurrent or contiguous, trustees are expected to work together pursuant to § 300.615.

2. *Indian Tribes (§ 300.610).* The amendments to CERCLA provide that an Indian Tribe may bring an action for injury to, destruction of, or loss of "natural resources belonging to, managed by, controlled by, or appertaining to such tribe, or held in trust for the benefit of such tribe, or belonging to a member of such tribe if such resources are subject to a trust restriction on alienation." In those instances where the United States acts on behalf of an Indian Tribe, the Secretary of the Interior shall function as the trustee of those natural resources for which the Indian Tribe would otherwise act as trustee. The revisions in § 300.610 reflect these statutory changes.

Section 300.72(d) of the current Subpart G designates the Secretary of the Interior as trustee to recover "[d]amages to natural resources protected by treaty (or other authority pertaining to Native American tribes) or located on lands held by the United States in trust for Native American communities or individuals." Because this quoted language is inconsistent with the language on "natural resources" in section 107 of CERCLA, as amended, it has been deleted from the proposed revisions to Subpart G.

3. *Responsibilities of trustees (§ 300.615).* EPA proposes to reorganize and make substantive changes to the existing NCP § 300.74. The section has been reorganized by changing the order in which some information appears (e.g., discussion of multiple trustees appears first, instead of last) and by changing the format in which some information appears (e.g., listing the responsibilities of the trustees so that their responsibilities are easier to read and understand).

Several new provisions are proposed to be added to this section to provide better information on the actions trustees can take to carry out their responsibilities. The first addition notes that trustees may list in each Regional contingency plan (see § 300.210(b)) the appropriate contacts to ensure that the trustees are notified of potential or actual damage to natural resources. In addition, the proposed section provides that when trustees are notified of or discover possible damage to natural resources, they may conduct a preliminary survey of the area to determine if natural resources under their trust are affected.

Although a trustee may be responsible for certain natural resources affected or potentially affected by a release, it is important that only one person (i.e., the lead agency OSC or RPM) manage activities at the site of a release or potential release. The OSC/RPM shall coordinate responsibilities for CERCLA section 104 assessments, investigations, and planning, including Federal trustees' participation in negotiations with PRPs as provided under CERCLA section 122(j)(1). Close communication and coordination between OSCs/RPMs and trustees is essential. When there are multiple trustees, it is recommended that a lead authorized official be designated to coordinate all aspects of the assessment.

The trustee actions authorized under existing NCP § 300.74(b) are proposed to be changed in the following ways. First, the trustee is authorized to conduct CERCLA section 104(e) activities such as entering and inspecting any relevant vessels, facilities, or other properties, or inspecting or obtaining samples of any suspected hazardous substances, pollutants, or contaminants. This addition to this section reflects authorities delegated to trustees under Executive Order 12580. In exercising this authority, trustees must consult with the lead agency to ensure efficient response actions and to avoid duplication of effort. Second, a new provision of CERCLA, section 104(e)(5)(B), provides that the President (or Federal trustees by delegation under EO 12580) may request that the Attorney General initiate civil actions against PRPs in order to compel compliance with orders regarding information gathering and access.

Finally, in discussing trustee responsibilities, the option of pursuing claims against the Fund has been deleted. This change reflects the provision in SARA that prohibits expenditures from the Fund to pay trustees' claims for natural resources damages assessment and restoration of natural resources. Although section 111(a)(3) of CERCLA provides for claims against the Fund for assessment and restoration of natural resources, section 517 of the Superfund taxing provisions in Title V of SARA (Superfund Revenue Act of 1986), by necessary implication, eliminates authority to pay for such assessments or restoration. The proposed deletion of existing NCP § 300.74(b)(4) reflects this change in the law.

Subpart H—Participation by Other Persons

The focus of this subpart is on those authorities of CERCLA that allow

persons other than governments to respond to releases and to recover those response costs. Although this subpart is new, it revises and consolidates provisions from current NCP § 300.25 on Nongovernment Participation and § 300.71 on Other Party Responses into one place in the NCP. Subpart H also incorporates the new authorities from CERCLA, as amended, which address participation by other persons.

A. Major Revisions

1. *Reorganization of authorities regarding participation by other persons (§ 300.700).* EPA proposes to combine the closely related concepts of current NCP §§ 300.25(d) and 300.71 into a new subpart to clarify NCP authorities regarding responses undertaken by persons other than the Federal government, States or Indian Tribes. Accordingly, § 300.700(a) states that any person may undertake a response action to reduce or eliminate a release of a hazardous substance, or pollutant, or contaminant. Section 300.700(b) then sets forth the following summary of the mechanisms for the recovery of response costs:

- i. *CERCLA section 107(a)(4)(B).* Awards of response costs from liable parties to other persons who undertake response actions consistent with the NCP;
- ii. *CERCLA section 111(a)(2).* Claims by other persons against the Fund for reimbursement for actions consistent with EPA's prior approval;
- iii. *CERCLA section 106(b)(2).* Petitions against the Fund for reimbursement of costs incurred in compliance with a section 106(a) order, issued after October 17, 1986, where the petitioner was not liable for the release, or if the petitioner was liable, to the extent that the action ordered was arbitrary and capricious, or not otherwise in accordance with the law; and
- iv. *CERCLA section 123.* Claims by a general purpose unit of local government for reimbursement of temporary emergency measures costs (see 40 CFR Part 310).

In order for a person to recover the costs of his or her response action from the Fund or from another person, several conditions must be met. The remainder of the paragraphs in the new subpart examine each of the above cost recovery mechanisms and give a more in-depth description of the conditions that must be met.

2. *Consistency with the NCP for the purpose of cost recovery.* Section 107(a)(4)(B) authorizes parties other than the Federal government, States, or Indian Tribes to recover from liable

parties response costs which they incurred consistent with the NCP. Proposed NCP § 300.700(c) revises current NCP § 300.71(a)(2) and contains a list of NCP sections that these other persons (except for other persons acting pursuant to orders issued under CERCLA sections 104 and 106) must comply with in order for their response actions to be considered consistent with the NCP for the purpose of cost recovery from other third parties. The exception is made for section 104 and 106 actions because the administrative order or consent decree issued under these sections determines the scope and requirements of the response action. Today EPA proposes to list the following NCP sections that EPA believes other persons must comply with in order for their response actions to be considered consistent with the NCP:

- i. Section 300.150 (on worker health and safety);
- ii. Section 300.160 (on documentation and cost recovery);
- iii. Section 300.400(c)(1), (4), (5), and (7) (on determining the need for a Fund-financed action), (e) (on permit requirements), and (g) (on identification of ARARs);
- iv. Section 300.405(b), (c), and (d) (on reports of releases to the NRC);
- v. Section 300.410 (on removal site evaluation) except (e)(5) and (6) and the reference to listing releases in CERCLIS in (h), which are uniquely Federal determinations;
- vi. Section 300.415 (on removal actions) except (a)(2), (b)(2)(vii), (b)(5), and (g);
- vii. Section 300.420 (on remedial site evaluation);
- viii. Section 300.430 (on RI/FS and selection of remedy) except paragraph (f)(3)(iv)(F) which applies only to Fund-financed responses; and
- ix. Section 300.435 (on remedial design/remedial action, operation and maintenance).

These sections have been chosen to assure protection of human health and the environment. EPA has omitted those NCP sections that pertain to organizational matters and other areas of concern that are unique to the government.

In addition, the regulation specifically states that other persons must provide an opportunity for public comment concerning the selection of the response action. The regulation identifies the sections of the proposed NCP regarding public participation (except administrative record and information repository requirements stated therein)

that a response action must comply with in order to be consistent with the NCP:

- a. Section 300.155 (on public information and community relations);
- b. Section 300.415(n) (on community relations during removal actions);
- c. Section 300.430(c) (on community relations during RI/FS and selection of remedy) except (5);
- d. Section 300.430(f)(1), (2), and (5) (on community relations during RI/FS and selection of remedy); and
- e. Section 300.435(c) (on community relations during RD/RA and operation and maintenance).

Alternatively, EPA intends that a response action will be considered consistent with NCP public participation requirements if the person taking the response action complies with appropriate State or local requirements which provide a substantially equivalent opportunity for public involvement in the choice of remedy.

Further, the regulation suggests that other persons consider the methods of remedying releases listed in Appendix D when selecting the appropriate remedial action.

The requirements listed above are to be complied with where pertinent to the particular response action. By setting forth these requirements, EPA wishes to clarify that it is not EPA's objective to limit the discretion of Federal courts in determining what constitutes substantial compliance with the NCP or making CERCLA cost recovery awards. The courts, rather than EPA, will make the ultimate determination of what response costs parties may recover pursuant to CERCLA section 107. Nevertheless, as the primary agency charged with the implementation of the statute, EPA has an interest in this matter, and believes that its interpretation of the statute merits judicial deference. EPA believes it has an obligation, in promulgating the NCP, to explain when actions by non-governmental entities are consistent with the NCP. This obligation is particularly important given the widespread confusion and conflicting judicial interpretations of the issue. See e.g., *Walls v. Waste Resources Corp.*, 761 F.2d 311 (6th Cir. 1985); *Pinole Point Properties, Inc. v. Bethlehem Steel Corp.*, 596 F. Supp. 283 (N.D. Cal. 1984); *Bulk Distribution Centers, Inc. v. Monsanto Co.*, 589 F. Supp. 1437, 1442-44 (S.D. Fla. 1984); *Jones v. Inmont Corp.*, 584 F. Supp. 1425, 1430 (S.D. Ohio 1984); *City of Philadelphia v. Stepan Chemical Co.*, 544 F. Supp. 1135 (E.D. Pa. 1982).

Moreover, EPA intends that providing a list of requirements to be complied with in order to be consistent with the NCP will enhance the probability of a successful cost recovery action, thus

providing an incentive to other persons to undertake response actions.

3. *Deletion of requirements regarding response actions that are "not inconsistent with the NCP."* EPA is proposing to delete the language of current NCP § 300.71(a)(2) regarding which sections of the NCP must be complied with for governmental response actions to be "not inconsistent with the NCP." EPA believes that CERCLA contemplates a different standard of proof for actions conducted by the Federal government, States, or Indian Tribes. EPA does not propose to define what actions are "not inconsistent with the NCP," and would leave that determination to case-by-case decisionmaking.

4. *Summary of revisions to language regarding consistency with the NCP.* In today's proposed rule, as well as in the current NCP, EPA makes it absolutely clear that no Federal approval of any kind is required for a cost recovery action under CERCLA section 107. The main effect of today's proposed revisions to current NCP § 300.71(a)(2) is to specify in further detail what other persons must do in order to act consistently with the NCP.

5. *Deletion of certification authorities from the NCP.* EPA proposes to delete current NCP § 300.71(c) regarding certification of organizations to conduct site response activities because EPA believes that preauthorization of each response claim is a sufficient means of determining the capability of applicants to perform proposed response actions. EPA is also concerned that its certification of organizations would be used as a marketing tool, possibly leading to public misperceptions regarding the quality of performance by certified firms. Today's proposed revisions incorporate that earlier proposed change.

6. *Additional statutory authorities for the recovery of response costs.* Subpart H refers to new mechanisms for reimbursement of response costs added by the 1986 CERCLA amendments:

i. Section 106(b), whereby a person who has complied with a section 106(a) enforcement order issued after October 17, 1986 may petition the Fund for reimbursement of response costs if he or she is not liable for the release, or, if liable for the release, can subsequently demonstrate that the order, or a portion thereof, was arbitrary and capricious, or not otherwise in accordance with the law; and

ii. Section 123, which authorizes any general purpose unit of local government to petition the Fund for expenses incurred in providing temporary emergency measures. Such

reimbursement may not exceed \$25,000 for a single response. EPA has issued an interim final regulation (see 52 FR 39396, October 21, 1987) establishing procedures for such actions.

B. Other Revisions

1. *Clarification and reorganization of requirements for preauthorization of responses by other persons.* The language in current NCP § 300.25(d) has, for the most part, been retained. However, the language has been reorganized, and minor clarifications and amplifications to existing language are proposed. Preauthorization is an established requirement. EPA is not considering revising it and does not solicit comment on the requirement itself.

The proposed revisions clarify that in order to receive EPA's prior approval, the applicant must demonstrate not only the technical and other capabilities necessary to respond safely and effectively to releases, but also establish that the action will be consistent with the NCP as established by this section. The capability of an applicant to perform a proposed action will be evaluated on a case-by-case basis, since an application for preauthorization must be filed with respect to each proposed action. EPA intends to propose a separate regulation setting forth the procedures for applying for preauthorization and for presenting a claim for reimbursement of response costs.

2. *Impact of new CERCLA section 122 settlement provisions on other party response.* Section 122(b) of CERCLA adds a provision that allows potentially responsible parties to be reimbursed through "mixed funding" agreements. Mixed funding agreements permit EPA to reimburse parties to settlement agreements for certain response actions that the parties have agreed to perform and that EPA has agreed to finance in part. EPA proposes to add a new paragraph to the section on claims to state that a claim by a party determined by EPA to be potentially liable under section 107 of CERCLA, including a State or a political subdivision thereof, will receive EPA's prior approval to submit claims only in accordance with an order issued pursuant to section 106 of CERCLA, or a settlement with the Federal government in accordance with section 122 of CERCLA. Consequently, a State or its political subdivision can submit claims under these sections in the context of enforcement actions taken by EPA. Where such persons are not determined by EPA to be potentially liable under section 107 of CERCLA, but

act in their capacity as a unit of government, they may receive funds from the Fund for section 104 response action as authorized by section 111(a)(1) of CERCLA. A political subdivision of a State is treated as a State for the purpose of section 107.

3. *Grants for technical assistance.* Current NCP § 300.25(d) refers to cooperative agreements and contracts. Amendments to CERCLA section 111 authorize technical assistance grants pursuant to section 117(e). Cooperative agreements and grants, when taken together, are generally referred to as "assistance agreements." EPA is proposing to revise § 300.25(d) to refer to "procurement contracts or assistance agreements."

Subpart I—Administrative Record for Selection of Response Action

Proposed Subpart I of the NCP is entirely new. It implements CERCLA requirements concerning the establishment of an administrative record. Section 113(k)(1) of CERCLA requires the establishment of an administrative record that contains the documents that form the basis for the selection of a CERCLA response action. In addition, section 113(k)(2) requires the promulgation of regulations establishing procedures for the participation of interested persons in the development of the administrative record.

EPA is proposing regulations regarding the administrative record that include procedures for public participation. This will ensure the development of a complete and accurate record by all parties responsible for compiling records, because procedures for establishing and maintaining the record are closely related to the procedures governing public participation.

Because this subpart is entirely new, the following discussion is not divided into major revisions, other revisions, and points of clarification. Instead, it explains the purpose of the administrative record and then generally provides a paragraph by paragraph explanation of the proposed regulations.

A. Background and Purpose

Under CERCLA, the administrative record established under section 113(k) serves two primary purposes. First, under section 113(j), judicial review of any issue concerning the adequacy of a response action is limited to the administrative record. Second, section 113(k) requires that the administrative record be used as a vehicle for public participation in the selection of the response action, ensuring that EPA has

considered all relevant factors in selecting the response and that interested parties have been given adequate notice and an opportunity to participate in that selection.

1. *Judicial review.* Section 113(j)(1) of CERCLA provides that judicial review of any issues concerning the adequacy of any response action shall be limited to the administrative record. Section 113(j)(2) provides that the court shall uphold the selection of a response action unless the objecting party can demonstrate, based on the administrative record, that the decision was arbitrary and capricious, or otherwise not in accordance with law. These statutory provisions codify well-established principles of administrative law concerning the applicable standard and scope of review for informal agency actions. The legislative history of section 113 demonstrates that it is intended to clarify and confirm the applicability of these administrative law principles to CERCLA response selection. (See S. Rep. 99-11, 99th Cong., 1st Sess. 57 (1985); H.R. Rep. 99-253, 99th Cong., 1st Sess. 82 (1985); Cong. Rec. H 11084 (daily ed. Dec. 5, 1985)).

Limiting judicial review of the selection of a response action to the administrative record ensures that litigation on the selection of the response action focuses on the selection in light of the information available to the decisionmaker at the time the response was selected. Judicial review limited to the administrative record contributes to the overwhelming public interest in effecting the expeditious cleanup of potentially health- and environment-threatening hazardous waste sites and ensures that all interested persons may participate equally in the administrative decisionmaking process. The principal effect of limiting judicial review to the administrative record is that courts will not engage in de novo fact-finding during their review of a challenge to the decision to select a certain response. Thus, record review of response selection decisions would mean that persons challenging the response decision could not depose, examine or cross-examine on-scene coordinators (OSCs), remedial project managers (RPMs), government consultants, or decisionmakers with respect to the response decision or engage in any other discovery activities. Also, the imposition of long and costly trial-type procedures in section 106 actions would greatly delay response.

2. *Public participation.* Sections 113(k)(2) (A) and (B) of CERCLA require the promulgation of regulations establishing procedures for the

participation of interested persons in the development of the administrative record. Participation by interested persons, where appropriate, will ensure that EPA has considered the concerns of the public, including potentially responsible parties (PRPs), in selecting the response action. In addition, for purposes of administrative and judicial review, the administrative record can contain documents that reflect the views of the public, including PRPs and those not party to any judicial proceeding, concerning the selection of a response action.

For remedial actions, section 113(k)(2)(B) of CERCLA establishes the following minimum procedures for public participation:

- i. Notice to potentially affected persons and the public, accompanied by a brief analysis of the plan and alternative plans that were considered;
- ii. A reasonable opportunity to comment and provide information regarding the plan;
- iii. An opportunity for a public meeting in the affected area, in accordance with section 117(a)(2) of CERCLA;
- iv. A response to each of the significant comments, criticisms, and new data submitted in written or oral presentations; and
- v. A statement of the basis and purpose of the selected action.

These requirements are virtually the same as those required by section 117 of CERCLA concerning public participation for remedial actions. These public participation requirements are proposed for codification today in § 300.430 of Subpart E of the NCP. Subpart I expands on the public participation requirements of Subpart E.

Because the nature of removal actions often involves the need for prompt action, the procedures proposed today for public participation in removal actions are quite different from those for remedial actions. Removal authority allows the lead agency to move quickly in situations where prompt lead agency action is warranted. Section 113(k)(2)(A) of CERCLA requires that there be "appropriate" participation of interested persons in the development of the administrative record supporting removal actions. The legislative history of this section states that these public participation requirements "are not intended to hamper emergency removal actions. Nonetheless, the Administrator is directed to develop appropriate participation procedures for removal actions and should follow these requirements to the maximum extent practicable." (H.R. Rep. 99-253, 99th

Cong. 1st Sess., 1985, at 82). Public participation requirements for removal actions are addressed in § 300.415(n) of today's proposed regulations. Additional public participation procedures in the development of an administrative record for a removal action are addressed in § 300.820. The public participation procedures are designed to ensure an appropriate level of public involvement for removal actions without causing unnecessary delay. In general, where there is time to solicit public comment before the selection of a removal action, the lead agency will do so. Public participation procedures for removal actions are described in greater detail below.

B. Current Record Requirements

Section 113(k)(2)(C) of CERCLA states that until regulations on the participation of interested persons in the development of the administrative record are promulgated, the administrative record shall consist of all items developed and received pursuant to current procedures for selection of the response action, including procedures for the participation of interested parties and the public. Current procedures on public participation in the selection of response actions include an extensive community relations program through which interested persons have notice of information through notices in local newspapers, community relations mailings, public meetings, and letters, including notice letters to potentially responsible parties. An adequate record should be compiled and maintained through use of current procedures for sites where the remedial investigation or removal action has already begun prior to promulgation of these regulations. These proposed administrative record requirements build upon and formalize existing procedures for the exchange of information on the selection of a response action.

The cutoff date for the applicability of these regulations is based on when the administrative record file must first be made available under these regulations. The lead agency may not be able to fully comply with regulations concerning compilation of the record which are promulgated after a record has already been compiled and made available at or near a site. Thus, at such sites, the lead agency will comply with these regulations to the extent practicable.

C. Summary of New Subpart I

1. *Establishment of an administrative record (§ 300.800).* As explained earlier, section 113(k) requires the establishment of an administrative record consisting of the documents that form the basis for

the selection of a response action. An administrative record is the compilation of documents considered or relied on by the agency in making a decision; in this case, the selection of the response action for the site. Proposed § 300.800(a) codifies this statutory provision and provides that such establishment is the responsibility of the lead agency. The regulation also uses the term "administrative record file" to refer to documents which the lead agency anticipates will be included in the administrative record when the decision on response action selection is made. The administrative record file contains a body of documents which increases as documents are added and does not necessarily constitute the final administrative record.

The term "documents," also used in the preamble and proposed regulations, is intended to be very broad. It includes writings, drawings, graphs, charts, photographs, and data compilations from which information can be obtained. It does not include physical samples.

Section 300.800(b) addresses administrative records for Federal facilities. Executive Order 12580 authorizes Federal agencies to establish the administrative record for selection of response actions for Federal facilities under their jurisdiction, custody, or control. EPA, however, is required to promulgate regulations establishing procedures for the participation of interested parties in the development of the record. Federal agencies must compile and maintain records as required by this subpart, as finally promulgated. Section 300.800(b) also clarifies that although the Federal agency is responsible for compiling and maintaining the administrative record, EPA may furnish documents which the Federal agency is to place in the administrative record file to ensure that the administrative record includes all documents which form the basis for the selection of the response action.

Section 300.800(b)(2) provides that when EPA (or the United States Coast Guard (USCG)) is the lead agency at a Federal facility, EPA (or USCG) shall compile and maintain the record. Executive Order 12580 delineates cases in which EPA (or USCG) is the lead agency. EPA is the lead agency, for example, at Federal facilities conducting on-site emergency removal actions (other than at DOD or DOE Facilities). The USCG can be the lead agency at Federal facilities with on-site emergency removal actions in the coastal zone.

Section 300.800(b)(3) requires that when EPA is involved in the selection of a response action at a Federal facility on

the NPL, the Federal agency shall provide EPA with a copy of the index of documents included in the administrative record file, the RI/FS workplan, the RI/FS released for public comment, the proposed plan, any public comments received on the RI/FS and proposed plan, and any other documents requested by EPA on a case-by-case basis. EPA is involved in the selection of a response action when it is jointly selecting the response action with the Federal agency, as delineated in Executive Order 12580. Such joint selection occurs, for example, for all remedial actions at Federal facilities on the NPL. In such cases, EPA must be sufficiently familiar with the contents of the administrative record to be able to select jointly the response action.

EPA considered other options for involvement in the development of the administrative record for Federal facilities, such as periodic visits to the Federal facility to review the administrative record file as it is compiled, receipt of the entire contents of the record file for all NPL sites, and receipt of the entire contents of the record file for all response actions at all Federal facilities. EPA has tentatively rejected these options as being overly burdensome. EPA believes that the preferred option allows enough flexibility for EPA to ensure that the response action selected by the Federal agency adequately accounts for the concerns of the public, is consistent with response action selection at non-Federal facilities, and allows EPA to be sufficiently involved in the decision when it is jointly selecting the response action. EPA solicits comments on alternative procedures for EPA's involvement in the development of the administrative record for Federal facilities.

Section 300.800(c) specifies that it is the responsibility of the State to compile and maintain administrative records at a State-lead site. Section 300.800(c) applies only if EPA and the State formally designate the State as the lead agency for a site as specified in Subpart A under the definition of lead agency. The requirements for State-lead sites are similar to those for Federal agencies compiling administrative records for Federal facilities at which EPA is involved in the selection of the response action. EPA is proposing that the State provide EPA, commencing at the time the administrative record file is first made available to the public, with the index of documents included in the administrative record file. The issues relating to this requirement are similar to those outlined above for Federal

facilities. Additionally, EPA may require that States place additional documents in the record file to ensure that the administrative record includes all documents which form the basis for the selection of the response action.

Section 300.800(d) provides that Subpart I applies to all response actions taken under section 104 of CERCLA or sought, secured, or ordered administratively or judicially under section 106 of CERCLA. The statutory language of section 113(j)(1) states that in any judicial action under this Act, judicial review of any issues concerning the adequacy of any response action taken or ordered by the President shall be limited to the administrative record. It has been argued that section 113(j)(1) of CERCLA does not apply to injunctive actions taken under section 106, and that the literal meaning of the phrase "taken or ordered by the President" does not include section 106 actions for injunctive relief unless an administrative order is issued.

The statutory language of sections 113(j) (1) and (2), when read together, indicates that this narrow interpretation of section 113(j) is incorrect. Together, sections 113(j) (1) and (2) provide that judicial review of any response action is limited to the administrative record. In addition, section 121 of CERCLA expressly provides that the President shall select all remedial actions to be carried out by EPA under section 104 of CERCLA or secured under section 106. No exception for section 106 injunctive actions was made.

Accordingly, consistent with the statutory language and congressional intent, EPA is clarifying that limiting judicial review of response action selection to the administrative record applies to all actions taken under section 104 of CERCLA, or sought, secured, or ordered administratively or judicially under section 106 of CERCLA.

Section 300.800(d) further provides that Subpart I only applies to those sites at which the remedial investigation commences or the action memorandum is signed after the promulgation of these regulations. For those sites grandfathered by paragraph (d), paragraph (e) provides that the lead agency shall comply with these regulations to the extent practicable on a case-by-case basis. This does not mean that administrative records are not required for these sites or that judicial review of the selection of a response action at these sites will not be limited to the administrative record. Rather, as explained earlier, this provision simply recognizes that there will be ongoing actions at which the final regulations cannot be complied

with in full. The public participation procedures for remedial actions outlined in section 113(k)(2)(B) and 117 of the statute and discussed earlier in this preamble, however, are applicable to any Record of Decision (ROD) signed after October 17, 1986, the date that, in general, the amendments to CERCLA took effect.

Subpart I does not apply to third party cleanups, i.e., those not undertaken pursuant to sections 104, 106, or 111 of CERCLA. Under this proposal, such cleanups need not comply with these administrative record requirements. Section 300.800(d) does not require that State actions for cost recovery under section 107 of CERCLA, where the State used only its own authorities to conduct a response action, comply with this subpart. If a State is seeking to recover costs from responsible parties under section 107 of CERCLA, EPA may wish to require that States comply with this subpart to expedite judicial proceedings in such circumstances. EPA solicits comments on whether these regulations should apply to those situations.

2. *Location of the administrative record (§ 300.805).* Section 113(k)(1) of CERCLA requires that "the administrative record shall be available to the public at or near the facility at issue. The President also may place duplicates of the administrative record at any other location." EPA proposes to require that the administrative record file generally be located in two places. First, as provided by the statute, the record file shall be located at or near the facility at issue. (To conform to the terminology of the rest of the NCP, the term "site" will be used in this subpart as a substitute for the term "facility" used in the statute.)

In addition, EPA proposes that the administrative record file be located at an office of the lead agency or other central location. Examples of central locations include an EPA Regional Office, an EPA field office, a Federal agency equivalent to an EPA Regional office, or, for State lead sites, a State environmental agency office. EPA considered making the central location requirement optional, but concluded that the lead agency has more control over the maintenance of the necessary documents at the central location than at or near the site. As described below, the file at or near the site should contain a copy of most of the documents included in the administrative record file at the central location.

Under § 300.805, the file at the central location must contain all documents which are part of the administrative record except certain verified sampling data, quality control and quality

assurance documents, chain of custody forms, and publicly available technical literature. These documents, which are part of the record, may be located elsewhere, as provided in § 300.805 (a) and (c), and explained further below.

The administrative record file at or near the site at issue should be located at one of the information repositories which may already exist for community relations purposes. The information repository, maintained by the community relations coordinator, may contain additional information which is of interest to the public, but which does not form a basis for the response action decision. Examples of such information include newspaper articles, press releases, and information concerning the NPL listing. If there is no existing community relations information repository, or the information repository is inadequate for maintaining the administrative record file, the file may be located in some other publicly accessible place. EPA is considering and seeks comments on limiting the information which must be available at or near the site in situations where the record is too voluminous for the publicly accessible location. Typically, local libraries, town halls, or public schools are used as publicly accessible locations.

EPA may make the administrative record file available to the public in microform. EPA may microform-copy documents that form the basis for the selection of a CERCLA response action in the regular course of business. The microform copying will be done in accordance with technical regulations concerning micrographics of Federal Government records and EPA records management procedures.

EPA proposes that some information need not be physically located at or near the site because of the substantial administrative burden this would pose. The information not available at or near the site would, however, always be available to the public at another location. For example, § 300.805(a) provides that certain types of technical information may be located in the central location or elsewhere, such as a contract laboratory or field office. The index to the administrative record file, which will be included in the administrative record file both at or near the site and at the central location, must indicate where the information is located and how it can be obtained for inspection. Thus, such information continues to be easily accessible to interested persons. Examples of such information include validated sampling data, which are normally summarized in

data summary sheets and are quite voluminous, documentation of quality assurance and quality control which is normally summarized in the remedial investigation/feasibility study (RI/FS), and chain of custody forms. These types of documents may be stored in the EPA Regional office, contract laboratory office that conducted the testing, State environmental agency office, or elsewhere, as appropriate.

Section 300.805(b) provides that guidance documents not generated for the particular site for which an administrative record is being compiled may be maintained in a library at the central location. The guidance documents need not be in each site-specific administrative record file at the central location or at or near the site at issue. EPA anticipates that each EPA Regional office will maintain a central library of guidance documents which are frequently cited as a basis for selecting a response action. This approach eliminates the need for reproducing copies of the same document for each site record. The term guidance document includes issue-specific policy memoranda as well as formal guidance documents. Examples of such guidance documents and issue-specific memoranda include the RI/FS guidance document, guidance on risk/exposure assessments, guidance on applicable or relevant and appropriate requirements, memoranda on maximum contaminant levels, and guidance on testing for specific contaminants.

Guidance documents and memoranda which are generated for a particular site must be placed in the site-specific administrative record file. (For example a document on dioxin contamination at XYZ site must be placed in the XYZ site-specific administrative record file. If it is also used as a guidance document on the cleanup of dioxin at other sites, it may be located only in the central library rather than physically in the administrative record file at those other sites.) The central library of guidance documents will be available to the public.

EPA proposes in § 300.805(c) that publicly available technical literature not generated for a site at issue need not be located at or near the site at issue, in the central library of guidance documents or in the site-specific administrative record file, provided that it is listed in the index to the administrative record. Copyright laws may bar the copying of these materials without specific approvals. EPA believes that expending Superfund resources on obtaining copies of publicly available technical literature is

not appropriate. Examples of publicly available technical literature include widely used engineering handbooks on ground-water monitoring, and articles from technical journals, which are readily available in technical libraries. The index must list these documents separately and indicate information on their availability, or, the literature may already be cited in a document included in the record.

Technical literature, however, which is not generally available should be included in the site-specific administrative record file. Because these documents are by definition not easily obtainable, they should not simply be indexed. They generally will not be used for many sites; therefore, it is also not appropriate to include them in the central library of guidance documents. The library should be reserved for documents which are frequently used to select response actions. Examples of technical literature not generally available include articles from technical journals or unpublished documents not available through the Library of Congress or not circulated to technical libraries.

Section 300.805(d) provides that documents included in the confidential portion of the administrative record file shall be located only in the central location. Since the public cannot review the confidential and privileged information, there is no reason to require that such information be maintained at or near the site.

EPA is proposing in § 300.805(b)(5) that, for reasons of administrative feasibility, an administrative record file for emergency removal actions where on-site activities cease within 30 days of initiation need only be available for public inspection at the central location. Emergencies are those actions with little or no lead time and generally of very short duration—for example, a highway spill. The benefits of placing the record file at or near the site are outweighed by the administrative burden on the response to such emergencies. Where feasible, a notice may be placed at the site explaining that the administrative record file will be available for public inspection at the EPA Regional office (or other central location).

3. *Contents of the administrative record (§ 300.810).* The administrative record under section 113(k) consists of documents which form the basis for the selection of a response action at a particular site. In determining which documents form the basis for the response action, i.e., what constitutes a complete record, the lead agency shall include all documents considered by the

decisionmaker, including those relied upon by the decisionmaker in selecting the response action.

It should be noted that documents constituting the administrative record for selection of a response action are only a subset of documents that the lead agency may have compiled with respect to a particular site. The lead agency will also have general files consisting of documents relevant to other aspects of a site.

Section 300.810 discusses generally what should be contained in the administrative record file for response selection and what should be excluded. Section 300.810(a) states that it should contain factual information; data; analysis of the factual information and data; guidance documents; technical literature; site-specific policy memoranda; documents received, published, or made available to the public under §§ 300.815 and 300.820 of this subpart; decision documents; and enforcement orders. In addition, an index listing the documents contained in the administrative record file should be included at the beginning of the record file.

The following is a list of documents which typically, but not in all cases, should be part of the administrative record for selection of a remedial or removal action. (For purposes of this subpart, an RI/FS should be included as a component of a remedial action record.) Only documents within each category which form a basis for selecting the response action will be part of the record (i.e., although correspondence is listed under public participation, correspondence on liability issues is not part of the record). This list is intended to be illustrative, but not necessarily required at each site or complete.

i. *Contents of Remedial Action Administrative Record.*

- (a) *Factual Information/Data.*
 - Sampling plan.
 - Validated sampling and analysis data.
 - Chain of custody forms.
 - Project plan or program plan (QAPP).
 - Preliminary assessment report.
 - Site investigation report.
 - Inspection reports.
 - RI/FS final workplan.
 - Amendments to final RI/FS workplan.
 - Summary of remedial action alternatives (used in conjunction with early special notice letters).
 - Data summary sheets.
 - RI/FS.
 - Technical studies.
 - Factual information submitted by the public, including PRPs.

Documents supporting the lead agency's determination of imminent and substantial endangerment.

(b) *Policy and Guidance.*

Memoranda on policy decisions (site-specific and issue-specific).

Guidance documents.

Technical literature.

(c) *Public Participation.*

Correspondence.

Public notices.

Public comments.

Community relations plan.

Notice letters to PRPs.

Proposed plan.

Transcript of meeting on RI/FS and proposed plan, and waivers under section 121(d) of CERCLA.

Documentation of other public meetings.

Response to significant comments.

(d) *Other Party Information.*

ATSDR health assessment.

Natural Resource Trustees finding of fact and final reports.

Documentation of State involvement.

(e) *Decision Documents.*

Record of Decision, including responsiveness summary.

(f) *Enforcement Documents.*

Administrative orders.

Consent decrees.

Affidavits.

Response to notice letters containing relevant factual information.

(g) *Index.*

ii. *Contents of Removal Action*

Administrative Record.

(a) *Factual Information/Data.*

Sampling plan.

Validated sampling and analysis data.

Chain of custody forms.

Preliminary assessment report.

Site investigation report.

Inspection reports.

Engineering evaluation/Cost analysis report (EE/CA).

Technical studies performed for the site.

Factual information submitted by the public, including PRPs.

Documents supporting the lead agency's determination of imminent and substantial endangerment.

(b) *Policy and Guidance.*

Memoranda on policy decisions (site-specific and issue-specific).

Guidance documents.

Technical literature.

(c) *Public Participation.*

Correspondence.

Public notices.

Public comments.

Community relations plan.

Notice letters to PRPs.

Documentation of other meetings.

Response to significant comments.

(d) *Other Party Information.*

ATSDR health assessment.

Natural Resource Trustees finding of fact and final reports.

Documentation of State involvement.

(e) *Decision Documents.*

EE/CA approval memorandum.

Action memorandum.

(f) *Enforcement Documents.*

Administrative orders.

Consent decrees.

Affidavits.

Response to notice letters containing relevant factual information.

(g) *Index.*

Several documents in the list above require further explanation. First, verified sampling data are included on the list above. Data which have undergone quality assurance/quality control and are relied on must be included in the record. Data which have been rejected as inaccurate, or will otherwise not be considered or relied upon, need not be included in the record.

Second, EPA is proposing in § 300.810(a)(1) that documents supporting the determination of an imminent and substantial endangerment be part of the administrative record. EPA and other Federal agencies have the discretion to conduct assessments to determine the extent of an imminent and substantial endangerment to the public health or welfare or the environment due to an actual or threatened release of a hazardous substance. If EPA chooses to exercise its discretion to conduct such an assessment, the assessment shall be included in the record. A determination of an imminent and substantial endangerment is based on factual information which forms a basis for the selection of the response action. As such, when a determination of an imminent and substantial endangerment is made, it is part of the record of the selection of a response action. EPA believes that judicial review of the determination that there is an imminent and substantial endangerment in actions under section 106 to enforce an order or for injunctive relief, therefore, is limited to the administrative record.

Third, for a remedial action record, the list includes a summary of remedial action alternatives. This summary will only be generated in conjunction with special notice letters EPA may issue to PRPs pursuant to section 122(e) of CERCLA if the notice letter is issued prior to the availability of an RI/FS report and it appears necessary to inform interested persons of the lead agency's direction on remedial alternatives. In this context, a summary of remedial action alternatives would be generated if necessary to enable PRPs to make an informed good faith offer to undertake the remedial design or

remedial action. The summary of remedial action alternatives should be included in the administrative record file so that the public and not just the PRPs have the information.

Finally, EPA is proposing that notice letters to PRPs be included in the administrative record. EPA has recently issued guidance on the notice letters issued under section 122(e) of CERCLA, 53 FR 5298 (February 23, 1988). PRPs that receive notice letters are expected to become familiar with CERCLA, if they have not already done so. In light of notice letters and general principles of administrative law, PRPs are on notice that an administrative record file will be, or is, available for public inspection.

Section 300.810(b) addresses documents which generally will not be included in the administrative record. The type of documents referenced in § 300.810(b) are those which by definition are not appropriate for inclusion in the administrative record because they do not form a basis for the selection of the response action. These documents are specified in the regulation for purposes of clarity.

Draft documents, internal memoranda, and day-to-day notes of staff generally will not be included in the administrative record. Examples of draft documents that will be included in the administrative record are those that were considered or relied on in response action selection and never superseded by a final document, and those that contain material facts which do not appear in any other document included in the administrative record file. The general rule, however, is that only final documents will be included in the administrative record.

Examples of internal memoranda and day-to-day notes of staff which are not appropriate for inclusion in the administrative record are documents that express opinions or recommendations of staff to other staff or management, or internal pre-decisional documents that evaluate alternative viewpoints.

Section 300.810(c) addresses privileged documents. Examples of privileged documents include, but are not limited to: documents subject to attorney-client privilege and attorney work product exclusion, documents subject to deliberative process privilege, and enforcement sensitive information. Common law and other privileges may be asserted.

An assertion of confidentiality of information does not necessarily eliminate the need to make such information part of the administrative record. If confidential information which

forms a basis for the selection of a response action is not included in any other document in the administrative record, that information must be part of the administrative record. Section 300.810(d) requires that the information, to the extent feasible, must be summarized in such a manner as to make it disclosable to the public and placed in the administrative record file. If it is not feasible to summarize the information in a releasable manner, e.g., when the privilege applies directly to the information which forms a basis for the selection of the response action, such as confidential business information, the documents must be maintained by the lead agency in a confidential portion of the administrative record file. (These documents may be reviewed in camera in any subsequent judicial proceeding.) The index to the administrative record must list the confidential or privileged document even though the document will not be available for public inspection. Whether or not the information can be summarized in a releasable manner, the actual document containing confidential or privileged material must be included in the confidential portion of the administrative record file. In light of the nature of the information in the RI/FS and underlying documents and the fact that contamination levels are generally not privileged, this is not expected to occur frequently.

It should be noted that section 104(e)(7) of CERCLA governs the extent to which information may be claimed confidential by persons required to provide information under that section. Where confidential business information is claimed, EPA will proceed according to regulations set forth in 40 CFR Part 2.

4. *Administrative record for a remedial action (§ 300.815).* Section 300.815(a) provides that the documents included in the administrative record file for a remedial action shall be available for public inspection at the commencement of the remedial investigation phase. Generally, the commencement of the remedial investigation phase occurs when the final RI/FS work plan is available. The regulations do not specify when the remedial investigation phase commences because this may be a site-specific determination. EPA solicits comments on whether the regulation should specify in greater detail when the lead agency must make the administrative record file for a remedial action available for public inspection. The file at that time should contain the documents which will form a basis for

the selection of the response action generated or received through the date when the administrative record file is first made available. Documents generally available when the RI/FS work plan is approved include a preliminary assessment report, site inspection report, the RI/FS work plan, underlying inspection reports, and the community relations plan. From that time until the ROD is signed (except as provided in § 300.825, described below) documents which form the basis for the selection of the remedial action, shall be added as generated or received to the administrative record file.

The lead agency may establish a system allowing for periodic review of documents where there are questions as to whether the documents must be included in the administrative record file. Quarterly or monthly updates of the administrative record file may be appropriate in given situations and allows the lead agency to analyze data and organize it in a manner that will be meaningful to the public. In addition, it may save the lead agency the time involved in making daily or weekly determinations on whether questionable documents should be added to the administrative record file. If there is no question that a document belongs in the administrative record file, e.g., the RI/FS report, the document should be placed in the record file as soon as practicable after its generation or receipt.

EPA proposes in § 300.815(a) that the lead agency publish a notice of availability of the administrative record file. The notice must be published in a major local newspaper of general circulation, as is required for the notice of availability of the proposed plan. (See § 300.430 of today's proposed rule.) EPA considered proposing that a notice be published in the *Federal Register* for wider circulation, but rejected such a requirement as unnecessary. EPA solicits comments on whether a notice of availability of the record or of commencement of the public comment period should be published in the *Federal Register*. EPA also considered proposing that a separate notification of known potentially responsible parties be made. Section 113(k)(2)(D) of CERCLA provides that the President shall make reasonable efforts to identify and notify PRPs as early as possible before selection of a response action. EPA will be issuing notice letters to PRPs under section 122(e) of CERCLA early in the process in many situations. Given these early efforts, as well as the notice in a local newspaper, EPA chose not to propose a separate notification of PRPs here.

Section 300.815(b) clarifies that interested persons may submit comments for inclusion in the administrative record file during the public comment period on the RI/FS and proposed plan described in § 300.430(f) of Subpart E. The lead agency need not, however, respond to comments that were submitted prior to the public comment period on the proposed plan, although in many instances, the lead agency will either make appropriate modifications to the response action or respond in writing to those early comments.

A written response to significant comments will be included in the administrative record file. The lead agency need not respond to any comments received during the public comment period until the close of the public comment period. Generally, responses will be included in the responsiveness summary, which is part of the ROD. In responding to significant comments, the lead agency need not respond separately to each comment but may combine comments by subject or other category in the response.

The public participation procedures for a remedial action are set forth in § 300.430. Section 300.815(c) of Subpart I requires that compliance with the requirements of § 300.430(f) be documented for inclusion in the administrative record file. The requirements of § 300.430(f) include preparation of a proposed plan; publication of a notice of availability and brief analysis of the proposed plan; placing a copy of the proposed plan in the information repository; providing an opportunity for the submission of written or oral comments on the proposed plan, RI/FS, and any waivers to cleanup standards under section 121(d)(4) of CERCLA; providing an opportunity for a public meeting on the RI/FS, proposed plan, and waivers to cleanup standards; preparing a transcript of public meetings held during the public comment period; making the transcript available to the public; discussing significant changes to the proposed plan; responding to significant comments; and soliciting additional public comment and providing for other public participation procedures at the lead agency's discretion prior to the adoption of the decision where new and substantial issues have been raised. It will generally be the practice of the lead agency that, whenever possible, documents upon which the selection decision is based will be included in the administrative record file as soon as possible after they are generated or received, and no later than when the

decision document is signed. This is intended to encourage maximum public participation in the development of the record.

Documents generated or received after the selection is made do not provide a basis for the decision and thus generally are not part of the administrative record, except as provided in § 300.825, discussed below.

5. *Administrative record for a removal action (§ 300.820).* Section 300.820 proposes requirements for administrative records for removal actions. It is divided into two parts. Paragraph (a) addresses "non-time-critical" removal actions, i.e., those for which, based on the site evaluation, the lead agency determines that a removal action is appropriate and that there is a planning period of at least six months before on-site cleanup activities must be initiated. Paragraph (b) addresses all other removal actions.

Explanations of regulatory requirements and related issues which are the same as those for remedial actions will not be repeated here. Only requirements and issues specific to removal actions will be addressed.

Section 300.820(a)(1) provides that the administrative record file for a non-time-critical removal action shall be available for public inspection when the engineering evaluation/cost analysis (EE/CA) report is made available for public comment. At that time, an administrative record file shall be established and made available to the public and shall contain all documents relevant to selection of the removal action generated up through that date. Documents generally available at that time include sampling data, a preliminary assessment report, a site inspection report, the EE/CA approval memorandum, and the EE/CA. After the EE/CA report is available and until the Action Memorandum is signed (except as provided in § 300.825, discussed below), documents relevant to the selection of the removal action shall be added to the administrative record file as discussed in the remedial action section of today's preamble.

The public participation procedures for non-time-critical removal actions are set forth in § 300.415(n)(3) of Subpart E of today's proposed regulations. Section 300.820(a)(3) requires that compliance with § 300.415(n)(3) (i) through (iii) be documented for inclusion in the administrative record. The requirements of § 300.415(n)(3) (i) through (iii) include publication of a notice of availability and brief description of the EE/CA; making the EE/CA available to the public; providing a reasonable opportunity, not less than 30 days, for

submission of comments after the completion of the EE/CA; and responding to significant comments.

Section 300.820(b) provides different procedures for time-critical, including emergency, removal actions. As explained earlier, section 113(k)(2)(A) of CERCLA requires procedures for the "appropriate" participation of interested persons in the development of the administrative record for removal actions. Appropriate participation is significantly different in situations where an action must be taken on short notice. Where the exigencies of the situation demand that cleanup be initiated and often completed within short timeframes, public comment periods may delay expeditious response to the emergency. In view of Congressional intent that public participation requirements not hamper or delay emergency removal actions, EPA has considered many options for the appropriate level of public participation. EPA must balance the benefits of public involvement in advance of the selection of a removal action against the need to proceed quickly in emergency situations. EPA believes that the requirements proposed today strike the correct balance.

EPA has had to consider two questions in determining the level of participation for time-critical removals. First, at what point should the administrative record file be made available to the public, and second, should there be a formal public comment period on the record? EPA is proposing in § 300.820(b)(1) that for all time-critical removals (including emergencies), the record file should be made available to the public no later than 60 days after initiation of on-site removal activity. EPA is choosing to make the record available at this time recognizing that there will be many situations where immediate action must be undertaken to remove threats to human health and the environment before the administrative record file can be assembled and placed in a public docket for inspection. In reviewing typical removal actions, EPA found that generally containment or stabilization (i.e., those activities taken to retard, reduce, or prevent the spread of a release or threat of release and eliminate any immediate threat) at removal sites often are completed within 60 days. Clearly, where circumstances warrant, EPA should focus on addressing the threat at a site, and attend to administrative procedures later. The proposal meets both EPA's charge to protect human health and the environment and the requirement to provide for appropriate public

participation, by requiring that the administrative record file be made available to the public no later than 60 days after initiation of removal activities. Making the record available involves: assembling the administrative record file, identifying a publicly accessible location for the record file at or near the site, finding an acceptable newspaper and placing an advertisement in it to notify the public, and preparing for receipt and evaluation of comments. The proposed requirement that the file be available "no later than" 60 days does not preclude making the record file available at an earlier time, if circumstances allow.

EPA is also proposing in § 300.820(b)(2) that the lead agency shall, as appropriate, provide a 30-day public comment period to begin at the time the administrative record is made available to the public. Generally, when the removal action has not been completed, a public comment period will be considered appropriate at the time the administrative record file is made available to the public. EPA requests comment on whether public comment should be solicited on activities that have already been completed at the time the record is made available.

EPA has also considered other public participation procedures for time-critical removals. They include:

- i. Requiring that the record file be made available immediately upon issuing the Action Memorandum, and delaying the initiation of cleanup until after public comment is solicited and responded to. This would allow maximum public participation in selection of the removal, but it is not consistent with the need to provide prompt response for protection of human health and the environment at the site. Such an approach would also be inconsistent with the legislative history which states that administrative procedures established under section 113 should not hamper emergency removal actions.

- ii. Requiring that the record be made available "promptly" after issuing the Action Memorandum, and then soliciting public comment "as time allows." EPA considered this as a way of addressing the individual nature of removals, the different timeframes that may be involved, and the need to provide meaningful opportunities for public comment in cases where time allows. As discussed earlier, EPA believes resources should first be directed toward mitigating threats at a time-critical removal site and that 60 days of on-site work will allow this. However, EPA is concerned that a

standard of "prompt" availability is too vague and would be a source of controversy at each site. Thus, EPA believes an objective standard is preferable. Similarly, while providing for public comment "as time allows" permits flexibility in the requirements, such a rule would require the exercise of judgment and would allow disputes over compliance with this requirement in individual cases. In addition, as discussed above, it is rare that there is sufficient time before beginning a time-critical action to solicit, consider and respond to comments.

iii. Delaying the availability of the record until 120 days after beginning cleanup and then soliciting public comment. This approach parallels the community relations requirements (within 120 days of cleanup for ongoing responses, a Community Relations Plan must be prepared and an information repository must be made available; see § 300.415(n)). This would increase the number of sites at which cleanup has been completed before the public is notified. EPA believes that the increased cleanup time provided under this option generally does not justify the delay in public involvement concerning response selection.

iv. Requiring that the record file be made available after performing containment or stabilization at a site where disposal is needed (over 25 percent of removals do not require disposal) and delaying disposal until public comment could be solicited, evaluated and responded to. This approach attempts to balance the need for public comment with the urgency of the response, limiting the response selection undertaken without benefit of public input to those aspects of removals which must be conducted swiftly in order to protect public health and the environment.

There are two major difficulties with this approach. The first concerns precisely defining "containment" and "stabilization" in this context and providing indicators to mark their completion. While it is possible, based on experience, to say that the containment or stabilization phase of a removal action is generally completed within 60 days of initiating work, it is much more difficult to determine such completion on a site-specific basis.

The second difficulty with such a rule is that it fails to take into account several important factors which may make such an approach infeasible in many cases. Specifically, delay of disposal activities may: (a) Create additional unnecessary risks to human health and the environment, and (b) result in needless expenditures of time

and money. Site conditions, weather conditions, location, public accessibility, availability of approved disposal facilities, availability of treatment facilities and the effect of the delay on the statutory time and money limitations on removals are only some of the factors to be considered before a site-by-site determination could be made as to whether or not it was practicable to solicit public comment.

v. Making the record publicly available as in the proposal (i.e., no later than 60 days after initiation of cleanup), but not formally soliciting any public comment. Given the need for quick action on time-critical removals, that they are generally limited in scope, and few cleanup options are feasible, this may be an appropriate approach. This approach, however, would not provide the public with an opportunity for meaningful participation where it might be appropriate in specific removal situations.

EPA solicits comments on the proposed and other considered approaches to public participation on removal actions.

6. *Adding documents after selection of response action (§ 300.825).* New documents may be added to the record file after the decision document is signed only as provided in § 300.825. Documents generated or received after the decision document (e.g., Action Memorandum or ROD) is signed generally will be kept in a post-decision document file unless and until a determination is made that the document(s) should be placed in the administrative record file, pursuant to § 300.825.

Section 300.825(a) provides that the lead agency may add post-decision documents to the administrative record file in two situations. The first situation occurs when the decision document does not address or reserves a portion of the response action decision. In such cases, the lead agency will continue to add to the administrative record file documents which form the basis for that portion of the decision not addressed or reserved by the decision document. Where appropriate, the lead agency shall provide public notice that the administrative record file for this portion of the decision continues to be available for public inspection and comment. It should be noted that this exception applies to RODs that address an operable unit but leave a portion of the decision on that operable unit open.

The second situation arises when an explanation of significant differences provided for in § 300.435(c) or an amended decision document is required. An explanation of significant differences

is issued when, after adoption of a final remedial action plan, the remedial action or enforcement action taken, or the settlement or consent decree entered into, significantly differs in scope, performance or cost from the final plan. The record shall include an explanation of significant differences and all documents that form the basis for the decision to modify the response selection decision. The lead agency shall publish a notice of availability of these documents, as required by section 117 of CERCLA and as proposed in § 300.435(c). If, in addition, an amended decision document is required, the record shall include the amended document and all documents that form the basis for the amended decision. The public participation procedures outlined in Subpart E on explanations of significant differences and amendments to decision documents shall apply.

Section 300.825(b) provides that the lead agency may, in its discretion, hold additional public comment periods or extend the time for submission of public comment after the decision document is signed, and may limit such comment to issues for which the lead agency has requested additional comment. This is intended to allow the lead agency to solicit additional comment on the response action whenever it determines that new information or other circumstances warrant additional input.

Section 300.825(c) governs public comments received after the close of the comment period. Under this section, the lead agency will need to consider such comments only if they could not have been submitted during the comment period and provide critical, new information relevant to the response selection which substantially supports the need to significantly alter the response action. EPA is proposing the standard set out in § 300.825(c) as providing the best balance between EPA's desire to remain open to critical, new information on the effectiveness of a selected response and the need to make final decisions in order to allow expeditious implementation of the response action. EPA solicits comment on this approach.

D. Compliance With This Subpart

As provided in section 113(j)(4) of CERCLA, in reviewing alleged procedural errors related to the administrative record, a court may disallow costs or damages only if the errors were so serious and related to matters of such central relevance to the action that the action would have been significantly changed had such errors not been made.

Subpart J—Use of Dispersants and Other Chemicals

Proposed Subpart J is very similar to existing Subpart H and contains only minor revisions. Section numbers and references to other sections and subparts have been changed where necessary. Technical changes and minor wording changes to improve clarity have also been made.

Definitions formerly in this section have been moved to Subpart A, and a new definition has been added for miscellaneous oil spill control agents. Accordingly, a list of data requirements for miscellaneous spill control agents is proposed to be added to § 300.915. The definition for navigable waters is as defined in 40 CFR 110.1.

Points of Clarification

Section 300.910 on "Authorization of use" specifies the conditions under which the OSC may authorize the use of dispersants and other chemicals. Authorization applies to all products on the NCP Product Schedule.

The language in § 300.910 has been modified slightly to emphasize the importance of obtaining concurrence for the use of dispersants and other chemicals from the appropriate Regional Response Team (RRT) State representative and the DOC/DOI natural resource trustees "as appropriate." "As appropriate" refers, in this case, to the fact that the decision to use a chemical is highly dependent upon specific circumstances, locations, and conditions which must be assessed by the OSC. The EPA and the State RRT representatives and DOC/DOI trustees are in a unique position to understand local conditions and to collect and coordinate quickly the necessary local information which should facilitate a correct decision. Since the decision whether to use such chemicals has far-reaching implications and must be made in a timely fashion, early involvement of the EPA and State RRT representatives and DOC/DOI trustees, as appropriate, is important. As a part of their contingency planning efforts, RRTs are further encouraged to make pre-approval determinations with respect to the use of certain dispersants or chemical agents in their area of geographical responsibility.

Sinking agents are specifically prohibited for application to oil discharges.

Appendix C to Part 300—Revised Standard Dispersant Effectiveness and Toxicity Tests

Two technical corrections have been proposed for Appendix C to Part 300. First, in the calculations sections, 2.5 and 2.6, the formulas of equations (2),

(3), and (5) for concentration of oil (C_{do}) in the sample, dispersant blank correction (D), and oil blank correction (OBC) have been corrected. Second, the units of viscosity (item 3, part IX in section 4.0) have been changed from furl seconds to centistokes. Last, the new 1988 ASTM standards has been cited for reference to viscosity in centistokes.

Appendix D to Part 300—Appropriate Actions and Methods of Remedying Releases

Proposed Appendix D to Part 300 includes materials from existing § 300.68(j) on appropriate actions at remedial sites and existing § 300.70 on methods for remedying releases. The appendix describes general approaches and lists specific techniques but is not intended to be inclusive of all possible methods of addressing releases. A lead agency may respond to types of releases and employ techniques other than those that are listed, depending on the particular circumstances. EPA believes that the provisions in existing §§ 300.68(j) and 300.70 are not appropriate for inclusion in proposed Subpart E, which has been structured to focus on the sequence of response procedures. Because the materials do not impose any requirements or restrictions, they are appropriate for a proposed appendix. It is intended that parties conducting response actions should consider the information provided in Appendix D.

III. Summary of Supporting Analyses

A. Regulatory Impact Analysis of Proposed Revisions to the NCP

An economic analysis entitled, "Regulatory Impact Analysis Prepared in Support of the Proposed Revisions to the National Contingency Plan" (RIA) estimates the incremental costs associated with the proposed revisions to the NCP. The RIA is available in the Superfund Docket, Room LG at the U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

The RIA estimates total and incremental costs to the Fund, States, Federal agencies, and responsible parties of implementing the remedial and removal programs during the period FY 87 through FY 91, the duration of the 1986 reauthorization of the Superfund program. The analysis focuses on four provisions with incremental costs and benefits attributable directly to the 1986 CERCLA amendments: (1) Selection of remedy; (2) removals; (3) water restoration; and (4) publicly owned sites. The impacts of these four provisions are attributable directly to the 1986 CERCLA amendments, rather than to additional requirements imposed by

EPA, because in these areas EPA chose to retain the flexibility of the statutory language; the NCP essentially codifies the statutory requirements. The RIA estimates the incremental costs of the four provisions, using the requirements of CERCLA, as specified in the 1985 NCP, as the baseline. The 1985 NCP is the proper baseline for the analysis of changes attributable to the statutory amendments because the 1985 NCP is the legal framework that defines response activities in the absence of the amendments to CERCLA. The estimated economic costs attributable to the 1986 CERCLA amendments are summarized below.

1. *Selection of remedy.* The new CERCLA preference for reducing mobility, toxicity, and volume of contaminants at a site is assumed to be a preference for remedies that use treatment as a principal element. All Superfund Records of Decision (RODs) signed during the FY 82 to FY 86 period were reviewed for information on capital and operation and maintenance (O&M) costs for treatment-based remedies and for containment-based remedies considered for a site. Many RODs, however, do not include useful cost data for purposes of this analysis. RODs that did not develop costs for both treatment-based remedies and containment-based remedies, or that presented cost information only in present value terms, without a separate presentation of the capital and O&M costs, could not be used in the analysis. The RIA estimates of selection of remedy costs, therefore, are developed using cost data from 30 RODs, the mandatory schedules in section 116 of CERCLA for 175 remedial action starts by the end of FY 89 and an additional 200 starts by FY 91, and the assumptions that the principal effect of the selection of remedy provisions in the 1986 CERCLA amendments is to increase from 32 percent to 80 percent the frequency of selection of remedies (including operable units) that use treatment to address the principal threat at a site.

The RIA estimates that the total cost of the selection of remedy provisions in the 1986 amendments to CERCLA, during the FY 87 through FY 91 period, is \$9.4 billion: \$4.5 billion to the Fund; \$0.8 billion to States; \$3.2 billion to responsible parties; and \$0.9 billion to Federal agencies. The 5-year present value of the estimated incremental cost of the selection of remedy provisions over the costs imposed already by the 1985 NCP is \$3.6 billion: \$1.8 billion to the Fund; \$0.2 billion to States; \$1.2 billion to responsible parties; and \$0.4

billion to Federal agencies. Changes in program administrative costs are not included in these estimates.

A sensitivity analysis is included in the RIA to determine how the cost estimates developed in the RIA change if the most important assumptions used to derive the estimates are altered. In addition to varying cost parameters used in the analysis, the frequency of use of treatment under the 1986 CERCLA amendments is varied between 50 percent of sites or operable units using treatment to 100 percent using treatment. The results of the sensitivity analysis estimates the total incremental costs of the selection of remedy provisions to be between \$686 million and \$8 billion, with a best estimate of \$3.6 billion.

The 1986 amendments to CERCLA require remedial actions to comply with State applicable or relevant and appropriate requirements (ARARs) that are more stringent than Federal ARARs. To the extent possible, therefore, cost estimates used in the RIA are for remedies expected to comply with Federal ARARs and those State ARARs more stringent than the Federal standards. Approximately 50 percent of the RODs signed in FY 86 had selected remedies in compliance with more stringent State ARARs. This represents the baseline level of compliance with State ARARs because the FY 86 RODs were developed in compliance with the 1985 NCP. Ten of the containment-based remedies and 14 of the treatment-based remedies whose costs were used in the RIA are expected to meet more stringent State ARARs. The RIA includes a brief comparative analysis of the costs of these 24 remedies with the costs of the other remedies used in the RIA where compliance with State ARARs is not designated specifically in the ROD. This analysis indicates that compliance with more stringent State ARARs may increase the costs of a remedial action by about \$6.6 million. However, one should not conclude that an additional \$6.6 million will be incurred to meet State ARARs for every remedial action under CERCLA. Many RODs signed prior to the 1986 CERCLA amendments already showed evidence of compliance with State ARARs. Therefore, no incremental costs associated with such compliance would result under CERCLA as amended. In addition, many States do not have relevant standards more stringent than Federal standards and, even if a State has identified a potential ARAR that is more stringent than a Federal standard, that State standard may not be applicable at all sites within a State.

Assuming 50 percent of the Fund-financed remedial actions expected to be conducted annually over the FY 87 to FY 89 period would have chosen remedies under the provisions of the 1985 NCP in compliance with more stringent State ARARs and that the remaining 50 percent of the remedial actions will incur incremental costs under CERCLA for compliance with more stringent State ARARs, the incremental cost of compliance with the State ARARs provision in the 1986 CERCLA amendments can be estimated to be approximately \$190 million per year. These costs are not additive to the total annual remedy selection costs shown above because compliance with State ARARs was captured to some extent in the ROD data used to estimate costs in the RIA.

The results of the ARAR cost analysis may be overestimated because State ARARs were not discussed in all RODs, and it is not clear if the lack of discussion implies lack of compliance with State ARARs, or the fact that there were no more stringent State ARARs that were relevant to the remedy selection process. If the latter is the case, then the number of sites that will incur incremental costs to comply with the State ARAR provisions in the 1986 amendments to CERCLA is overstated.

2. Removals. Incremental costs of the removal provisions in the 1986 CERCLA amendments are not quantified in the RIA due to a paucity of relevant data. Removal actions are very sensitive to budgetary fluctuations and regulatory and policy modifications. The 1986 removal data reflect the budgetary constraints resulting from the delay in the reauthorization of the Superfund; earlier removal data did not reflect the off-site policy and other recent regulatory and statutory changes that affect removal costs, such as the 1984 Hazardous Substances Waste Act amendments to the Resource Conservation and Recovery Act that prohibit land disposal of listed hazardous wastes. Although the increase is not quantified in the RIA, removals undertaken during the period from FY 87 through FY 91 are expected to have higher average costs than removals undertaken in the past because more extensive removals are allowable without a waiver and because treatability studies may be done during removal actions at NPL sites to promote consistency with long-term remedial actions.

3. Water restoration provisions. Under the 1985 NCP, States held primary responsibility for financing O&M costs associated with a remedial action at a

Fund-lead site. During the first fiscal year after completion of the capital expenditure at a site, the Fund financed a maximum of 90 percent of the operational costs until EPA was assured that the remedy was operational and functional. In each subsequent year, the State financed 100 percent of O&M costs. The 1986 amendments to CERCLA change this funding relationship for remedial actions involving treatment to restore ground water or surface water. Long-term costs of treatment of contaminated ground water or surface water now are defined to be a component of the remedial action when treatment is being used to restore an aquifer or surface water body. Hence, this provision transfers financing responsibilities at Fund-lead sites using water restoration as part of the selected remedy from the States to the Fund. Under the new provision, the Fund finances 90 percent of the costs of water restoration for up to ten years; States finance the remaining 10 percent of costs during these years. The RIA estimates that approximately \$63 million in obligations to pay for water restoration will be transferred from States to the Fund over the FY 87-91 period as a result of the provisions on ground-water and surface water restoration in the 1986 amendments to CERCLA. Because the provision results only in transfers of obligations to pay from States to the Fund, it does not give rise to real economic costs or real economic benefits.

4. Publicly owned sites. The 1986 amendments to CERCLA require that States pay at least 50 percent of the costs of Fund-lead remedial actions at sites operated by a "State or political subdivision thereof, either directly or through a contractual relationship." Prior to the amendments, CERCLA required States to pay at least 50 percent of costs at Fund-lead sites owned or operated by a public entity. The effect of this amendment is to transfer from States to the Fund costs incurred at publicly owned sites operated by a private entity. The RIA estimates that the publicly owned sites provision in the 1986 CERCLA amendments will result in transfers from the States to the Fund of approximately \$32 million in obligations to pay for remedial actions over the FY 87-91 period. Because this provision results only in transfers from States to the Fund of obligations to pay for certain activities, it does not give rise to real economic costs or real economic benefits.

5. Other provisions analyzed. New CERCLA section 113(k) requires that an

administrative record of the decisionmaking process for removal actions and remedial actions be established. Subpart I in the proposed NCP revisions describes the documents that must be included in the administrative record and outlines the procedures to follow in developing the record. Essentially, the proposed NCP provision gives detail to the CERCLA requirement, and, therefore, the costs of establishing the administrative record are attributable to CERCLA rather than to additional requirements imposed by EPA. The costs of establishing the record include both the labor hours to develop and maintain the record and the capital cost for the storage space required to house the record. These costs are not quantified explicitly in the RIA, but are estimated to be small.

The RIA also includes an analysis of other incremental costs and benefits attributable to the proposed NCP revisions. These include costs and benefits where EPA exercised discretion and imposed specific requirements beyond those imposed already by the statute. The following subparts of the NCP have costs and benefits attributable to the additional requirements.

Section 300.420 of the proposed NCP establishes procedures that a petitioner must follow in petitioning for a preliminary assessment. The information required by EPA is minimal and involves no data gathering or analysis on the part of the petitioner. It is estimated that no more than one hour would be required to create the petition instrument. In §§ 300.415 and 300.430 of the proposed NCP, some new provisions are included for public participation in removal and remedial activities, respectively. Some of these new provisions reflect existing policy, others incorporate requirements of CERCLA. The costs of the new community relations provisions are expected to be small. The provisions help ensure that information is disseminated quickly and efficiently.

The post-screening field investigation is a new step added to the RI/FS process detailed in § 300.430 of the proposed revisions to the NCP. Although such field investigations are not a specific component in the 1985 NCP, these investigations have been conducted in the past at sites where treatment-based remedies were selected. As a result of CERCLA's increased emphasis on the use of treatment-based remedies, more treatability studies are expected to be conducted.

The proposed NCP provisions in § 300.500 formalize State involvement in

remedial action decisionmaking using a Superfund Memorandum of Agreement (SMOA). This provision is expected to result in a clearer understanding of the EPA/State relationship and the responsibilities each party will assume. The incremental costs attributable to this provision are expected to be small.

The RIA results indicate that the proposed rule will have a significant effect on the economy. However, the majority of costs associated with the proposed revisions to the NCP are attributable to requirements in CERCLA rather than to additional requirements imposed by EPA.

B. Executive Order No. 12291

Proposed regulations must be classified as major or nonmajor to satisfy the rulemaking protocol established by Executive Order (E.O.) No. 12291. E.O. No. 12291 establishes the following criteria for a regulation to qualify as a major rule.

1. An annual effect on the economy of \$100 million or more;
2. A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions; or
3. Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Based on the RIA results summarized above, the proposed NCP is a major rule because adoption of today's proposed rule would have an annual effect on the economy of \$100 million or more. This regulation has been submitted to the Office of Management and Budget for review under Executive Order Nos. 12291 and 12580.

C. Regulatory Flexibility Act

In accordance with the Regulatory Flexibility Act of 1980, agencies must evaluate the effects of a proposed regulation on small entities. If the proposed rule is likely to have a "significant impact on a substantial number of small entities," then a Regulatory Flexibility Analysis must be performed. EPA certifies that today's rule will not have a significant impact on a substantial number of small entities.

Small businesses generally will be affected only by the proposed changes that address selection of remedy. The cost of a CERCLA response action, whether using containment-based remedies or treatment-based remedies, can be quite large and, in some cases, may be beyond the financial resources

of a responsible party (RP). Because RPs can be in different industry sectors and face different market structures, each RP's ability to finance Superfund response actions could be very different. The analytical framework used in Chapter 7 of the RIA to estimate the economic effects of the CERCLA provisions on typical RPs relies heavily on publicly available financial information and makes the conservative assumption that each RP would be solely responsible for the entire remedial action cost. The analysis includes two financial tests performed on a sample of 15 firms selected randomly and varying in size. One test (the net income test) compares average response costs to the sample firm's net income or cash flow. The second test (a modified Beaver ratio) compares the sample firm's cash flow to its total liabilities, including response costs. On the basis of this analysis, EPA has determined that the proposed revisions to the NCP will not result in a significant impact on a substantial number of small businesses.

Municipalities also could be affected by the proposed revisions to the selection of remedy provisions in the NCP because municipalities can be RPs. NPL sites owned by municipalities tend to be municipal wellfields and landfills. The cleanup of wellfields is undertaken to restore drinking water to a community either by pumping and treating a contaminant plume or building an alternative water distribution system. The contaminant plume usually has not been created by municipality actions; instead, the plume may have migrated from a nearby industrial waste site. As a result, the municipality is not likely to be liable for the costs of response actions. At municipal landfill sites, or other landfill sites that have accepted municipal wastes, the municipality also is not likely to be liable for 100 percent of response costs, because other entities typically have contributed to the site problem. The range of capital costs of cleanups at municipally owned sites with RODs signed over the FY 82 to FY 86 period is from \$304,000 for construction of an alternative water supply system to \$23.2 million to cap a 90 acre landfill site.

The level of involvement of small municipalities in the Superfund program is not expected to change under the 1986 CERCLA amendments. The sites at which municipalities are most likely to be involved are not expected to be affected greatly by the new CERCLA selection of remedy provisions. The costs of cleaning up municipal landfills in particular are not expected to

increase substantially as a result of the CERCLA amendments because the typical size of such sites limits the implementability of treatment-based remedies.

D. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request document has been prepared by EPA (ICR No. 1463) and a copy may be obtained from Carl Koch, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, or by calling 1-202-382-2739.

Public reporting burden for this collection of information is estimated to be a weighted average of 3,350 hours per respondent, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Respondent means States and other entities (excluding the Federal government) conducting required activities associated with remedial actions.

Please send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503, marked "Attention: Desk Officer for EPA." The final rule will respond to any OMB or any public comments on the information collection requirements contained in this proposal.

List of Subjects in 40 CFR Part 300

Air pollution control, Chemicals, Hazardous materials, Hazardous substances, Incorporation by reference, Intergovernmental relations, Natural resources, Occupational safety and health, Oil pollution, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control, Water supply.

Dated: November 15, 1988.

Lee M. Thomas,
Administrator.

Therefore, it is proposed that 40 CFR Part 300, be amended as follows:

1. The authority citation for Part 300 is revised to read as follows:

Authority: 42 U.S.C. 9605; 33 U.S.C. 1321(c)(2); E.O. 11735, 38 FR 21243; E.O. 12580, 52 FR 2923.

2. Subparts A through H of Part 300 are revised, Subparts I and J are added, and Subpart K is added and reserved to read as follows:

PART 300—NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

Subpart A—Introduction

- Sec.
- 300.1 Purpose and objectives.
 - 300.2 Authority and applicability.
 - 300.3 Scope.
 - 300.4 Abbreviations.
 - 300.5 Definitions.
 - 300.6 Use of number and gender.
 - 300.7 Computation of time.

Subpart B—Responsibility and Organization for Response

- 300.100 Duties of President delegated to Federal agencies.
- 300.105 General organization concepts.
- 300.110 National Response Team.
- 300.115 Regional Response Teams.
- 300.120 On-scene coordinators and remedial project managers: general responsibilities.
- 300.125 Notification and communications.
- 300.130 Determinations to initiate response and special conditions.
- 300.135 Response operations.
- 300.140 Multi-regional responses.
- 300.145 Special teams and other assistance available to OSCs/RPMs.
- 300.150 Worker health and safety.
- 300.155 Public information and community relations.
- 300.160 Documentation and cost recovery.
- 300.165 OSC reports.
- 300.170 Federal agency participation.
- 300.175 Federal agencies: additional responsibilities and assistance.
- 300.180 State and local participation in response.
- 300.185 Nongovernmental participation.

Subpart C—Planning and Preparedness

- 300.200 General.
- 300.205 Planning and coordination structure.
- 300.210 Federal contingency plans.
- 300.215 Title III local emergency response plans.
- 300.220 Related Title III issues.

Subpart D—Operational Response Phases for Oil Removal

- 300.300 Phase I—Discovery or notification.
- 300.305 Phase II—Preliminary assessment and initiation of action.
- 300.310 Phase III—Containment, countermeasures, cleanup, and disposal.
- 300.315 Phase IV—Documentation and cost recovery.
- 300.320 General pattern of response.
- 300.330 Waterfowl conservation.
- 300.335 Funding.

Subpart E—Hazardous Substance Response

- 300.400 General.

- 300.405 Discovery or notification.
- 300.410 Removal site evaluation.
- 300.415 Removal action.
- 300.420 Remedial site evaluation.
- 300.425 Establishing remedial priorities.
- 300.430 Remedial investigation/feasibility study and selection of remedy.
- 300.435 Remedial design/remedial action, operation and maintenance.
- 300.440 [Reserved]

Subpart F—State Involvement in Hazardous Substance Response

- 300.500 General.
- 300.505 EPA/State Superfund Memorandum of Agreement (SMOA).
- 300.510 State assurances.
- 300.515 Requirements for State involvement in remedial and enforcement response.
- 300.520 State involvement in EPA-lead enforcement negotiations.
- 300.525 State involvement in removal actions.

Subpart G—Trustees for Natural Resources

- 300.600 Designation of Federal trustees.
- 300.605 State trustees.
- 300.610 Indian Tribes.
- 300.615 Responsibilities of trustees.

Subpart H—Participation by Other Persons

- 300.700 Activities by other persons.

Subpart I—Administrative Record for Selection of Response Action

- 300.800 Establishment of an administrative record.
- 300.805 Location of the administrative record.
- 300.810 Contents of the administrative record.
- 300.815 Administrative record for a remedial action.
- 300.820 Administrative record for a removal action.
- 300.825 Record requirements after the decision document is signed.

Subpart J—Use of Dispersants and Other Chemicals

- 300.900 General.
- 300.905 NCP Product Schedule.
- 300.910 Authorization of use.
- 300.915 Data requirements.
- 300.920 Addition of products to schedule.

Subpart K—Federal Facilities [Reserved]

Appendix A to Part 300—[Not Included]

Appendix B to Part 300—[Not Included]

Appendix C to Part 300—Revised Standard Dispersant Effectiveness and Toxicity Tests

Appendix D to Part 300—Appropriate Actions and Methods of Remedying Releases

Subpart A—Introduction

§ 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(c)(2) of the Clean Water Act (CWA), as amended, 33 U.S.C. 1321(c)(2). In Executive Order (E.O.) 12580 (52 FR 2923, January 29, 1987), 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 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 taken pursuant to the authorities under CERCLA and section 311 of the CWA.

§ 300.3 Scope.

(a) The NCP applies to Federal agencies and States and is in effect for:

(1) Discharges of oil into or upon the navigable waters of the United States and adjoining shorelines, the waters of the contiguous zone, and the high seas beyond the contiguous zone in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act). (See sections 311(b)(1) and 502(7) of the CWA.)

(2) Releases of hazardous substances into the environment, and releases of pollutants or contaminants which may present an imminent and substantial danger to public health or welfare.

(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 on-scene coordinator (OSC) 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.

(6) Designation of 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 policies and 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 NCP shall conform to the provisions of international joint contingency plans, where they are applicable. The Department of State shall be consulted, as appropriate, prior to taking any action which may affect its activities.

§ 300.4 Abbreviations.

(a) Department and Agency Title Abbreviations:

ATSDR—Agency for Toxic Substances and Disease Registry
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
HHS—Department of Health and Human Services
NIOSH—National Institute for Occupational Safety and Health
NOAA—National Oceanic and Atmospheric 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:

ARARs—Applicable or Relevant and Appropriate Requirements
CERCLIS—CERCLA Information System
CRC—Community Relations Coordinator
CRP—Community Relations Plan
ERT—Environmental Response Team
FCO—Federal Coordinating Officer
FS—Feasibility Study
HRS—Hazard Ranking System
NPL—National Priorities List
NRC—National Response Center
NRT—National Response Team
NSF—National Strike Force
O&M—Operation and Maintenance
OSC—On-Scene Coordinator
PA—Preliminary Assessment
PIAT—Public Information Assist Team
RA—Remedial Action
RCP—Regional Contingency Plan
RD—Remedial Design
RI—Remedial Investigation
ROD—Record of Decision
RPM—Remedial Project Manager
RRC—Regional Response Center
RRT—Regional Response Team
SAC—Support Agency Coordinator
SI—Site Inspection
SMOA—Superfund Memorandum of Agreement
SSC—Scientific Support Coordinator

§ 300.5 Definitions.

Terms not defined in this section have the meaning given by CERCLA 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 environmental protection requirements, criteria, or limitations promulgated under Federal or State law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site.

"Biological additives" means microbiological cultures, enzymes, or nutrient additives that are deliberately introduced into an oil discharge for the specific purpose of encouraging 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" means EPA's comprehensive data base and management system that inventories and tracks releases addressed or needing to be addressed by the Superfund program. CERCLIS is the abbreviation of the CERCLA Information System. CERCLIS consists of three distinct inventories: CERCLIS Removal Inventory, CERCLIS Remedial Inventory, and CERCLIS Enforcement Inventory. Within each of the three categories are active and inactive releases. Inactive releases are those where a determination has been made, based on available information, that no further action is needed. These are retained in the data base as a historical record of accomplishment. Active releases are those for which a lead agency has not yet had an opportunity to evaluate for response action, or to which a lead agency has responded and determined that further action is required, or where there is currently ongoing response action.

"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.

"Claim" as defined by section 101(4) of CERCLA, means a demand in writing for a sum certain.

"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.

"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.

"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" means a Federal assistance agreement in which substantial EPA involvement is anticipated during the performance of the project.

"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 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) 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; 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.

"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.

"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.

"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 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; 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. 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, liquefied 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.

"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 agency" means the agency that provides the OSC/RPM to plan and implement response action 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 collecting agent, biological additive, or burning agent, that can be used to enhance oil spill cleanup, removal, treatment, or mitigation.

"National Priorities List" (NPL) means the list, compiled by EPA pursuant to CERCLA section 105, of uncontrolled hazardous substance facilities in the United States that need to be addressed under CERCLA authorities. Only NPL sites are eligible for Fund-financed remedial action.

"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.

"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 pollution fund" means the fund established by section 311(k) of the CWA.

"On-scene coordinator" (OSC) means the Federal official pre-designated by EPA or the USCG to coordinate and direct Federal responses under Subpart D, or the 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" for permitting purposes, 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. Operable

units will not impede implementation of subsequent actions, including final action at the site.

"Operation and maintenance" (O&M) means activities 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.

"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, liquefied natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). For purposes of Subpart E 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.

"Preliminary assessment" (PA) 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 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; 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 environmental protection requirements, criteria, or limitations promulgated under Federal or State law 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.

"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, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. 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. The term also includes enforcement activities related thereto.

"Remove or removal" as defined by section 311(a)(8) of the CWA, refers to 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, welfare, or to the environment. 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 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, and any emergency assistance which may be provided under the Disaster Relief Act of 1974. The term also includes enforcement activities related thereto.

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

"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."

"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, nor are they a measure of environmental injury. Any oil discharge that poses a substantial threat to public health or welfare or the environment or results in critical public concern shall be classified as a major discharge regardless of the following quantitative measures:

(a) 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.

(b) 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.

(c) 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.):

(a) 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 or the environment.

(b) Medium release means a release not meeting the criteria for classification as a minor or major release.

(c) 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 or the environment or results in significant public concern.

"Source control remedial action" means measures that are intended to address the hazardous substances or pollutants or contaminants primarily on top of or within the ground, or in buildings or other structures. Source control measures are distinguished from management of migration measures which address contaminated ground

water or hazardous substances in streams, marshes, or lakes.

"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.

"State" means the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of 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 of the NCP describes the requirements pertaining to Indian Tribes that wish to be treated as States.

"Superfund Memorandum of Agreement" (SMOA) means a written document executed by an EPA Regional Administrator and the head of a State agency establishing the nature and extent of EPA and State interaction during the pre-remedial, remedial, and 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" means a joint agreement between the Federal agency and a State which documents any required cost share and assurances necessary to conduct a response action when the Federal agency is the lead agency for response. It is not a procurement contract as defined by the Federal Grant and Cooperative Agreement Act. The Superfund State contract may also be a three-party agreement used to establish EPA, State, and political subdivision responsibilities for political subdivision-lead activities and for States to provide assurances for political subdivision-lead actions.

"Support agency" means the agency that provides 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, other Federal agency, or a State may be the support agency 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.

"Threat of discharge or release," see definitions for discharge and 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 who may pursue claims for damages under section 107(f) of CERCLA.

"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 Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands. United States, when used in relation to section 101(27) of CERCLA, 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 Mariana Islands, 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.

§ 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 B—Responsibility and Organization for Response

§ 300.100 Duties of President delegated to Federal agencies.

In Executive Order 11735 and Executive Order 12580, the President delegated certain functions and responsibilities vested in him by the CWA and CERCLA, respectively. Responsibilities so delegated shall be responsibilities of Federal agencies under the NCP unless:

(a) Responsibility is redelegated pursuant to section 11(g) of Executive Order 12580; or

(b) Executive Order 11735 or Executive Order 12580 is amended or revoked.

§ 300.105 General organization concepts.

(a) Federal agencies should:

(1) Plan for emergencies and develop procedures for addressing oil discharges and releases of hazardous substances, pollutants, or contaminants;

(2) Coordinate their planning, preparedness, and response activities with one another;

(3) Coordinate their planning, preparedness, and response activities with affected States and local governments and private entities; and

(4) Make available such of their facilities or resources as may be useful in a response situation, consistent with agency authorities and capabilities.

(b) Three fundamental kinds of activities are performed pursuant to the NCP:

(1) Preparedness planning and coordination for response to a discharge of oil or release of a hazardous substance, pollutant, or contaminant;

(2) Notification and communications; and

(3) Response operations at the scene of a discharge or release.

(c) The organizational elements created to perform these activities are:

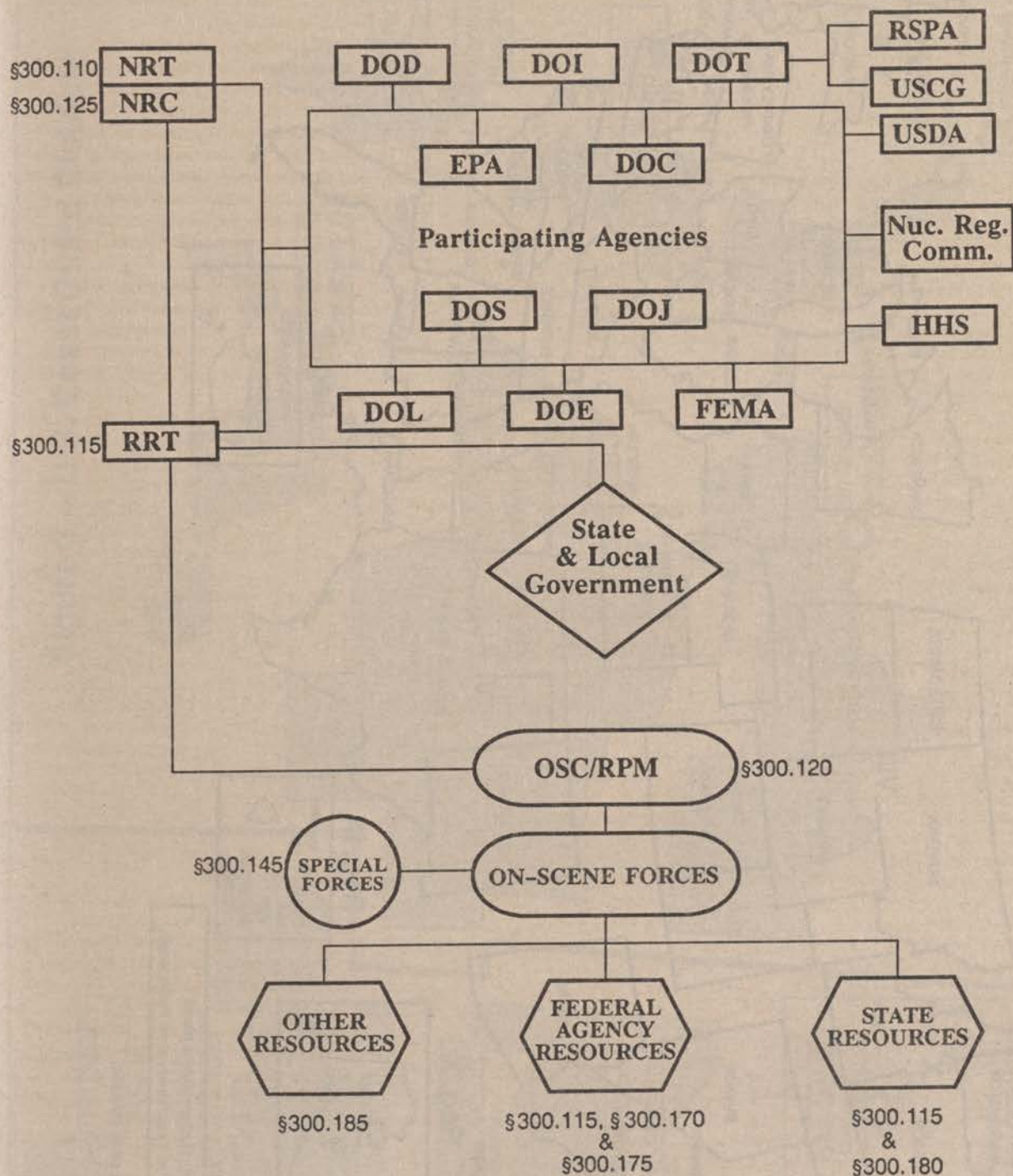
(1) The National Response Team (NRT), responsible for national planning for and coordination of preparedness and response actions. NRT membership consists of representatives from agencies specified in § 300.175.

(2) Regional Response Teams (RRTs), responsible for regional planning and preparedness activities before response actions, and coordination of assistance and advice during such response actions in support of the on-scene coordinator (OSC) and remedial project manager (RPM). RRT membership consists of designated representatives from each participating Federal agency, State government, and local government (as agreed upon by the States).

(3) The OSC and the RPM, primarily responsible for directing response efforts and coordinating all other efforts at the scene of a discharge or release. The other responsibilities of OSCs and RPMs are described in § 300.135.

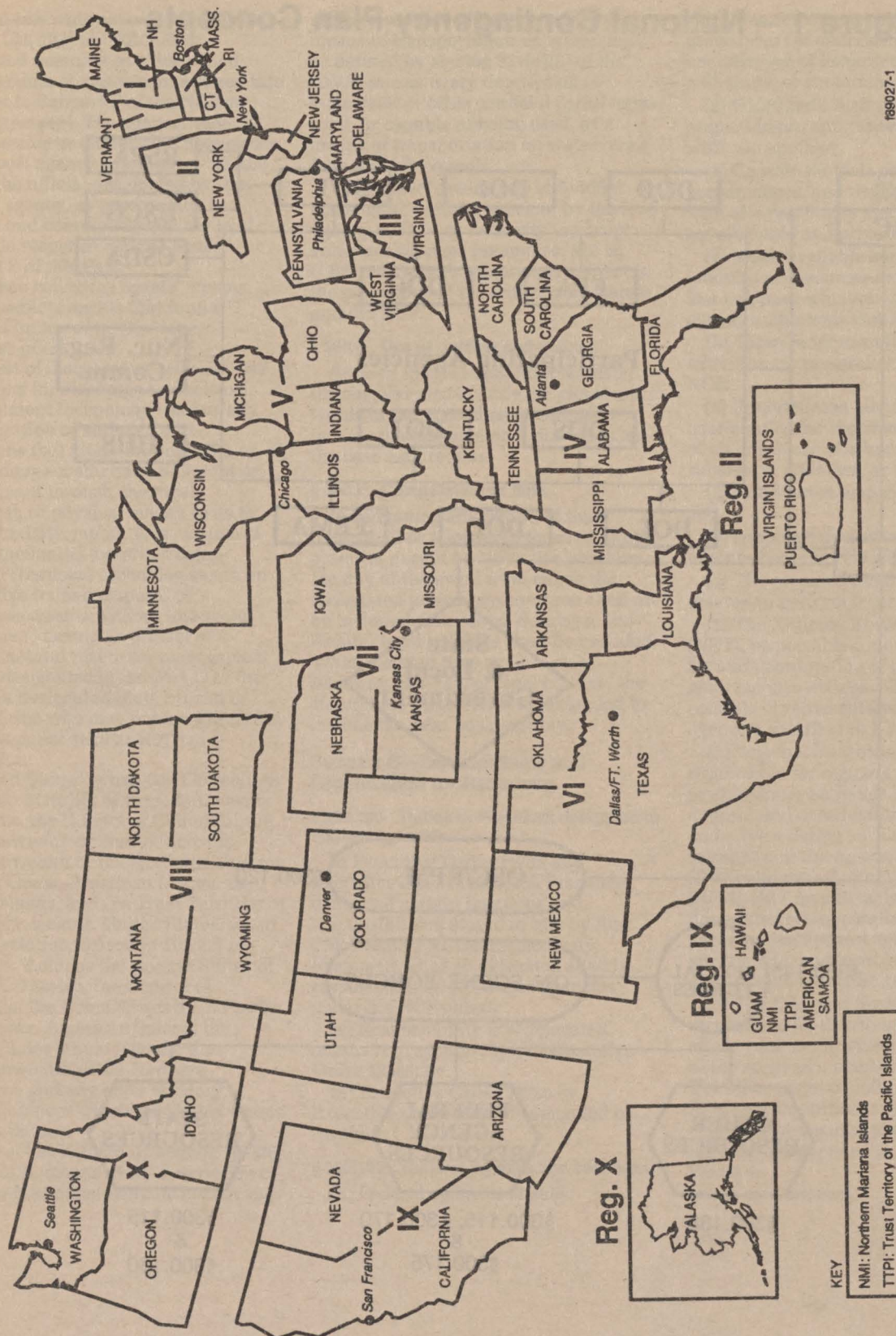
(d)(1) The organizational concepts of the NCP are depicted in the following Figure 1:

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Figure 1 -- National Contingency Plan Concepts

(2) The standard Federal regional boundaries are shown in the following Figure 2:

Figure 2 -- Standard Regional Boundaries for Ten Regions

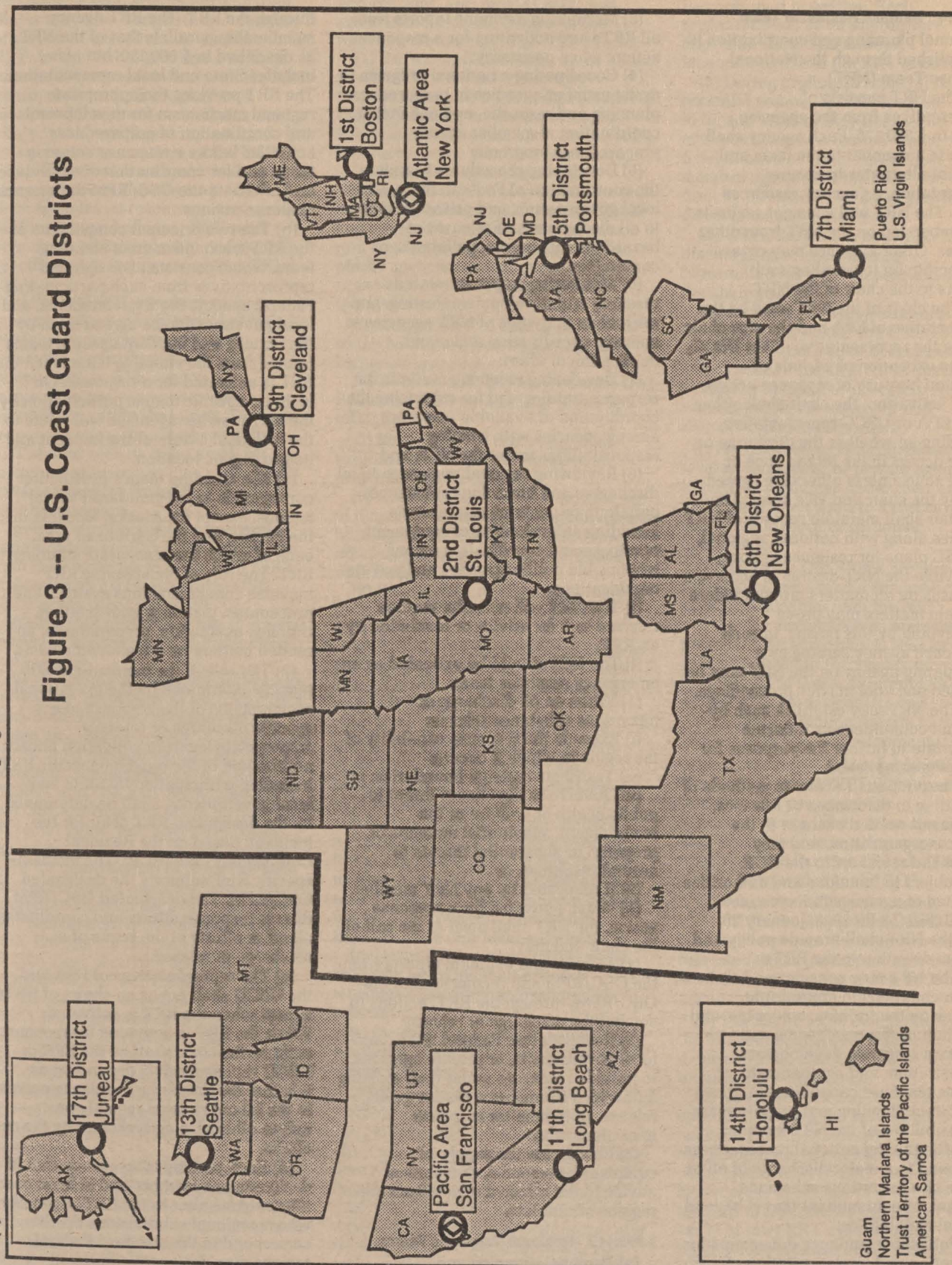


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(3) The USCG District boundaries are shown in the following Figure 3:

Figure 3 -- U.S. Coast Guard Districts



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§ 300.110 National Response Team.

National planning and coordination is accomplished through the National Response Team (NRT).

(a) The NRT consists of representatives from the agencies named in § 300.175. Each agency shall designate a member to the team and sufficient alternates to ensure representation, as agency resources permit. The NRT will consider requests for membership on the NRT from other agencies. Other agencies may request membership by forwarding such requests to the chair of the NRT.

(b) The chair of the NRT shall be the representative of EPA and the vice chair shall be the representative of the USCG, with the exception of periods of activation because of response action. During activation, the chair shall either be the EPA or USCG representative, depending on whether the discharge or release occurs in the inland zone or coastal zone, unless otherwise agreed upon by the chair and vice chair. The vice chair shall maintain records of NRT activities along with national, regional, and OSC plans for response actions.

(c) While the NRT desires to achieve a consensus on all matters brought before it, certain matters may prove unresolvable by this means. In such cases, each agency serving as a participating agency on the NRT may be accorded one vote in NRT proceedings.

(d) The NRT may establish such by-laws and committees as it deems appropriate to further the purposes for which it is established.

(e) The NRT shall evaluate methods of responding to discharges or releases, recommend needed changes in the response organization, and may recommend revisions to the NCP.

(f) Subject to functions and authorities delegated to agencies in Executive Order 12580 (52 FR 2923, January 29, 1987), the NRT shall provide policy and program direction to the RRTs.

(g) The NRT may consider and make recommendations to appropriate agencies on the training, equipping, and protection of response teams and necessary research, development, demonstration, and evaluation to improve response capabilities.

(h) Direct planning and preparedness responsibilities of the NRT include:

(1) Maintaining national preparedness to respond to a major discharge of oil or release of a hazardous substance, pollutant, or contaminant that is beyond regional capabilities;

(2) Publishing guidance documents for preparation and implementation of SARA Title III local emergency response plans;

(3) Monitoring incoming reports from all RRTs and activating for a response action, when necessary;

(4) Coordinating a national program to assist member agencies in preparedness planning and response, and enhancing coordination of member agency preparedness programs;

(5) Developing procedures to ensure the coordination of Federal, State, and local governments, and private response to oil discharges and releases of hazardous substances, pollutants, or contaminants;

(6) Monitoring response-related research and development, testing, and evaluation activities of NRT agencies to enhance coordination and avoid duplication of effort;

(7) Developing recommendations for response training and for enhancing the coordination of available resources among agencies with training responsibilities under the NCP; and

(8) Reviewing regional responses to oil discharges and hazardous substance, pollutant, or contaminant releases, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations.

(i) The NRT will consider matters referred to it for advice or resolution by an RRT.

(j) The NRT should be activated as an emergency response team:

(1) When an oil discharge or hazardous substance release:

(i) Exceeds the response capability of the region in which it occurs;

(ii) Transects regional boundaries; or

(iii) Involves a significant threat to public health or welfare or the environment, substantial amounts of property, or substantial threats to natural resources; or

(2) If requested by any NRT member.

(k) When activated for a response action, the NRT shall meet at the call of the chair and may:

(1) Monitor and evaluate reports from the OSC/RPM and recommend to the OSC/RPM, through the RRT, actions to combat the discharge or release;

(2) Request other Federal, State, and local governments, or private agencies, to provide resources under their existing authorities to combat a discharge or release, or to monitor response operations; and

(3) Coordinate the supply of equipment, personnel, or technical advice to the affected region from other regions or districts.

§ 300.115 Regional Response Teams.

(a) Regional planning and coordination of preparedness and response actions is accomplished

through the RRT. The RRT agency membership parallels that of the NRT, as described in § 300.110, but also includes State and local representation. The RRT provides the appropriate regional mechanism for development and coordination of preparedness activities before a response action is taken and for coordination of assistance and advice to the OSC/RPM during such response actions.

(b) The two principal components of the RRT mechanism are a standing team, which consists of designated representatives from each participating Federal agency, State governments, and local governments (as agreed upon by the States); and incident-specific teams formed from the standing team when the RRT is activated for a response. On incident-specific teams, participation by the RRT member agencies will relate to the technical nature of the incident and its geographic location.

(1) The standing team's jurisdiction corresponds to the standard Federal regions, except for Alaska, Oceania in the Pacific, and the Caribbean area, each of which has a separate standing RRT. The role of the standing RRT includes communications systems and procedures, planning, coordination, training, evaluation, preparedness, and related matters on a regionwide basis.

(2) The role of the incident-specific team is determined by the operational requirements of the response to a specific discharge or release. Appropriate levels of activation and/or notification of the incident-specific RRT, including participation by State and local governments, shall be determined by the designated RRT chair for the incident, based on the Regional Contingency Plan (RCP). The incident-specific RRT supports the designated OSC/RPM. The designated OSC/RPM directs response efforts and coordinates all other efforts at the scene of a discharge or release.

(c) The representatives of EPA and the USCG shall act as co-chairs of RRTs except when the RRT is activated. When the RRT is activated for response actions, the chair shall be the EPA or USCG representative, depending on whether the discharge or release occurs in the inland zone or coastal zone, unless otherwise agreed upon by the co-chairs.

(d) Each participating agency should designate one member and at least one alternate member to the RRT. Agencies whose regional subdivisions do not correspond to the standard Federal regions may designate additional representatives to the standing RRT to ensure appropriate coverage of the

standard Federal region. Participating States may also designate one member and at least one alternate member to the RRT. Indian Tribal governments may arrange for representation with the RRT appropriate to their geographical location. All agencies and States may also provide additional representatives as observers to meetings of the RRT.

(e) RRT members should designate representatives and alternates from their agencies as resource personnel for RRT activities, including RRT work planning, and membership on incident-specific teams in support of the OSCs/RPMs.

(f) Federal RRT members or their representatives should provide OSCs/RPMs with assistance from their respective Federal agencies commensurate with agency responsibilities, resources, and capabilities within the region. During a response action, the members of the RRT should seek to make available the resources of their agencies to the OSC/RPM as specified in the RCP and OSC contingency plan.

(g) RRT members should designate appropriately qualified representatives from their agencies to work with OSCs in developing and maintaining OSC contingency plans, described in § 300.210, that provide for use of agency resources in responding to discharges and releases.

(h) Affected States are encouraged to participate actively in all RRT activities. Each State governor is requested to assign an office or agency to represent the State on the appropriate RRT; to designate representatives to work with the RRT and OSCs in developing RCPs and OSC contingency plans; to plan for, make available, and coordinate State resources; and to serve as the contact point for coordination of response with local government agencies, whether or not represented on the RRT. The State's RRT representative should keep the State Emergency Response Commission (SERC), described in § 300.205(c), apprised of RRT activities and coordinate RRT activities with the SERC. Local governments are invited to participate in activities on the appropriate RRT as provided by State law or as arranged by the State's representative. Indian Tribes are also invited to participate and may contact the appropriate RRT to arrange for their participation.

(i) The standing RRT shall recommend changes in the regional response organization as needed, revise the RCP as needed, evaluate the preparedness of the participating agencies and the effectiveness of OSC contingency plans for the Federal response to discharges

and releases, and provide technical assistance for preparedness to the response community. The RRT should:

(1) Review and comment, to the extent practicable, on local emergency response plans or other issues related to the preparation, implementation, or exercise of such plans upon request of a local emergency planning committee;

(2) Evaluate regional and local responses to discharges or releases on a continuing basis, considering available legal remedies, equipment readiness, and coordination among responsible public agencies and private organizations, and recommend improvements;

(3) Recommend revisions of the NCP to the RRT, based on observations of response operations;

(4) Review OSC actions to ensure that RCPs and OSC contingency plans are effective;

(5) Encourage the State and local response community to improve its preparedness for response;

(6) Conduct advance planning for use of dispersants, surface collection agents, burning agents, biological additives, or other chemical agents in accordance with Subpart J of this Part;

(7) Be prepared to respond to major discharges or releases outside the region;

(8) Conduct training and exercises as necessary to encourage preparedness activities of the response community within the region;

(9) Meet at least semiannually to review response actions carried out during the preceding period and consider changes in RCPs and OSC contingency plans; and

(10) Provide letter reports on RRT activities to the NRT twice a year, no later than January 31 and July 31. At a minimum, reports should summarize recent activities, organizational changes, operational concerns, and efforts to improve State and local coordination.

(j)(1) The RRT may be activated by the chair as an incident-specific response team when a discharge or release:

(i) Exceeds the response capability available to the OSC/RPM in the place where it occurs;

(ii) Transcends State boundaries; or
(iii) May pose a substantial threat to the public health or welfare or the environment, or to regionally significant amounts of property. RCPs shall specify detailed criteria for activation of RRTs.

(2) The RRT will be activated during any discharge or release upon a request from the OSC/RPM, or from any RRT representative, to the chair of the RRT. Requests for RRT activation shall later

be confirmed in writing. Each representative, or an appropriate alternate, should be notified immediately when the RRT is activated.

(3) During prolonged removal or remedial action, the RRT may not need to be activated or may need to be activated only in a limited sense, or may need to have available only those member agencies of the RRT who are directly affected or who can provide direct response assistance.

(4) When the RRT is activated for a discharge or release, agency representatives shall meet at the call of the chair and may:

(i) Monitor and evaluate reports from the OSC/RPM, advise the OSC/RPM on the duration and extent of response, and recommend to the OSC/RPM specific actions to respond to the discharge or release, subject to statutory and Executive Order authorities;

(ii) Request other Federal, State, or local governments, or private agencies, to provide resources under their existing authorities to respond to a discharge or release or to monitor response operations;

(iii) Help the OSC/RPM prepare information releases for the public and for communication with the NRT;

(iv) If the circumstances warrant, make recommendations to the regional or district head of the agency providing the OSC/RPM that a different OSC/RPM should be designated; and

(v) Submit pollution reports to the NRC as significant developments occur.

(5) At the regional level, a Regional Response Center (RRC) may provide facilities and personnel for communications information storage, and other requirements for coordinating response. The location of each RRC should be provided in the RCP.

(6) When the RRT is activated, affected States may participate in all RRT deliberations. State government representatives participating in the RRT have the same status as any Federal member of the RRT.

(7) The RRT can be deactivated when the incident-specific RRT chair determines that the OSC/RPM no longer requires RRT assistance.

(8) Notification of the RRT may be appropriate when full activation is not necessary, with systematic communication of pollution reports or other means to keep RRT members informed as to actions of potential concern to a particular agency, or to assist in later RRT evaluation of regionwide response effectiveness.

(k) Whenever there is insufficient national policy guidance on a matter

before the RRT, a technical matter requiring solution, a question concerning interpretation of the NCP, or there is a disagreement on discretionary actions among RRT members that cannot be resolved at the regional level, it may be referred to the NRT, described in § 300.110, for advice.

§ 300.120 On-scene coordinators and remedial project managers: general responsibilities.

(a) The OSC/RPM directs response efforts and coordinates all other efforts at the scene of a discharge or release. As part of the planning and preparedness for response, OSCs shall be predesignated by the regional or district head of the lead agency. EPA and the USCG shall predesignate OSCs for all areas in each region, except as provided in paragraphs (b) and (c) of this section. RPMs shall be assigned by the lead agency to manage remedial or other response actions at NPL sites, except as provided in paragraphs (b) and (c) of this section.

(1) The USCG shall provide OSCs for oil discharges, including discharges from facilities and vessels under the jurisdiction of another Federal agency, within or threatening the coastal zone. The USCG shall also provide OSCs for the removal of releases of hazardous substances, pollutants, or contaminants into or threatening the coastal zone, except as provided in paragraph (b) of this section. The USCG shall not provide predesignated OSCs for discharges or releases from hazardous waste management facilities or in similarly chronic incidents. The USCG shall provide an initial response to discharges or releases from hazardous waste management facilities within the coastal zone in accordance with DOT/EPA Instrument of Delegation (46 FR 63294, December 31, 1981). The USCG OSC shall contact the cognizant RPM as soon as it is evident that a removal may require a follow-up remedial action, to ensure that the required planning can be initiated and an orderly transition to an EPA or State lead can occur.

(2) EPA shall provide OSCs for discharges or releases into or threatening the inland zone and shall provide RPMs for Federally-funded remedial actions, except in the case of State-lead Federally-funded response and as provided in paragraph (b) of this section. EPA will also assume all remedial actions at NPL sites in the coastal zone, even where removals are initiated by the USCG, except those involving vessels.

(b) For releases of hazardous substances, pollutants, or contaminants, when the release is on, or the sole

source of the release is from, any facility or vessel, including vessels bareboat chartered and operated, under the jurisdiction, custody, or control of DOD, DOE, or other Federal agency:

(1) In the case of DOD or DOE, DOD or DOE shall provide OSCs/RPMs responsible for taking all response actions; and

(2) In the case of a Federal agency other than the USCG, EPA, DOD, or DOE, such agency shall provide OSCs for all removal actions that are not emergencies and shall provide RPMs for all remedial actions.

(c) DOD will be the removal response authority with respect to incidents involving military weapons and munitions.

(d) The OSC is responsible for developing any OSC contingency plans for the Federal response in the area of the OSC's responsibility. The planning shall, as appropriate, be accomplished in cooperation with the RRT, described in § 300.115, and designated State and local representatives.

(e) The RPM is the prime contact for remedial or other response actions being taken (or needed) at sites on the proposed or promulgated NPL, and for sites not on the NPL but under the jurisdiction, custody, or control of a Federal agency. The RPM's responsibilities include:

(1) Fund-Financed Response: The RPM coordinates, directs, and reviews the work of EPA, State, and local governments, the U.S. Army Corps of Engineers, and all other agencies and contractors to assure compliance with the NCP. Based upon the reports of these parties, the RPM recommends action for decisions by lead agency officials. The RPM's period of responsibility begins prior to initiation of the remedial investigation/feasibility study (RI/FS), described in § 300.430, and continues through design, remedial action, deletion of the site from the NPL, and the CERCLA cost recovery activity. When a removal and remedial action occur at the same site, the OSC and RPM should coordinate to ensure an orderly transition of responsibility.

(2) Federal-lead Non-Fund-Financed Response: The RPM coordinates, directs, and reviews the work of other agencies and contractors to assure compliance with the NCP. Based upon the reports of these parties, the RPM shall recommend action for decisions by lead agency officials. The RPM's period of responsibility begins prior to initiation of the RI/FS, described in § 300.430, and continues through design and remedial action, and the CERCLA cost recovery activity. The OSC and RPM shall ensure

orderly transition of responsibilities from one to the other.

(3) The RPM shall participate in all decisionmaking processes necessary to ensure compliance with the NCP, including, as appropriate, agreements between EPA or other Federal agencies and the State. The RPM may also review responses where EPA has preauthorized a person to file a claim for reimbursement to determine that the response was consistent with the terms of such preauthorization in cases where claims are filed for reimbursement.

(f)(1) Where a support agency has been identified through a cooperative agreement, SMOA, or other agreement, that agency may designate a support agency coordinator (SAC) to provide assistance, as requested, by the OSC/RPM. The SAC is the prime representative of the support agency for response actions.

(2) The SAC's responsibilities may include:

(i) Providing and reviewing data and documents as requested by the OSC/RPM during the planning, design, and cleanup activities of the response action; and

(ii) Providing other assistance as requested.

(g)(1) The lead agency should provide appropriate training for its OSCs, RPMs, and other response personnel to carry out their responsibilities under the NCP.

(2) OSCs/RPMs should ensure that persons designated to act as their on-scene representatives are adequately trained and prepared to carry out actions under the NCP, to the extent practicable.

§ 300.125 Notification and communications.

(a) The NRC is the national communications center for activities related to response actions. It is located at USCG Headquarters in Washington, DC. The NRC receives and relays notices of discharges or releases to the appropriate OSC, records each notice, disseminates OSC/RPM and RRT reports to the NRT when appropriate, and provides facilities for the NRT to use in coordinating a national response action when required.

(b) The Commandant, USCG, shall provide the necessary personnel, communications, plotting facilities, and equipment for the NRC.

(c) Notice of an oil discharge or release of a hazardous substance in an amount equal to or greater than the reportable quantity must be made immediately in accordance with 33 CFR Part 153, Subpart B, and 40 CFR Part 302, respectively. Notification shall be made

to the NRC Duty Officer, HQ USCG, Washington, DC, telephone (800) 424-8802 or (202) 426-2675. All notices of discharges or releases received at the NRC will be relayed immediately by telephone to the OSC.

§ 300.130 Determinations to initiate response and special conditions.

(a) The Administrator of EPA or the Secretary of the Department in which the USCG is operating, as appropriate, is authorized to act for the United States to take response measures deemed necessary to protect the public health or welfare or environment from discharges of oil or releases of hazardous substances, pollutants, or contaminants except with respect to such releases on or from vessels or facilities under the jurisdiction, custody or control of other Federal agencies.

(b) The Administrator of EPA or the Secretary of the Department in which the USCG is operating, as appropriate, is authorized to initiate appropriate response activities when the Administrator or Secretary determines that:

(1) Any oil is discharged from any vessel or offshore or onshore facility into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or which may affect natural resources belonging to, appertaining to, or under exclusive management authority of the United States;

(2) The release into the environment of a hazardous substance, pollutant or contaminant presents a threat to public health or welfare or environment; or

(3) A marine disaster in or upon the navigable waters of the United States has created a substantial threat of a pollution hazard to the public health or welfare because of a discharge or release, or an imminent discharge or release, from a vessel of large quantities of oil or hazardous substances designated pursuant to section 311(b)(2)(A) of the CWA.

(c) Whenever there is such a marine disaster, the Administrator of EPA or Secretary of the Department in which the USCG is operating may:

(1) Coordinate and direct all public and private efforts to abate the threat; and

(2) Summarily remove and, if necessary, destroy the vessel by whatever means are available without regard to any provisions of law governing the employment of personnel or the expenditure of appropriated funds.

(d) In addition to any actions taken by a State or local government, the Administrator of EPA or the Secretary of the Department in which the USCG is operating may request the U.S. Attorney General to secure the relief necessary to abate a threat if the Administrator or Secretary determines:

(1) That there is an imminent and substantial threat to the public health or welfare or the environment because of discharge of oil from any offshore or onshore facility into or upon the navigable waters of the United States; or

(2) That there may be an imminent and substantial endangerment to the public health or welfare or the environment because of a release of a hazardous substance from a facility.

(e) Response actions to remove discharges originating from operations conducted subject to the Outer Continental Shelf Lands Act shall be in accordance with the NCP.

(f) Where appropriate, when a discharge or release involves radioactive materials, the lead or support Federal agency shall act consistent with the notification and assistance procedures described in the appropriate Federal Radiological Plan. For the purpose of the NCP, the Federal Radiological Emergency Response Plan (FRERP) (50 FR 46542, November 8, 1985) is the appropriate plan.

(g) Removal actions involving nuclear weapons should be conducted in accordance with the joint Department of Defense, Department of Energy, and Federal Emergency Management Agency Agreement for Response to Nuclear Incidents and Nuclear Weapons Significant Incidents (January 8, 1981).

(h) If the situation is beyond the capability of State and local governments and the statutory authority of Federal agencies, the President may, under the Disaster Relief Act of 1974, act upon a request by the governor and declare a major disaster or emergency and appoint a Federal Coordinating Officer (FCO) to coordinate all Federal disaster assistance activities. In such cases, the OSC/RPM would continue to carry out OSC/RPM responsibilities under the NCP, but would coordinate those activities with the FCO to ensure consistency with other Federal disaster assistance activities.

§ 300.135 Response operations.

(a) The OSC/RPM, consistent with §§ 300.120 and 300.125, shall direct response efforts and coordinate all other efforts at the scene of a discharge or release, as provided for in Executive Order 11735 and Executive Order 12580. As part of the planning and preparation

for response, the OSCs/RPMs shall be pre-designated by the regional or district head of the lead agency.

(b) The first Federal official affiliated with an NRT member agency to arrive at the scene of a discharge or release should coordinate activities under the NCP and is authorized to initiate, in consultation with the OSC, any necessary actions normally carried out by the OSC until the arrival of the pre-designated OSC. This official may initiate Federal Fund-financed actions only as authorized by the OSC or, if the OSC is unavailable, the authorized representative of the lead agency.

(c) The OSC/RPM shall, to the extent practicable, collect pertinent facts about the discharge or release, such as its source and cause; the identification of potentially responsible parties; the nature, amount, and location of discharged or released materials; the probable direction and time of travel of discharged or released materials; the pathways to human and environmental exposure; the potential impact on human health, welfare, and safety and the environment; the potential impact on natural resources and property which may be affected; priorities for protecting human health and welfare, and the environment; and appropriate cost documentation.

(d) The OSC's/RPM's efforts shall be coordinated with other appropriate Federal, State, local, and private response agencies. OSCs/RPMs may designate capable persons from Federal, State, or local agencies to act as their on-scene representatives. State and local governments, however, are not authorized to take actions under Subparts D and E of the NCP that involve expenditures of CWA section 311(k) or CERCLA funds unless an appropriate contract or cooperative agreement has been established.

(e) The OSC-RPM should consult regularly with the RRT in carrying out the NCP and keep the RRT informed of activities under the NCP.

(f) The OSC/RPM shall advise the support agency as promptly as possible of reported discharges or releases.

(g) The OSC/RPM shall immediately notify FEMA of situations potentially requiring evacuation, temporary housing, or permanent relocation. In addition, the OSC/RPM shall evaluate incoming information and immediately advise FEMA of potential major disaster situations.

(h) In those instances where a possible public health emergency exists, the OSC/RPM should notify the HHS representative to the RRT. Throughout response actions, the OSC/RPM may

call upon the HHS representative for assistance in determining public health threats and call upon the Occupational Safety and Health Administration and HHS for advice on worker health and safety problems.

(i) All Federal agencies should plan for emergencies and develop procedures for dealing with oil discharges and releases of hazardous substances, pollutants, or contaminants from vessels and facilities under their jurisdiction. All Federal agencies, therefore, are responsible for designating the office that coordinates response to such incidents in accordance with the NCP and applicable Federal regulations and guidelines.

(j) The OSC/RPM shall promptly notify the trustees for natural resources of discharges or releases that are injuring or may injure natural resources under their jurisdiction. The OSC or RPM should consult with the natural resource trustees in determining such effects and shall coordinate, as appropriate, all response activities with natural resource trustees.

(k) Where the OSC/RPM becomes aware that a discharge or release may adversely affect any endangered or threatened species, or result in destruction or adverse modification of the habitat of such species, the OSC/RPM should consult with the DOI or DOC (NOAA).

(l) The OSC/RPM is responsible for addressing worker health and safety concerns at a response scene, in accordance with § 300.150.

(m) The OSC, and the RPM as appropriate, shall submit pollution reports to the RRT and other appropriate agencies as significant developments occur during response actions, through communications networks or procedures agreed to by the RRT and covered in the RCP.

(n) OSCs/RPMs should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response, to the extent practicable, consistent with the requirements of § 300.155 of this Part.

§ 300.140 Multi-regional responses.

(a) If a discharge or release moves from the area covered by one RCP or OSC contingency plan into another area, the authority for response actions should likewise shift. If a discharge or release affects areas covered by two or more RCPs, the response mechanisms of both may be activated. In this case, response actions of all regions concerned shall be fully coordinated as detailed in the RCPs.

(b) There shall be only one OSC and/or RPM at any time during the course of a response operation. Should a discharge or release affect two or more areas, EPA, the USCG, DOD, DOE, or other lead agency, as appropriate, shall give prime consideration to the area vulnerable to the greatest threat, in determining which agency should provide the OSC and/or RPM. The RRT shall designate the OSC and/or RPM if the RRT member agencies who have response authority within the affected areas are unable to agree on the designation. The RRT shall designate the OSC and/or RPM if members of one RRT or two adjacent RRTs are unable to agree on the designation.

(c) Where the USCG has initially provided the OSC for response to a release from hazardous waste management facilities located in the coastal zone, responsibility for response action shall shift to EPA, in accordance with EPA/USCG agreements, or to another Federal agency, as appropriate under Executive Order 12580.

§ 300.145 Special teams and other assistance available to OSCs/RPMs.

(a) Strike Teams, collectively known as the National Strike Force (NSF), are established by the USCG on the Pacific coast and Gulf coast (covering the Atlantic and Gulf coast regions), to provide assistance to the OSC/RPM.

(1) Strike Teams can provide communications support, advice, and assistance for oil and hazardous substances removal. These teams also have knowledge of shipboard damage control, are equipped with specialized containment and removal equipment, and have rapid transportation available. When possible, the Strike Teams will provide training for emergency task forces to support OSCs/RPMs and assist in the development of RCPs and OSC contingency plans.

(2) The OSC/RPM may request assistance from the Strike Teams. Requests for a team may be made directly to the Commanding Officer of the appropriate team, the USCG member of the RRT, the appropriate USCG Area Commander, or the Commandant of the USCG through the NRC.

(b) Each USCG OSC manages emergency task forces trained to evaluate, monitor, and supervise pollution responses. Additionally, they have limited "initial aid" response capability to deploy equipment prior to the arrival of a cleanup contractor or other response personnel.

(c)(1) The Environmental Response Team (ERT) is established by EPA in accordance with its disaster and emergency responsibilities. The ERT has

expertise in treatment technology, biology, chemistry, hydrology, geology, and engineering.

(2) The ERT can provide access to special decontamination equipment for chemical releases and advice to the OSC/RPM in hazard evaluation; risk assessment; multimedia sampling and analysis program; on-site safety, including development and implementation plans; cleanup techniques and priorities; water supply decontamination and protection; application of dispersants; environmental assessment; degree of cleanup required; and disposal of contaminated material.

(3) The ERT also provides both introductory and intermediate level training courses to prepare response personnel.

(4) OSC/RPM or RRT requests for ERT support should be made to the EPA representative on the RRT; EPA Headquarters, Director, Emergency Response Division; or the appropriate EPA regional emergency coordinator.

(d) Scientific support coordinators (SSCs) are available, at the request of OSCs/RPMs, to assist with actual or potential responses to discharges of oil or releases of hazardous substances, pollutants, or contaminants. The SSC will also provide scientific support for the development of RCPs and OSC contingency plans. Generally, SSCs are provided by NOAA in coastal and marine areas, and by EPA in inland regions.

(1) During a response, the SSC serves under the direction of the OSC/RPM and is responsible for providing scientific support for operational decisions and for coordinating on-scene scientific activity. Depending on the nature of the incident, the SSC can be expected to provide certain specialized scientific skills and to work with governmental agencies, universities, community representatives, and industry to compile information that would assist the OSC/RPM in assessing the hazards and potential effects of discharges and releases and in developing response strategies.

(2) If requested by the OSC/RPM, the SSC will serve as the principal liaison for scientific information and will facilitate communications to and from the scientific community on response issues. The SSC, in this role, will strive for a consensus on scientific issues surrounding the response but will also ensure that any differing opinions within the community are communicated to the OSC/RPM.

(3) The SSC will assist the OSC/RPM in responding to requests for assistance

from State and Federal agencies regarding scientific studies and environmental assessments. Details on access to scientific support shall be included in the RCPs.

(e) For marine salvage operations, OSCs/RPMs with responsibility for monitoring, evaluating, or supervising these activities should request technical assistance from DOD, the Strike Teams, or commercial salvors as necessary to ensure that proper actions are taken. Marine salvage operations generally fall into five categories: afloat salvage; offshore salvage; river and harbor clearance; cargo salvage; and rescue towing. Each category requires different knowledge and specialized types of equipment. The complexity of such operations may be further compounded by local environmental and geographic conditions. The nature of marine salvage and the conditions under which it occurs combine to make such operations imprecise, difficult, hazardous, and expensive. Thus, responsible parties or other persons attempting to perform such operations without adequate knowledge, equipment, and experience could aggravate, rather than relieve, the situation.

(f) Radiological Assistance Teams have been established by EPA's Office of Radiation Programs (ORP) to provide response and support for incidents or sites containing radiological hazards. Expertise is available in radiation monitoring, radionuclide analysis, radiation health physics and risk assessment. Radiological Assistance Teams can provide on-site support including mobile monitoring laboratories for field analyses of samples and fixed laboratories for radiochemical sampling and analyses. Requests for support may be made 24 hours a day to the Radiological Response Coordinator. Assistance is also available from the Department of Energy and other Federal agencies.

(g) The USCG Public Information Assist Team (PIAT) is available to assist OSCs/RPMs and regional or district offices to meet the demands for public information and participation. Its use is encouraged any time the OSC/RPM requires outside public affairs support. Requests for the PIAT may be made through the NRC.

§ 300.150 Worker health and safety.

(a) Requirements under the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.) (OSH Act) and under the laws of States with plans approved under section 18 of the OSH Act (State OSH laws), as well as other applicable safety and health requirements, will be applied to

response activities under the NCP. These requirements are subject to enforcement by the appropriate Federal and State agencies. Federal OSH Act requirements include, among other things, all OSH Act General Industry (29 CFR Part 1910, in particular, § 1910.120 Hazardous Waste Operations and Emergency Response), Construction (29 CFR Part 1926), Shipyard (29 CFR Part 1915), and Longshoring (29 CFR Part 1918) standards wherever they are relevant, as well as OSH Act recordkeeping and reporting regulations (29 CFR Part 1904). Employers at response actions under the NCP will also be subject to the general duty requirements of section 5(a)(1) of the OSH Act (29 U.S.C. 654(a)(1)). No action by the lead agency with respect to response activities under the NCP constitutes an exercise of statutory authority within the meaning of section 4(b)(1) of the OSH Act. All governmental agencies and private employers are directly responsible for the health and safety of their own employees.

(b) In a response action taken by a responsible party, the responsible party must assure that an occupational safety and health program is made available for the protection of workers at the response site, and that workers entering the response site are apprised of the response site hazards and provisions of the safety and health program.

(c) In a response taken under the NCP by a lead agency, the lead agency must assure that a program for occupational safety and health is made available for the protection of workers at the response site, and that workers entering the response site are apprised of site hazards and provisions of the safety and health program. Any contract relating to a response action under the NCP shall contain assurances that the contractor at the response site will comply with this program and with any applicable provision of the OSH Act and State OSH laws.

(d) When a State, or political subdivision of a State, without an OSHA-approved State plan is the lead agency for response, the State or political subdivision must comply with standards promulgated by EPA pursuant to section 126(f) of SARA.

§ 300.155 Public information and community relations.

(a) When an incident occurs, it is imperative to give the public prompt, accurate information on the nature of the incident and the actions underway to mitigate the damage. OSCs/RPMs and community relations personnel should ensure that all appropriate public

and private interests are kept informed and that their concerns are considered throughout a response. They should coordinate with available public affairs/community relations resources to carry out this responsibility.

(b) An on-scene news office may be established to coordinate media relations and to issue official Federal information on an incident. Whenever possible, it will be headed by a representative of the lead agency. The OSC/RPM determines the location of the on-scene news office, but every effort should be made to locate it near the scene of the incident. If a participating agency believes public interest warrants the issuance of statements and an on-scene news office has not been established, the affected agency should recommend its establishment. All Federal news releases or statements by participating agencies should be cleared through the OSC/RPM.

(c) The community relations requirements specified in §§ 300.415, 300.430, and 300.435 apply to removal, remedial, and enforcement actions and are intended to promote active communication between communities affected by discharges or releases and the lead agency responsible for response actions. Community Relations Plans (CRPs) are required by EPA for certain response actions. The OSC/RPM should ensure coordination with such plans which may be in effect at the scene of a discharge or release or which may need to be developed during followup activities.

§ 300.160 Documentation and cost recovery.

(a) For releases of a hazardous substance, pollutant, or contaminant, the following provisions apply:

(1) During all phases of response, the lead agency shall complete and maintain documentation to support all actions taken under the NCP and to form the basis for cost recovery. In general, documentation shall be sufficient to provide the source and circumstances of the release, the identity of responsible parties, the response action taken, accurate accounting of Federal, State, or private party costs incurred for response actions, and impacts and potential impacts to the public health and welfare and the environment. Where applicable, documentation shall state when the NRC received notification of a release of a reportable quantity.

(2) The information and reports obtained by the lead agency for Fund-financed response actions shall, as

appropriate, be transmitted to the chair of the RRT. Copies can then be forwarded to the NRT, members of the RRT, and others as appropriate. In addition, OSCs shall report as required by § 300.165 for all major releases and all Fund-financed removal actions taken.

(3) The lead agency shall make available to the trustees of affected natural resources information and documentation that can assist in the determination of actual or potential natural resource injuries.

(b) For discharges of oil, documentation and cost recovery provisions are described in § 300.315.

(c) Response actions undertaken by the participating agencies shall be carried out under existing programs and authorities when available. Federal agencies are to make resources available, expend funds, or participate in response to discharges and releases under their existing authority. Interagency agreements may be signed when necessary to ensure that the Federal resources will be available for a timely response to a discharge or release. The ultimate decision as to the appropriateness of expending funds rests with the agency that is held accountable for such expenditures. Further funding provisions for discharges of oil are described in § 300.335.

(d) The Administrator of EPA and the Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR) shall assure that the costs of health assessment or health effect studies conducted under the authority of CERCLA section 104(i) are documented in accordance with standard EPA procedures for cost recovery. Documentation shall include information on the nature of the hazardous substances addressed by the research, information concerning the locations where these substances have been found, and any available information on response actions taken concerning these substances at the location.

§ 300.165 OSC reports.

(a) Within 90 days after completion of removal activities at a major discharge of oil, a major hazardous substance, pollutant, or contaminant release, or when requested by the RRT, the OSC/RPM shall submit to the RRT a complete report on the removal operation and the actions taken. The OSC/RPM shall at the same time send a copy of the report to the Secretary of the NRT. The RRT shall review the OSC report and send to the NRT a copy of the OSC report with its comments or recommendations

within 30 days after the RRT has received the OSC report.

(b) The OSC report shall record the situation as it developed, the actions taken, the resources committed, and the problems encountered.

(c) The format for the OSC report shall be as follows:

(1) Summary of Events—a chronological narrative of all events, including:

(i) The location of the hazardous substance, pollutant, or contaminant release or oil discharge, including, for oil discharges, an indication of whether the discharge was in connection with activities regulated under the Outer Continental Shelf Lands Act (OCSLA), the Trans-Alaska Pipeline Authority Act, or Deepwater Port Act;

(ii) The cause of the discharge or release;

(iii) The initial situation;

(iv) Efforts to obtain response by responsible parties;

(v) The organization of the response, including State participation;

(vi) The resources committed;

(vii) Comments on whether the discharge or release affected natural resources;

(viii) Comments on Federal or State damage assessment activities and efforts to replace or restore damaged natural resources;

(ix) Details of any threat abatement action taken under CERCLA or under section 311 (c) or (d) of the CWA;

(x) Treatment/Disposal/Alternative Technology approaches pursued and followed; and

(xi) Public information/community relations activities.

(2) Effectiveness of removal actions taken by:

(i) The responsible party(ies);

(ii) State and local forces;

(iii) Federal agencies and special forces; and

(iv) Contractors, private groups, and volunteers, if applicable.

(3) Difficulties Encountered—A list of items that affected the response, with particular attention to issues of intergovernmental coordination.

(4) Recommendations—OSC/RPM recommendations, including at a minimum:

(i) Means to prevent a recurrence of the discharge or release;

(ii) Improvement of response actions; and

(iii) Any recommended changes in the NCP, RCP, OSC contingency plan, and, as appropriate, plans developed under section 303 of SARA and other local emergency response plans.

§ 300.170 Federal agency participation.

Federal agencies listed in § 300.175 have duties established by statute, executive order, or Presidential directive which may apply to Federal response actions, following, or in prevention of, the discharge of oil or release of a hazardous substance, pollutant, or contaminant. Some of these agencies also have duties relating to the rehabilitation, restoration, or replacement of natural resources injured or lost as a result of such discharge or release as described in Subpart G of this Part. The NRT and RRT organizational structure, the NCP, the Federal Regional Contingency plans (RCPs) and OSC contingency plans, described in § 300.210, provide for agencies to coordinate with each other in carrying out these duties.

(a) Federal agencies may be called upon by an OSC/RPM during response planning and implementation to provide assistance in their respective areas of expertise as described in § 300.175, consistent with the agencies' capabilities and authorities.

(b) In addition to their general responsibilities, Federal agencies should:

(1) Make necessary information available to the Secretary to the NRT, RRTs, and OSCs/RPMs.

(2) Provide representatives to the NRT and RRTs and otherwise assist RRTs and OSCs, as necessary, in formulating RCPs and OSC contingency plans.

(3) Inform the NRT and RRTs, consistent with national security considerations, of changes in the availability of resources that would affect the operations implemented under the NCP.

(c) All Federal agencies are responsible for reporting releases of hazardous substances, pollutants, or contaminants or discharges of oil from facilities or vessels which are under their jurisdiction or control in accordance with section 103 of CERCLA.

§ 300.175 Federal agencies: additional responsibilities and assistance.

(a) During preparedness planning or in an actual response, various Federal agencies may be called upon to provide assistance in their respective areas of expertise as indicated in paragraph (b) of this section, consistent with agency legal authorities and capabilities.

(b) The Federal agencies include:

(1) The United States Coast Guard (USCG), as provided in 14 U.S.C. 1-3, is an agency in the Department of Transportation (DOT), except when operating as an agency in the United

States Navy in time of war. The USCG provides the NRT vice chair, co-chairs for the standing RRTs, and predesignated OSCs for the coastal zone as described in § 300.120(a)(1). The USCG maintains continuously manned facilities which can be used for command, control, and surveillance of oil discharges and hazardous substance releases occurring in the coastal zone. The USCG also offers expertise in domestic and international fields of port safety and security, maritime law enforcement, ship navigation and construction, and the manning, operation and safety of vessels and marine facilities.

(2) The Environmental Protection Agency (EPA) chairs the NRT and co-chairs, with the USCG, the standing RRTs; provides predesignated OSCs for the inland zone and RPMs for remedial actions except as otherwise provided; and generally provides the SSC for responses in the inland zone. EPA provides expertise on environmental effects of oil discharges or releases of hazardous substances, pollutants, or contaminants, and environmental pollution control techniques. EPA also provides legal expertise on the interpretation of CERCLA and other environmental statutes. EPA may enter into a contract or cooperative agreement with the appropriate State in order to implement a response action.

(3) The Federal Emergency Management Agency (FEMA) provides guidance, policy and program advice, and technical assistance in hazardous materials and radiological emergency preparedness activities (planning, training, and exercising). In a response, FEMA provides advice and assistance to the lead agency on coordinating relocation assistance and mitigation efforts with other Federal agencies, State and local governments, and the private sector. FEMA may enter into a contract or cooperative agreement with the appropriate State or political subdivision in order to implement relocation assistance in a response. In the event of a hazardous materials incident at a major disaster or emergency declared by the President, the lead agency shall coordinate hazardous materials response with the Federal Coordinating Officer (FCO) appointed by the President.

(4) The Department of Defense (DOD) has responsibility to take all action necessary with respect to releases where either the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of DOD. DOD may also, consistent with its operational

requirements and upon request of the OSC, provide locally deployed United States Navy oil spill equipment and provide assistance to other Federal agencies on request. The following two branches of DOD have particularly relevant expertise:

(i) The United States Army Corps of Engineers has specialized equipment and personnel for maintaining navigation channels, for removing navigation obstruction, for accomplishing structural repairs, and for performing maintenance to hydropower electric generating equipment. The Corps can also provide design services, perform construction, and provide contract writing and contract administrative services for other Federal agencies.

(ii) The United States Navy (USN) is the Federal agency most knowledgeable and experienced in ship salvage, shipboard damage control, and diving. The USN has an extensive array of specialized equipment and personnel available for use in these areas as well as specialized containment, collection, and removal equipment specifically designed for salvage-related and open sea pollution incidents.

(5) The Department of Energy (DOE), except as otherwise provided in Executive Order 12580, provides designated OSCs/RPMs that are responsible for taking all response actions with respect to releases where either the release is on, or the sole source of the release is from, any facility or vessel under its jurisdiction, custody or control, including vessels bareboat chartered and operated. In addition, under the Federal Radiological Emergency Response Plan (FRERP), DOE provides advice and assistance to other OSCs/RPMs for emergency actions essential for the control of immediate radiological hazards. Incidents that qualify for DOE radiological advice and assistance are those believed to involve source, by-product, or special nuclear material or other ionizing radiation sources, including radium, and other naturally occurring radionuclides, as well as particle accelerators. Assistance is available through direct contact with the appropriate DOE Radiological Assistance Coordinating Office.

(6) The Department of Agriculture (USDA) has scientific and technical capability to measure, evaluate, and monitor, either on the ground or by use of aircraft, situations where natural resources including soil, water, wildlife, and vegetation have been impacted by fire, insects and diseases, floods, hazardous substances, and other natural

or man-caused emergencies. The USDA may be contacted through Forest Service emergency staff officers who are the designated members of the RRT. Agencies within USDA have relevant capabilities and expertise as follows:

(i) The Forest Service has responsibility for protection and management of National Forests and National Grasslands. The Forest Service has personnel, laboratory, and field capability to measure, evaluate, monitor, and control as needed, releases of pesticides and other hazardous substances on lands under its jurisdiction.

(ii) The Agriculture Research Service (ARS) administers an applied and developmental research program in animal and plant protection and production; the use and improvement of soil, water, and air; the processing, storage and distribution of farm products; and human nutrition. The ARS has the capabilities to provide regulation of, and evaluation and training for, employees exposed to biological, chemical, radiological, and industrial hazards. In emergency situations, the ARS can identify, control, and abate pollution in the areas of air, soil, wastes, pesticides, radiation, and toxic substances for ARS facilities.

(iii) The Soil Conservation Service (SCS) has personnel in nearly every county in the nation knowledgeable in soil, agronomy, engineering, and biology. These personnel can predict the effects of pollutants on soil and their movements over and through soils. Technical specialists can assist in identifying potential hazardous waste sites and provide review and advice on plans for remedial measures.

(iv) The Animal and Plant Health Inspection Service (APHIS) can respond in an emergency to regulate movement of diseased or infected organisms to prevent spread and contamination of nonaffected areas.

(v) The Food Safety and Inspection Service (FSIS) has responsibility to prevent meat and poultry products contaminated with harmful substances from entering human food channels. In emergencies, the FSIS works with other Federal and State agencies to establish acceptability for slaughter of exposed or potentially exposed animals and their products. In addition they are charged with managing the Federal Radiological Emergency Response Program for the USDA.

(7) The Department of Commerce (DOC), through NOAA, provides scientific support for responses and contingency planning in coastal and marine areas, including assessments of

the hazards that may be involved, predictions of movement and dispersion of oil and hazardous substances through trajectory modeling and information on the sensitivity of coastal environments to oil or hazardous substances; provides scientific expertise on living marine resources for which it is responsible and their habitats, including endangered species and marine mammals; provides information on actual and predicted meteorological, hydrologic, ice, and oceanographic conditions for marine, coastal, and inland waters; and furnishes tide and circulation information for coastal and territorial waters and for the Great Lakes.

(8) The Department of Health and Human Services (HHS) is responsible for providing assistance on matters related to the assessment of health hazards at a response, and protection of both response workers and the public's health. HHS is delegated authorities under section 104(b) of CERCLA relating to a determination that illness, disease, or complaints thereof may be attributable to exposure to a hazardous substance, pollutant, or contaminant. HHS programs and services may be carried out through grants, contracts, or cooperative agreements. The basic research programs shall be coordinated with the Superfund research, demonstration, and development program conducted by EPA and DOD through the mechanisms provided for in CERCLA. Agencies within HHS have relevant responsibilities, capabilities, and expertise as follows:

(i) The Agency for Toxic Substances and Disease Registry (ATSDR), under section 104(i) of CERCLA, is required to: establish appropriate disease/exposure registries; provide medical care and testing of exposed individuals in cases of public health emergencies; develop, maintain, and provide information on health effects of toxic substances; maintain a list of areas restricted or closed because of toxic substances contamination; conduct research to determine relationships between exposure to toxic substances and illness; conduct health assessments at all NPL sites; conduct a health assessment in response to a petition or provide a written explanation why an assessment will not be conducted; together with EPA, identify the most hazardous substances related to CERCLA sites; together with EPA, develop guidelines for toxicological profiles for hazardous substances; develop a toxicological profile for all such substances; and develop educational materials related to health

effects of toxic substances for health professionals.

(ii) The National Institutes for Environmental Health Sciences (NIEHS) has been given the responsibilities under section 311(a) of CERCLA, to conduct and support programs of basic research, development, and demonstration; and to establish short course and continuing education programs, and graduate or advanced training. In addition, section 126(g) of SARA authorizes NIEHS to administer grants for training and education of workers who are or may be engaged in activities related to hazardous waste removal, containment, or emergency responses.

(9) The Department of the Interior (DOI) may be contacted through Regional Environmental Officers (REO), who are the designated members of RRTs. Department land managers have jurisdiction over the National Park System, National Wildlife Refuges and Fish Hatcheries, the public lands, and certain water projects in western States. In addition, bureaus and offices have relevant expertise as follows:

(i) Fish and Wildlife Service: fish and wildlife, including endangered and threatened species, migratory birds, and certain marine mammals; contaminants affecting habitat resources; and laboratory research facilities.

(ii) Geological Survey: geology, hydrology (ground water and surface water), and natural hazards.

(iii) Bureau of Land Management: minerals, soils, vegetation, wildlife, habitat, archaeology, and wilderness; and hazardous materials.

(iv) Minerals Management Service: manned facilities for Outer Continental Shelf (OCS) oversight.

(v) Bureau of Mines: analysis and identification of inorganic hazardous substances and technical expertise in metals and metallurgy relevant to site cleanup.

(vi) Office of Surface Mining: coal mine wastes and land reclamation.

(vii) National Park Service: biological and general natural resources expert personnel at Park units.

(viii) Bureau of Reclamation: operation and maintenance of water projects in the West; engineering and hydrology; and reservoirs.

(ix) Bureau of Indian Affairs: coordination of activities affecting Indian lands; assistance in identifying Indian Tribal government officials.

(x) Office of Territorial Affairs: assistance in implementing the NCP in American Samoa, Guam, the Trust Territory of the Pacific Islands, and the Virgin Islands.

(10) The Department of Justice (DOJ) can provide expert advice on complicated legal questions arising from discharges or releases, and Federal agency responses. In addition, the DOJ represents the Federal government, including its agencies, in litigation relating to such discharges or releases.

(11) The Department of Labor (DOL), through the Occupational Safety and Health Administration (OSHA) and the States operating plans approved under section 18 of the Occupational Safety and Health Act of 1970 (OSH Act), has authority to conduct safety and health inspections of hazardous waste sites to assure that employees are being protected and to determine if the site is in compliance with:

(i) Safety and health standards and regulations promulgated by OSHA (or the States) in accordance with section 126 of SARA and all other applicable standards; and

(ii) Regulations promulgated under the Occupational Safety and Health (OSH) Act and its General Duty Clause. OSHA inspections may be self-generated, consistent with its program operations and objectives, or may be conducted in response to requests from EPA or another lead agency. OSHA may also conduct inspections in response to accidents or employee complaints. OSHA may also conduct inspections at hazardous waste sites in those Plan States that choose not to exercise their jurisdiction to inspect such sites. On request, OSHA will provide advice and assistance to EPA and other NRT/RRT agencies as well as to the OSC/RPM regarding hazards to persons engaged in response activities. Technical assistance may include review of site safety plans and work practices, assistance with exposure monitoring, and help with other compliance questions. OSHA may also take any other action necessary to assure that employees are properly protected at such response activities. Any questions about occupational safety and health at these sites should be referred to the OSHA Regional Office.

(12) The Department of Transportation (DOT) provides response expertise pertaining to transportation of oil or hazardous substances by all modes of transportation. Through the Research and Special Programs Administration (RSPA), DOT offers expertise in the requirements for packaging, handling, and transporting regulated hazardous materials.

(13) The Department of State (DOS) will lead in the development of international joint contingency plans. It will also help to coordinate an

international response when discharges or releases cross international boundaries or involve foreign flag vessels. Additionally, DOS will coordinate requests for assistance from foreign governments and U.S. proposals for conducting research at incidents that occur in waters of other countries.

(14) The Nuclear Regulatory Commission will respond, as appropriate, to releases of radioactive materials by its licensees, in accordance with the NRC Incident Response Plan (NUREG-0728) to monitor the actions of those licensees and assure that the public health and environment are protected and adequate recovery operations are instituted. The Nuclear Regulatory Commission will keep EPA informed of any significant actual or potential releases in accordance with procedural agreements. In addition, the Nuclear Regulatory Commission will provide advice to the OSC/RPM when assistance is required in identifying the source and character of other hazardous substance releases where the Nuclear Regulatory Commission has licensing authority for activities utilizing radioactive materials.

§ 300.180 State and local participation in response.

(a) Each State Governor is requested to designate one State office/representative to represent the State on the appropriate RRT. The State's office/representative may participate fully in all activities of the appropriate RRT. Each State governor is also requested to designate a lead State agency that will direct State-lead response operations. This agency is responsible for designating the RPM for State-lead response actions, designating SACs for Federal-lead response actions, and coordinating/communicating with any other State agencies, as appropriate. Local governments are invited to participate in activities on the appropriate RRT as may be provided by State law or arranged by the State's representative. Indian Tribes wishing to participate should assign one person or office to represent the tribal government on the appropriate RRT.

(b) In addition to meeting the requirements for local emergency plans under SARA section 303, State and local government agencies are encouraged to include contingency planning for responses, consistent with the NCP and the RCP, in all emergency and disaster planning.

(c) For facilities not subject to response actions under the NCP, States are encouraged to undertake response actions themselves or to use their authorities to compel potentially

responsible parties to undertake response actions.

(d) States are encouraged to enter into cooperative agreements pursuant to section 104(c)(3) and (d) of CERCLA to enable them to undertake actions authorized under Subparts D and E of the NCP. Requirements for entering into these agreements are included in Subpart F of the NCP. A State agency that acts pursuant to such agreements is referred to as the lead agency. In the event there is no cooperative agreement, the lead agency can be designated in a SMOA or other agreement.

(e) Since State and local public safety organizations would normally be the first government representatives at the scene of a discharge or release, they are expected to initiate public safety measures necessary to protect public health and welfare, and are responsible for directing evacuations pursuant to existing State or local procedures.

§ 300.185 Nongovernmental participation.

(a) Industry groups, academic organizations, and others are encouraged to commit resources for response operations. Specific commitments should be listed in the RCP and OSC contingency plans.

(b) The technical and scientific information generated by the local community, along with information from Federal, State and local governments, should be used to assist the OSC/RPM in devising response strategies where effective standard techniques are unavailable. The SSC shall act as liaison between the OSC/RPM and such interested organizations.

(c) OSC contingency plans shall establish procedures to allow for well-organized, worthwhile, and safe use of volunteers, including compliance with § 300.150 regarding worker health and safety. OSC contingency plans should provide for the direction of volunteers by the OSC/RPM or by other Federal, State, or local officials knowledgeable in contingency operations and capable of providing leadership. OSC contingency plans also should identify specific areas in which volunteers can be used, such as beach surveillance, logistical support, and bird and wildlife treatment. Unless specifically requested by the OSC/RPM, volunteers generally should not be used for physical removal or remedial activities. If, in the judgment of the OSC/RPM, dangerous conditions exist, volunteers shall be restricted from on-scene operations.

(d) Nongovernmental participation must be in compliance with the requirements of Subpart H of this Part if any recovery of costs will be sought.

Subpart C—Planning and Preparedness

§ 300.200 General.

This subpart summarizes emergency preparedness activities relating to hazardous chemicals and substances; describes the Federal, State, and local planning structure; provides for three levels of Federal contingency plans; and cross-references State and local emergency preparedness activities under SARA Title III, also known as the "Emergency Planning and Community Right-to-Know Act of 1986" but referred to herein as "Title III". Regulations implementing Title III are codified at 40 CFR Subchapter J.

§ 300.205 Planning and coordination structure.

(a) *National.* As described in § 300.110, the NRT is responsible for national planning and coordination.

(b) *Regional.* As described in § 300.115, the RRTs are responsible for regional planning and coordination.

(c) *State.* As provided by sections 301 and 303 of SARA, the State emergency response commission (SERC) of each State, appointed by the Governor, is to designate emergency planning districts, appoint local emergency planning committees (LEPC), supervise and coordinate their activities, and review local emergency response plans, described in § 300.215. The SERC also is to establish procedures for receiving and processing requests from the public for information generated by Title III reporting requirements and to designate an official to serve as coordinator for information.

(d) *Local.* As provided by sections 301 and 303 of SARA, emergency planning districts are designated by the SERC in order to facilitate the preparation and implementation of emergency plans. Each LEPC is to prepare a local emergency response plan for the emergency planning district and establish procedures for receiving and processing requests from the public for information generated by Title III reporting requirements. The LEPC is to appoint a chair and establish rules for the LEPC. The LEPC is to designate an official to serve as coordinator for information.

§ 300.210 Federal contingency plans.

There are three levels of Federal contingency plans: the National Contingency Plan, Regional contingency plans (RCPs), and OSC contingency plans. These plans are available for inspection at EPA Regional offices or USCG district offices. Addresses and

telephone numbers for these offices may be found in the United States Government Manual, issued annually, or in local telephone directories.

(a) *The National Contingency Plan.* The purpose and objectives, authority, and scope of the NCP are described in §§ 300.1 through 300.3.

(b) *Regional contingency plans.* The RRTs, working with the States, shall develop Federal RCPs for each standard Federal region, Alaska, Oceania in the Pacific, and the Caribbean to coordinate timely, effective response by various Federal agencies and other organizations to discharges of oil or releases of hazardous substances, pollutants, or contaminants. RCPs shall, as appropriate, include information on all useful facilities and resources in the region, from government, commercial, academic, and other sources. To the greatest extent possible, RCPs shall follow the format of the NCP and coordinate with State emergency response plans, OSC contingency plans, described in § 300.210(c), and Title III local emergency response plans, described in § 300.215. RCPs shall contain lines of demarcation between the inland and coastal zones, as mutually agreed upon by USCG and EPA.

(c)(1) *OSC contingency plans.* In order to provide for a coordinated, effective Federal, State, and local response, each OSC, in consultation with the RRT, may develop an OSC contingency plan for response in the OSC's area of responsibility. OSC contingency plans shall be developed in all areas in the coastal zone, because OSCs in the coastal zone have responsibility for discharges and releases offshore, which often exceed the jurisdiction and capabilities of other responders. Boundaries for OSC contingency plans shall coincide with those agreed upon among EPA, USCG, DOE, and DOD, subject to functions and authorities delegated in Executive Order 12580, to determine OSC areas of responsibility and should be clearly indicated in the RCP. Jurisdictional boundaries of local emergency planning districts established by States, described in § 300.205(c), shall, as appropriate, be considered in determining OSC areas of responsibility. OSC areas of responsibility may include several such local emergency planning districts, or parts of such districts. In developing the OSC contingency plan, OSCs shall coordinate with SERCs and LEPCs affected by the OSC area of responsibility.

(2) The OSC contingency plan shall provide for a well-coordinated response that is integrated and compatible with all appropriate response plans of State,

local, and other non-Federal entities, and especially with Title III local emergency response plans, described in § 300.215, or the OSC area of responsibility. The OSC contingency plan shall, as appropriate, identify the probable locations of discharges or releases; the available resources to respond to multi-media incidents; where such resources can be obtained; waste disposal methods and facilities consistent with local and State plans developed under the Solid Waste Disposal Act, 42 U.S.C. 6901 et seq.; and a local structure for responding to discharges or releases.

§ 300.215 Title III local emergency response plans.

This section describes and cross-references the regulations that implement Title III of SARA. These regulations are codified at 40 CFR Part 355.

(a) Each LEPC is to prepare an emergency response plan in accordance with section 303 of SARA Title III and review the plan once a year, or more frequently as changed circumstances in the community or at any subject facility may require. Such Title III local emergency response plans should be closely coordinated with applicable Federal OSC contingency plans and State emergency response plans.

(b) A facility, as defined in 40 CFR Part 355, is subject to emergency planning requirements if an extremely hazardous substance, as defined in 40 CFR Part 355, is present at the facility in an amount equal to or in excess of the threshold planning quantity established for such substance. In addition, for the purposes of emergency planning, a Governor or SERC may designate additional facilities that shall be subject to planning requirements, if such designation is made after public notice and opportunity for comment. EPA may revise the list of extremely hazardous substances and threshold planning quantities, taking into account the toxicity, reactivity, volatility, dispersability, combustibility, or flammability of a substance. Facility owners or operators are to name a facility representative who participates in the planning process as a facility emergency coordinator.

(c) In accordance with section 303 of SARA, each local emergency response plan is to include, but is not limited to, the following:

(1) Identification of facilities subject to Title III emergency planning requirements that are within the emergency planning district; routes likely to be used for the transportation of substances on the list of extremely

hazardous substances; and any additional facilities, such as hospitals or natural gas facilities, contributing or subjected to additional risk due to their proximity to facilities subject to Title III emergency planning requirements;

(2) Methods and procedures to be followed by facility owners and operators and local emergency and medical personnel to respond to any release, as defined in 40 CFR Part 355, of extremely hazardous substances;

(3) Designation of a community emergency coordinator and a facility emergency coordinator for each facility subject to Title III emergency planning requirements, who will make determinations necessary to implement the emergency response plan;

(4) Procedures providing reliable, effective, and timely notification by the facility emergency coordinators and the community emergency coordinator to persons designated in the emergency response plan, and to the public, that a release has occurred;

(5) Methods for determining the occurrence of a release and the area or population likely to be affected by such a release;

(6) A description of emergency equipment and facilities in the community and at each facility in the community subject to Title III emergency planning requirements, including an identification of the persons responsible for such equipment and facilities;

(7) Evacuation plans, including provisions for precautionary evacuation and alternative traffic routes;

(8) Training programs, including schedules for training of local emergency response and medical personnel; and

(9) Methods and schedules for exercising the emergency response plan.

(d) In accordance with section 303 of SARA, the SERC of each State is to review the emergency response plan developed by the LEPC of each emergency planning district and make recommendations to the LEPC on revisions that may be necessary to ensure coordination of the plan with emergency response plans of other emergency planning districts. RRTs may review a local emergency response plan at the request of the LEPC.

(e) Title III establishes reporting requirements that provide useful information in developing emergency plans.

(1) Upon request from the LEPC, facility owners or operators shall provide promptly to such LEPC information necessary for developing

and implementing the emergency response plan.

(2) Facilities required to prepare or have available a material safety data sheet (MSDS) for a hazardous chemical, as defined in 40 CFR Part 370, under the Occupational Safety and Health Act of 1970, 29 U.S.C. 651 et seq., and regulations promulgated under that Act, shall submit a MSDS for each hazardous chemical or a list of hazardous chemicals to the appropriate SERC, LEPC, and local fire department in accordance with 40 CFR Part 370.

(3) Facilities subject to the requirements of paragraph (e)(2) of this section shall also submit an inventory form containing an estimate of the maximum amount of hazardous chemicals present at the facility during the preceding year, an estimate of the average daily amount of hazardous chemicals at the facility, and the location of these hazardous chemicals at the facility in accordance with 40 CFR Part 370.

(4) Certain facilities with ten or more employees and which manufacture, process, or use a toxic chemical, as defined in 40 CFR Part 372, in excess of a statutorily-prescribed quantity, shall submit annual information on the chemical and releases of the chemical into the environment to EPA and the State in accordance with 40 CFR Part 372.

(f) Immediately after a release of an extremely hazardous substance, or a hazardous substance subject to the notification requirements of CERCLA section 103(a), the owner or operator of a facility, as defined in 40 CFR Part 355, shall notify the community emergency coordinator for the appropriate LEPC and the appropriate SERC in accordance with 40 CFR Part 355. As soon as practicable after such a release has occurred, the facility owner or operator shall provide a written follow-up emergency notice, or notices, if more information becomes available, setting forth and updating the information contained in the initial release notification and including additional information with respect to response actions taken, health risks associated with the release, and, where appropriate, advice regarding medical attention necessary for exposed individuals. For releases of hazardous substances subject to the notification requirements of CERCLA section 103(a), immediate notification must also be made to the NRC, as provided in § 300.405(b).

(g) Title III requires public access to information submitted pursuant to its reporting requirements. Each emergency response plan, MSDS, inventory form,

toxic chemical release form, and follow-up emergency release notification is to be made available to the general public during normal working hours at the location(s) designated by the EPA Administrator, Governor, SERC, or LEPC, as appropriate.

§ 300.220 Related Title III issues.

Other related Title III requirements are found in 40 CFR Part 355.

Subpart D—Operational Response Phases for Oil Removal

§ 300.300 Phase I—Discovery or notification.

(a) A discharge of oil may be discovered through:

(1) A report submitted by the person in charge of a vessel or facility in accordance with statutory requirements;

(2) Deliberate search by patrols;

(3) Random or incidental observation by government agencies or the public; or

(4) Other sources.

(b) Any person in charge of a vessel or a facility shall, as soon as he or she has knowledge of any discharge from such vessel or facility in violation of section 311(b)(3) of the Clean Water Act, immediately notify the NRC. If direct reporting to the NRC is not practicable, reports may be made to the USCG or EPA predesignated OSC for the geographic area where the discharge 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 Coast Guard unit, provided that the person in charge of the vessel or facility notifies the NRC as soon as possible.

(c) Any other person shall, as appropriate, notify the NRC of a discharge of oil.

(d) Upon receipt of a notification of discharge, the NRC shall promptly notify the OSC. The OSC shall proceed with the following phases as outlined in the RCP and OSC contingency plan.

§ 300.305 Phase II—Preliminary assessment and initiation of action.

(a) The OSC is responsible for promptly initiating a preliminary assessment.

(b) The preliminary assessment shall be conducted using available information, supplemented where necessary and possible by an on-scene inspection. The OSC shall undertake actions to:

(1) Evaluate the magnitude and severity of the discharge or threat to

public health or welfare or the environment;

(2) Assess the feasibility of removal;

(3) To the extent practicable, identify potentially responsible parties; and

(4) Ensure that authority exists for undertaking additional response actions.

(c) The OSC, in consultation with legal authorities when appropriate, shall make a reasonable effort to have the discharger voluntarily and promptly perform removal actions. The OSC shall ensure adequate surveillance over whatever actions are initiated. If effective actions are not being taken to eliminate the threat, or if removal is not being properly done, the OSC shall, to the extent practicable under the circumstances, so advise the responsible party. If the responsible party does not take proper removal actions, or is unknown, or is otherwise unavailable, the OSC shall, pursuant to section 311(c)(1) of the CWA, determine whether authority for a Federal response exists, and, if so, take appropriate response actions. Where practicable, continuing efforts should be made to encourage response by responsible parties.

(d) If natural resources are or may be injured by the discharge, the OSC shall ensure that State and Federal trustees of affected natural resources are promptly notified in order that the trustees may initiate appropriate actions, including those identified in Subpart G. The OSC shall seek to coordinate, as appropriate, assessments, evaluations, investigations, and planning with State and Federal trustees.

§ 300.310 Phase III—Containment, countermeasures, cleanup, and disposal.

(a) Defensive actions shall begin as soon as possible to prevent, minimize, or mitigate threat(s) to public health or welfare or the environment. Actions may include but are not limited to: analyzing water samples to determine the source and spread of the oil; controlling the source of discharge; measuring and sampling; source and spread control or salvage operations; placement of physical barriers to deter the spread of the oil and to protect natural resources; control of the water discharged from upstream impoundment; and the use of chemicals and other materials in accordance with Subpart J of this Part to restrain the spread of the oil and mitigate its effects.

(b) As appropriate, actions shall be taken to recover the oil or mitigate its effects. Of the numerous chemical or physical methods that may be used, the chosen methods shall be the most consistent with protecting public health

and welfare and the environment. Sinking agents shall not be used.

(c) Oil and contaminated materials recovered in cleanup operations shall be disposed of in accordance with the RCP and OSC contingency plan and any applicable laws, regulations, or requirements.

§ 300.315 Phase IV—Documentation and cost recovery.

(a) Documentation shall be collected and maintained to support all actions taken under the CWA and to form the basis for cost recovery. Whenever practicable, documentation shall be sufficient to prove the source and circumstances of the incident, the responsible party or parties, and impact and potential impacts to public health and welfare and the environment. When appropriate, documentation shall also be collected for scientific understanding of the environment and for the research and development of improved response methods and technology. Damages to private citizens, including loss of earnings, are not addressed by the NCP. Evidentiary and cost documentation procedures and requirements are specified in the USCG Marine Safety Manual (Commandant Instruction M16000.11) and 33 CFR Part 153.

(b) OSCs shall submit OSC reports to the RRT as required by § 300.165.

(c) OSCs shall ensure the necessary collection and safeguarding of information, samples, and reports. Samples and information shall be gathered expeditiously during the response to ensure an accurate record of the impacts incurred. Documentation materials shall be made available to the trustees of affected natural resources.

(d) Information and reports obtained by the EPA or USCG OSC shall be transmitted to the appropriate offices responsible for follow-up actions.

§ 300.320 General pattern of response.

(a) When the OSC receives a report of a discharge, actions normally should be taken in the following sequence:

(1) When the reported discharge is an actual or potential major discharge, immediately notify the RRT, including the affected State, if appropriate, and the NRC.

(2) Investigate the report to determine pertinent information such as the threat posed to public health or welfare or the environment, the type and quantity of polluting material, and the source of the discharge.

(3) Officially classify the size of the discharge and determine the course of action to be followed.

(4) Determine whether a discharger or other person is properly carrying out

removal. Removal is being done properly when:

(i) The cleanup is fully sufficient to minimize or mitigate threat(s) to public health and welfare and the environment. Removal efforts are improper to the extent that Federal efforts are necessary to minimize further or mitigate those threats; and

(ii) The removal efforts are in accordance with applicable regulations, including the NCP.

(5) Determine whether a State or political subdivision has the capability to carry out response actions and whether a contract or cooperative agreement has been established with the appropriate fund administrator for this purpose.

(6) Notify the trustees of affected natural resources in accordance with the applicable RCP.

(b) The preliminary inquiry will probably show that the situation falls into one of four categories. These categories and the appropriate response to each are outlined below:

(1) If the investigation shows that no discharge occurred, or it shows a minor discharge with no removal action required, the case may be closed for response purposes.

(2) If the investigation shows a minor discharge with the responsible party taking proper removal action, contact shall be established with the party. The removal action shall, whenever possible, be monitored to ensure continued proper action.

(3) If the investigation shows a minor discharge with improper removal action being taken, the following measures shall be taken:

(i) An immediate effort shall, as appropriate, be made to stop further pollution and remove past and ongoing contamination.

(ii) The responsible party shall be advised of what action will be considered appropriate.

(iii) If the responsible party does not properly respond, the party shall be notified of potential liability for Federal response performed under the CWA. This liability includes all costs of removal and may include the costs of assessing and restoring damaged natural resources and other actual or necessary costs of a Federal response.

(iv) The OSC shall notify appropriate State and local officials, keep the RRT advised, and initiate Phase III operations, as described in § 300.310, as conditions warrant.

(v) Information shall be collected for possible recovery of response costs in accordance with § 300.315.

(4) When the investigation shows that an actual or potential medium or major

oil discharge exists, the OSC shall follow the same general procedures as for a minor discharge. If appropriate, the OSC shall recommend activation of the RRT.

§ 300.330 Waterfowl conservation.

The DOI and State representatives to the RRT shall arrange for the coordination of professional and volunteer groups permitted and trained to participate in waterfowl dispersal, collection, cleaning, rehabilitation, and recovery activities, consistent with 16 U.S.C. 703-712 and applicable State laws. The RCP and OSC contingency plans shall, to the extent practicable, identify organizations or institutions that are permitted to participate in such activities and operate such facilities. Waterfowl conservation activities will normally be included in Phase III response actions, described in § 300.310.

§ 300.335 Funding.

(a) If the person responsible for the discharge does not act promptly or take proper removal actions, or if the person responsible for the discharge is unknown, Federal discharge removal actions may begin under section 311(c)(1) of the CWA. The discharger, if known, is liable for costs of Federal removal in accordance with section 311(f) of the CWA and other Federal laws.

(b) Actions undertaken by the participating agencies in response to pollution shall be carried out under existing programs and authorities when available. Federal agencies will make resources available, expend funds, or participate in response to oil discharges under their existing authority. Authority to expend resources will be in accordance with agencies' basic statutes and, if required, through interagency agreements. Where the OSC requests assistance from a Federal agency, that agency may be reimbursed in accordance with the provisions of 33 CFR 153.407. Specific interagency reimbursement agreements may be signed when necessary to ensure that the Federal resources will be available for a timely response to a discharge of oil. The ultimate decisions as to the appropriateness of expending funds rest with the agency that is held accountable for such expenditures.

(c) The OSC shall exercise sufficient control over removal operations to be able to certify that reimbursement from the following funds is appropriate:

(1) The oil pollution fund, administered by the Commandant, USCG, has been established pursuant to section 311(k) of the CWA. Regulations

governing the administration and use of the fund are contained in 33 CFR Part 153.

(2) The fund authorized by the Deepwater Port Act is administered by the Commandant, USCG. Governing regulations are contained in 33 CFR Parts 136 and 150.

(3) The fund authorized by the Outer Continental Shelf Lands Act, as amended, is administered by the Commandant, USCG. Governing regulations are contained in 33 CFR Parts 136 and 150.

(4) The fund authorized by the Trans-Alaska Pipeline Authorization Act is administered by a Board of Trustees under the purview of the Secretary of the Interior. Governing regulations are contained in 43 CFR Part 29.

(d) Response actions other than removal, such as scientific investigations not in support of removal actions or law enforcement, shall be provided by the agency with legal responsibility for those specific actions.

(e) The funding of a response to a discharge from a Federally operated or supervised facility or vessel is the responsibility of the operating or supervising agency.

(f) The following agencies have funds available for certain discharge removal actions:

(1) EPA may provide funds to begin timely discharge removal actions when the OSC is an EPA representative.

(2) The USCG pollution control efforts are funded under "operating expenses." These funds are used in accordance with agency directives.

(3) The Department of Defense has two specific sources of funds that may be applicable to an oil discharge under appropriate circumstances. This does not consider military resources that might be made available under specific conditions.

(i) Funds required for removal of a sunken vessel or similar obstruction of navigation are available to the Corps of Engineers through Civil Works Appropriations, Operations and Maintenance, General.

(ii) The U.S. Navy may conduct salvage operations contingent on defense operational commitments, when funded by the requesting agency. Such funding may be requested on a direct cost basis.

(4) Pursuant to section 311(c)(2)(H) of the CWA, the State or States affected by a discharge of oil may act where necessary to remove such discharge and may, pursuant to 33 CFR Part 153, be reimbursed from the oil pollution fund for the reasonable costs incurred in such a removal.

(i) Removal by a State is necessary within the meaning of section 311(c)(2)(H) of the CWA when the OSC determines that the owner or operator of the vessel, onshore facility, or offshore facility from which the discharge occurs does not effect removal properly, or is unknown, and that:

(A) State action is required to minimize or mitigate significant threat(s) to the public health or welfare or the environment that Federal action cannot minimize or mitigate, or

(B) Removal or partial removal can be done by the State at a cost that is less than or not significantly greater than the cost that would be incurred by the Federal agencies.

(ii) State removal actions must be in compliance with the NCP in order to qualify for reimbursement.

(iii) State removal actions are considered to be Phase III actions, described in § 300.310, under the same definitions applicable to Federal agencies.

(iv) Actions taken by local governments in support of Federal discharge removal operations are considered to be actions of the State for purposes of this section. The RCP and OSC contingency plan shall show what funds and resources are available from participating agencies under various conditions and cost arrangements. Interagency agreements may be necessary to specify when reimbursement is required.

Subpart E—Hazardous Substance Response

§ 300.400 General.

(a) This subpart establishes methods and criteria for determining the appropriate extent of response authorized by CERCLA:

(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 endangerment to the public health or welfare.

(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 Fund-financed removal or remedial action 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 RRT in both removal and remedial response actions at appropriate decisionmaking 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) 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 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, 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) Entry is not restricted to those vessels, facilities, establishments, places, properties, or locations, or portions thereof, where there is a reasonable basis to believe there may be a release of a hazardous substance or pollutant or contaminant. Once a determination has been made that there is a reasonable basis to believe that there 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, in responding to that release.

(3) The lead agency may designate, among others, a potentially responsible party as its representative solely for the purpose of access, and EPA, or the appropriate Federal agency, may exercise the authority contained in section 104(e) of CERCLA to obtain access for the potentially responsible party. 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, 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) and seek judicial enforcement of such order; or commence a civil action in Federal court to enjoin interference with the requested action.

(ii) EPA reserves the right to proceed, where appropriate, under applicable authority other than CERCLA.

(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 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 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, or 122. The term "on-site," for permitting purposes, shall include 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 applicable requirements based upon an objective determination of whether the requirement specifically addresses a hazardous substance, pollutant, contaminant, remedial action,

location, or other circumstance at a CERCLA site.

(2) If, based upon the criteria in paragraph (g)(1) of this section, it is determined that a requirement is not applicable to a specific release, then the requirement shall be examined to determine if it is both relevant and appropriate to the circumstances of the release. The criteria in paragraphs (g)(2)(i) through (ix) of this section shall be weighed, where pertinent, to determine whether a requirement addresses problems or situations sufficiently similar to the circumstances of the release or remedial action contemplated that it is 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.

(i) Whether the purpose for the statute and regulations under which the requirement was created are similar to the specific objectives of the CERCLA action;

(ii) Whether the media regulated or affected by the requirement are similar to the media contaminated or affected at the CERCLA site;

(iii) Whether the substances regulated by the requirement are similar to the substances found at the CERCLA site;

(iv) Whether the entities or interests affected or protected are similar to the entities or interests affected by the CERCLA site;

(v) Whether the actions or activities regulated by the requirement are similar to the remedial action contemplated at the CERCLA site;

(vi) Whether any variances, waivers, or exemptions of the requirement are available for the circumstances of the CERCLA site or CERCLA action;

(vii) Whether the type of place regulated is similar to the type of place affected by the CERCLA site or CERCLA action;

(viii) Whether the type and size of structure or facility regulated is similar to the type and size of structure or facility affected by the release or contemplated by the CERCLA action; and

(ix) Whether any consideration of use or potential use of affected resources in the requirement is similar to the use or potential use of the affected resource.

(3) In addition to applicable or relevant and appropriate requirements, the lead and support agencies shall, as appropriate, identify other advisories, criteria, and guidance to be considered for a particular release. The "to be considered" (TBC) category consists of advisories, criteria, and guidance that were developed by EPA, other Federal

agencies, or States and that may be useful in developing CERCLA remedies.

(4) Only those State standards that are promulgated and 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 shall identify its applicable or relevant and appropriate requirements. The support agency shall identify its applicable or relevant and appropriate requirements. These agencies shall notify each other, in a timely manner as described in § 300.515(d)(2)(i), of the requirements they have determined to be applicable or relevant and appropriate.

(6) The procedures and timeframes for notification of ARARs specified in § 300.515(d)(2) and (h)(2) shall be used.

(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.

(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.

§ 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; and

(7) 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 USCG 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 Coast Guard unit, provided that the person in charge of the vessel or facility notifies 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) Reporting under paragraphs (b) and (c) of this section shall not be delayed due to incomplete notification information. 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; date and time of the release.

(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, remedial site evaluation shall, if appropriate, be undertaken by the lead agency pursuant to § 300.420, if one has not already been performed, and the release will be listed in the CERCLIS Remedial Inventory.

(3) If radioactive substances are present in a release, the EPA Radiological Response Coordinator should be notified for evaluation and assistance. See also §§ 300.130(f) 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 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.

§ 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. Pursuant to § 300.420(b)(5), the lead agency may perform a 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.

(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 non-Federal 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 (off-site) or on-site inspection taking into consideration whether such inspection can be performed safely.

(e) 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;

(4) The release consists of a situation specified in § 300.400(b) 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.

(f) The results of the removal site evaluation shall be documented.

(g) If natural resources are or may be injured by the release, the OSC or lead agency shall ensure that State and Federal trustees of the affected natural resources are promptly notified in order that the trustees may initiate appropriate actions, including those identified in Subpart G of this Part. The OSC or lead agency shall seek to coordinate, as appropriate, necessary assessments, evaluations, investigations, and planning with such State and Federal trustees.

(h) 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 remedial site evaluation pursuant to § 300.420. If a remedial site evaluation is performed, the release will be listed in the CERCLIS remedial inventory, if not already included.

§ 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, 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 or the environment, the lead agency may take any appropriate action to abate, 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 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 prevent, minimize, or mitigate the threat to public health or welfare 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, 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.

(5) 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 twelve 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 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) 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.

(d) 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 in response to any situation or preclude lead agency deferral of response action to other appropriate Federal or State enforcement or response authorities:

(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 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.

(e) When a Fund-financed removal action is initiated, the release shall be listed in the CERCLIS removal inventory.

(f) When 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) 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 or exceed applicable or relevant and appropriate Federal and State requirements. Other Federal and State criteria, advisories, and guidance shall, as appropriate, be considered in formulating the removal action. The waivers from attaining applicable or relevant and appropriate Federal and State requirements, described in § 300.430(f)(3), may be used for removal actions.

(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 twelve 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 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 insure 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 removal actions taken pursuant to § 300.415 or enforcement actions to compel response analogous to § 300.415, 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 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 or general circulation 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 all 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 shall 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 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 engineering evaluation/cost analysis (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 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); and

(iv) Prepare a written response to significant comments pursuant to § 300.820(a).

§ 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 in the CERCLIS remedial 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 PA shall also include an off-site reconnaissance as appropriate. A 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 PA, the lead agency may complete the EPA Preliminary Assessment form, available from EPA Regional offices, or its equivalent, and 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 should be undertaken.

(5) Any person may petition EPA or the appropriate Federal agency (the lead 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.

(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, a site-specific sampling plan shall be prepared that:

(i) Addresses the objectives of the sampling effort and the quality of data necessary to fulfill those objectives;

(ii) Identifies the number, type, and approximate location of sampling points and the procedures for collecting samples; and

(iii) Incorporates the appropriate field QA/QC samples.

(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.

§ 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 EPA's list of priority releases for long-term remedial response.

(1) Only those releases included on the NPL shall be considered eligible for Fund-financed remedial action. Remedial planning activities pursuant to CERCLA section 104(b) are not considered remedial action and 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. Responsible parties shall pay for or implement response actions to the fullest extent practicable. EPA may also pursue other appropriate authorities to remedy the release. 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 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* with a response to each significant comment and any significant new data submitted during the comment period.

(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 a minimum of 20 calendar days and a maximum of 30 calendar 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 of the Notice of 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 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*.

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

(a) *General—(1) Introduction.* The purpose of the remedial action process is to implement remedies that reduce, control, or eliminate risks to human health and the environment. The process generally will include a remedial investigation and feasibility study (RI/FS), a remedy selection decision, engineering design, and implementation of the remedial action. Remedial actions may include: actions initiated early in the RI/FS process where there is a need or opportunity to reduce or control risk or prevent further environmental degradation; final actions to control threats posed by a part of a site or specific pathway of migration; or actions that address the total site. The remedial action process at a site may be conducted through the use of an operable unit initiated at any time prior, during, or after the RI/FS when sufficient information is available to support selection of a remedy to address a particular site problem, a specific portion of a site, or the entire site. All remedial action will require evaluation of the nine criteria described in paragraph (e)(9) of this section, State review, development of a proposed plan, public participation, and selection of a remedy documented in a record of decision as described in paragraph (f) of this section. 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.

(2) *RI/FS.* The purpose of the 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 shall include the following activities: project scoping, data collection, risk assessment, 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) *Project scoping.* The lead agency or its designee shall examine available information and develop workplans that describe the scope and content of the RI/FS needed to select and implement response actions. Workplans shall identify the data needed to support those decisions and the methods by which these data will be obtained and analyzed. The investigative and analytical studies should be tailored to site circumstances so that the scope of

the analysis is appropriate to the complexity of site problems or the problem to be addressed. Based on the available information, 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, to begin to define potential pathways and associated impacts on human and environmental receptors and to initiate any response actions that may be indicated.

(2) Begin to formulate remedial alternatives, consistent with available information.

(3) Undertake limited data collection efforts or studies where this information will assist in scoping the RI/FS or accelerate response actions, and begin treatability studies, as appropriate.

(4) 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).

(5) Develop sampling and analysis plans that shall provide a process for obtaining data of sufficient quality to support decisions during remedial response. The sampling and analysis plans shall describe the number, type, and location of samples; the type of analyses; and quality assurance objectives and measures. Sampling and analysis plans shall be reviewed and approved by EPA.

(6) If natural resources are or may be injured by the release, ensure that State and Federal trustees of the affected natural resources are promptly 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, as appropriate, necessary assessments, evaluations, investigations, and planning with such State and Federal trustees.

(7) Initiate a dialogue with the support agency regarding identification of potential ARARs and other criteria, advisories, or guidance to be considered.

(8) Initiate development of remedial action objectives, as appropriate.

(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; and

(iii) Establishing at least one local information repository at or near the location of the response action. Each information repository shall contain a copy of each item made available to the public. The lead agency shall inform interested parties of the establishment of the information repository.

(3) For PRP actions, the lead agency shall plan and implement the community relations program at a site. Potentially responsible parties 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 potentially responsible parties 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 Register* at 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 a remedy selection decision. To characterize the site, the lead agency

shall, as appropriate, conduct field investigations, conduct a baseline risk assessment, and initiate treatability studies. The remedial investigation 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, to provide additional data for the detailed analysis and to support engineering design of remedial alternatives.

(2) The following activities, as appropriate, shall be considered to characterize and 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:

(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) Potential exposure pathways through environmental media;

(vi) 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 ARARs, pertinent criteria, advisories, or guidance related to the location of and contaminants at the site in a timely manner.

(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 waste management options can be presented to a decisionmaker 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. Typically, treatment alternatives will be evaluated consistent with the nature of the threat being addressed and the purpose of the response action. 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 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. Final remediation goals will be determined when the remedy is selected. Remediation goals that establish acceptable exposure levels that are protective of human health and the environment shall be developed considering the following:

(A) Applicable or relevant and appropriate Federal and State environmental requirements, 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, is expected to be exposed without appreciable risk of significant adverse effect during a lifetime;

(2) For known or suspected carcinogens, acceptable exposure levels are generally concentration levels that represent an excess upperbound lifetime cancer risk to an individual of between 10^{-4} and 10^{-7} using information on the relationship between dose and response.¹ 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;

(3) Presence of multiple contaminants at a site or multiple pathways of exposure;

(4) Factors related to technical limitations such as detection/quantification limits for contaminants;

(5) Factors related to uncertainty; and

(6) Other pertinent information.
(B) Maximum contaminant levels promulgated under the Safe Drinking Water Act shall generally be considered relevant and appropriate standards when determining acceptable exposure for ground water and surface water that is a current or potential source of drinking water. In cases involving multiple contaminants or pathways that present risks in excess of 10^{-4} , maximum contaminant level goals may be considered when determining acceptable exposures, along with the criteria in paragraph (e)(2)(i)(A) of this section.

(C) For threats to the environment, appropriate risk analyses will be performed.

(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 that employ treatment that reduces the toxicity, mobility, or volume of the hazardous substances, pollutants, or contaminants as their 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 there is a reasonable belief that they offer potential for better treatment 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, 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 minimizes residual risks and affords long-term protection, minimizes short-term impacts, and how quickly protection can be achieved. 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

¹ While a 10^{-4} to 10^{-7} risk range is proposed, EPA is very interested in comments on alternatives to this risk range for the reasons discussed in the Subpart E preamble, § 300.430, paragraph B.3.i.

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. Alternatives providing effectiveness and implementability similar to that of other alternatives, but at greater cost, may be eliminated. The relationship of costs as compared to the overall effectiveness of alternatives may also be considered as one of several factors used to eliminate alternatives.

(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 pertinent standards, criteria, and advisories to be considered.

(9) *Detailed analysis of alternatives.*

(i) A detailed analysis shall be conducted on the limited number of alternatives that represent viable hazardous waste management approaches. ARARs and other standards, criteria, and advisories related to specific actions must be identified in a timely manner and no later than the early stages of the comparative analysis.

(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) 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 as to whether they can adequately protect human health and the environment 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. This is a threshold requirement and the primary objective of the remedial program.

(B) *Compliance with ARARs.* The alternatives shall be assessed as to whether they attain applicable or relevant and appropriate requirements of other Federal and State environmental and public health laws or provide grounds for invoking one of the waivers under paragraph (f)(3)(iv) 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) Nature and magnitude of total residual risks in terms of amounts; potential for exposure of human and environmental receptors; concentrations of hazardous substances, pollutants, or contaminants remaining following implementation of a remedial alternative, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents;

(2) The type, degree, and adequacy of long-term management required for untreated substances and treatment residuals, including engineering controls (such as containment technologies), institutional controls, monitoring, and operation and maintenance;

(3) Long-term reliability of the engineering and institutional controls, including uncertainties associated with land disposal of untreated hazardous substances, pollutants, and contaminants, and treatment residuals; and

(4) Potential need for replacement of the remedy, as well as the continuing need for repairs to maintain the performance of the remedy.

(D) *Reduction of toxicity, mobility, or volume.* The degree to which alternatives employ treatment that reduces toxicity, mobility, or volume shall be assessed. Alternatives which, at a minimum, address the principal threats posed by the site through treatment shall also be identified. Factors that shall be considered, as appropriate, include the following:

(1) The treatment processes the alternatives employ and materials they will treat;

(2) The amount of hazardous substances, pollutants or contaminants that will be destroyed or treated;

(3) The degree of expected reduction in toxicity, mobility, or volume, including how the principal threat is addressed through treatment;

(4) The degree to which the treatment is irreversible; and

(5) The residuals that will remain following treatment, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents.

(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) Degree of difficulty or uncertainty associated with construction and operation of the technology;

(2) Expected operational reliability of the technologies the alternatives utilize and the ability to undertake additional action, if required;

(3) Ability and time required to obtain any necessary approvals and permits from other agencies;

(4) Availability of necessary equipment and specialists;

(5) Available capacity and location of needed treatment, storage, and disposal services; and

(6) Timing of the availability of prospective technologies that may be under consideration.

(G) *Cost.* The types of costs that shall be assessed include the following:

(1) Capital costs, including contingency and engineering fees;

(2) 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 and 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) *The proposed plan.* Prior to initiating a remedial action, the lead agency, in conjunction with the support agency, 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)(3)(iv) of this section from applicable or relevant and appropriate requirements.

(2) *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;

(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 record of decision, 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)(2)(i) of this section.

(3) *Selecting the remedy.* (i) 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, giving appropriate weight to specific factors within each criterion, as noted in paragraph (e)(9)(iii) of this section, that are most relevant to the circumstances at the site.

(ii) Remedies selected shall be protective of human health and the environment and attain ARARs or provide grounds for invoking a waiver.

(iii) The requirement to utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable while meeting the cost-effectiveness requirement shall be fulfilled by selecting the alternative that satisfies (f)(3)(ii) of this section and provides the best balance of trade-offs among alternatives in terms of the following criteria noted in paragraph (e)(9)(iii) of this section: long-term effectiveness factors; reduction of toxicity, mobility or volume factors;

short-term effectiveness factors; implementability factors; and cost factors. The balancing shall take into account the preference for treatment as a principal element and consider State and community acceptance, respectively.

(iv) An alternative that does not meet applicable or relevant and appropriate Federal or State public health or environmental requirements may be selected under the following circumstances:

(A) 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 requirements;

(B) Compliance with the requirements will result in greater risk to human health and the environment than other alternatives;

(C) Compliance with the requirements is technically impracticable from an engineering perspective;

(D) 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;

(E) 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

(F) For Fund-financed response actions only, an alternative that attains ARARs 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.

(v) 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 determine that a review shall be initiated no less often than every five years after implementation of the selected remedial action.

(vi) The process for selection of a remedial action at a Federal facility on the NPL, pursuant to CERCLA section 120, will 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.

(4) *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 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 record of decision 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 record of decision also shall:

(A) Indicate, as appropriate, the remediation levels 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)(2)(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)(3)(v) 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 timeframe.

(5) *Community relations when the record of decision is signed.* After the record of decision is signed, the lead agency shall:

(i) Publish a notice of the availability of the record of decision 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 RD/RA stage of remedial response 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.

(2) During the course of the RD/RA, the lead agency shall be responsible for ensuring that all Federal and State applicable requirements and relevant and appropriate requirements identified for the action being taken 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 remedial design (RD), the lead agency shall revise the CRP to address community concerns anticipated during the RD/RA process, if not already addressed by 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 selected remedy 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 § 300.825 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;

(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.

(d) *Contractor conflict of interest.* (1) For RD/RA and O&M activities which are not privately funded, the lead agency shall:

(i) Include appropriate language in the bid solicitation requiring potential contractors to provide information on their status and that of their parent companies, affiliates, and

subcontractors as potentially responsible parties at the site.

(ii) Require potential contractors to certify that, to the best of their knowledge, they have disclosed all such information 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 contractor and subcontractors and:

(i) Determine that they do not have conflicts of interest that would affect their performance; or

(ii) If a member of the contract team has a conflict of interest which prevents the team from serving the best interests of the State and Federal government in the capacity of RA contractor under Fund-financed actions, the bidder may be declared nonresponsible in accordance with appropriate acquisition regulations and the contract awarded to the next eligible 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) O&M activities are initiated after the remedy is operational and functional. A State must provide its assurance to assume responsibility for O&M under § 300.510 (c).

(2) For Fund-financed remedial actions involving treatment or other measures to restore contaminated ground or surface water quality to a level that assures protection of human health and the environment, the operation of such treatment or measures

for a period up to 10 years after the construction or installation and commencement of operation will be considered part of 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.

(3) The following shall not be deemed to constitute treatment or other measures to restore contaminated ground or surface water:

(i) Source control measures initiated to prevent contamination of ground or surface waters; 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.

(4) The 10-year period will begin once the ROD has been signed, construction activities have been completed, and the remedy is operational and functional.

§ 300.440 [Reserved]

Subpart F—State Involvement in Hazardous Substances Response

§ 300.500 General.

(a) EPA shall ensure meaningful and substantial State involvement in hazardous substance response as specified in this subpart. EPA shall provide an opportunity for State participation in pre-remedial and remedial and enforcement response. EPA shall encourage States to enter into an EPA/State Superfund Memorandum of Agreement (SMOA) under § 300.505 to increase State involvement and strengthen the EPA/State partnership.

(b) EPA shall encourage States to participate in Fund-financed response in two ways. Pursuant to § 300.515(a), States may either assume the lead through a cooperative agreement for the response action or may be the support agency in EPA-lead remedial response. Section 300.515 sets forth requirements for State involvement in EPA-lead remedial and enforcement response and also addresses comparable requirements for EPA involvement in State-lead remedial and enforcement response. Section 300.520 specifies requirements for State involvement in EPA-lead enforcement negotiations. Section 300.525 specifies requirements for State involvement in removal actions.

§ 300.505 EPA/State Superfund Memorandum of Agreement (SMOA).

(a) A SMOA is not required unless a State requests to be designated as lead agency for non-Fund-financed actions at

NPL sites or to recommend a remedy for EPA concurrence for Fund-financed actions. If a SMOA is executed, the following may be addressed:

(1) The SMOA may establish the nature and extent of EPA and State interaction during EPA-lead and State-lead response. Similar agreements may be developed with Federally-recognized Indian Tribes for specific actions at NPL sites on Indian lands if Fund-financed remedial response is contemplated.

(2) The SMOA may define the role and responsibilities of the lead agency for pre-remedial, remedial, and enforcement response and describe the roles and the responsibilities of the support agency.

(3) The SMOA may describe general requirements for EPA oversight. Oversight requirements may be more specifically defined in cooperative agreements.

(4)(i) The SMOA may describe the general nature of lead and support agency interaction regarding the review of key documents and/or decision points in pre-remedial, remedial, and enforcement response. The requirements for EPA and State review of each other's key documents when each is serving as the support agency shall be equivalent to the extent practicable.

(ii) Site-specific lead/support agency interaction may be established in cooperative agreements or State Superfund contracts entered into pursuant to section 104(d)(1) of CERCLA and shall be consistent with the interaction established in the SMOA.

(iii) The SMOA may be modified if EPA and the State agree that the lead and support agency roles and responsibilities have changed, or if modifications are required to achieve the desired goals.

(5) The SMOA and any modifications thereto shall be executed by the EPA Regional Administrator and the head of the State agency designated as lead agency for State implementation of CERCLA.

(b)(1) The SMOA may describe the timeframe and process for EPA and State consultation to determine priorities and make lead and support agency designations for pre-remedial and remedial and enforcement response to be conducted during the next fiscal year and to discuss future priorities and long-term requirements for response. These consultations shall include the exchange of information on both Fund- and non-Fund-financed response activities.

(2) The following activities shall be discussed in the EPA/State consultations established in the SMOA,

or otherwise initiated and documented in writing in the absence of a SMOA, on a site-specific basis with EPA and the State identifying the lead agency for each response action discussed:

(i) Pre-remedial response actions, including preliminary assessments and site inspections;

(ii) Hazard Ranking System scoring and NPL listing and deletion activities;

(iii) Remedial response, including remedial investigation/feasibility study, identification of potential applicable or relevant and appropriate requirements (ARARs) under Federal and State laws and other criteria, guidance, and advisories to be considered (TBCs) on a site-specific basis, proposed plan, ROD, remedial design, remedial action, and operation and maintenance;

(iv) Enforcement actions including potentially responsible party (PRP) searches, notices to PRPs, response to information requests, PRP negotiations, administrative and judicial enforcement, and oversight of PRPs;

(v) Compilation and maintenance of the administrative record for selection of a response action as required by Subpart I of this Part;

(vi) Related site support activities; and

(vii) State ability to share in the cost and timing of payments.

(3) If a SMOA designates a State as the lead agency for a non-Fund-financed action at an NPL site, the SMOA shall be supplemented by site-specific enforcement agreements between EPA and the State which specify schedules and EPA involvement.

(4) Requirements in the absence of a SMOA, or if the SMOA does not address the categories of requirements specified in § 300.515(h), are described in § 300.515(h).

§ 300.510 State assurances.

(a) A Fund-financed remedial action undertaken pursuant to section 104(a) cannot proceed unless a State provides its applicable required assurances. The assurances must be provided by the State prior to the initiation of remedial action pursuant to a Superfund State contract for EPA-lead (or political subdivision-lead) remedial action or pursuant to a cooperative agreement for a State-lead remedial action. The SMOA may not be used for this purpose. Federally-recognized Indian Tribes are not required to provide CERCLA section 104(c) assurances for Fund-financed response actions.

(b)(1) The State is not required to share in the cost of State- or EPA-lead Fund-financed removal actions or remedial planning activities associated with remedial actions conducted

pursuant to CERCLA section 104 unless the facility was operated by the State or a political subdivision thereof at the time of disposal of hazardous substances therein and a remedial action is ultimately undertaken at the site. Such remedial planning activities include, but are not limited to, remedial investigations (RI), feasibility studies (FS), and remedial design (RD). States shall be required to share 50 percent, or greater, in the cost of all Fund-financed response actions if the facility was publicly operated at the time of the disposal of hazardous substances. For other facilities, except Federal facilities, the State shall be required to share ten percent of the cost of the remedial action.

(2) CERCLA section 104(c)(5) provides that EPA shall grant a State credit for reasonable, direct, out-of-pocket, non-Federal expenditures during the specific time periods or circumstances specified in CERCLA section 104(c)(5). For a State to apply credit toward its cost share, it must enter into a cooperative agreement or Superfund State contract. The State must submit as soon as possible, but no later than at the time CERCLA section 104 assurances are provided for a remedial action, its accounting of eligible credit expenditures for EPA verification.

(3) Credit may be applied to a State's future cost share requirements at NPL sites for response expenditures or obligations incurred by the State or a political subdivision from January 1, 1978, to December 11, 1980, and for the remedial action expenditures incurred by the State only after October 17, 1986.

(4) Credit that exceeds the required cost share at the site for which the credit is granted may be transferred to another site to offset a State's required remedial action cost share.

(c)(1) Prior to remedial action, the State must also provide its assurance in accordance with CERCLA section 104(c) to assume responsibility for operation and maintenance of implemented remedial actions for the expected life of such actions. The State and EPA shall consult on a plan for operation and maintenance prior to the initiation of a remedial action.

(2) After a joint EPA/State inspection of the implemented Fund-financed remedial action under § 300.515(g), EPA may share, for a period of up to one year, in the cost of the operation of the remedial action to ensure that the remedy is operational and functional. In the case of the restoration of ground or surface water, EPA shall share in the cost of the State's operation of ground or surface water restoration remedial actions as specified in § 300.435(f).

(d) If off-site storage, destruction, treatment, or disposal is required, the State must provide its assurance before the remedial action begins on the availability of a hazardous waste disposal facility that is in compliance with section 121(d)(3) and is acceptable to EPA.

(e) Effective October 17, 1989, EPA shall not provide any remedial action pursuant to section 104 of CERCLA, unless the State in which the release first occurs has provided its assurance to EPA's satisfaction that it has adequate capacity for the destruction, treatment, or secure disposal of all hazardous wastes, including CERCLA wastes, expected to be generated within the State in the 20-year period following the assurance.

(f) EPA may determine that an interest in real property must be acquired in order to conduct a response action. As a general rule, the State in which the property is located must agree to acquire and hold the necessary property interest. If it is necessary for the United States government to acquire the interest in property to permit implementation of the response, the State must agree to accept transfer of the acquired interest on or before the completion of the response action.

§ 300.515 Requirements for State involvement in remedial and enforcement response.

(a) General. (1) States are encouraged to undertake actions authorized under Subpart E. Section 104(d)(1) of CERCLA authorizes EPA to enter into cooperative agreements or contracts with a State, political subdivision, or a Federally-recognized Indian Tribe to carry out Fund-financed response actions authorized under CERCLA, when EPA determines that the State, the political subdivision, or Federally-recognized Indian Tribe has the capability to undertake such actions. EPA will use a cooperative agreement to transfer funds to those entities to undertake Fund-financed response activities.

(2) For EPA-lead Fund-financed remedial planning activities, including, but not limited to, remedial investigations, feasibility studies, and remedial designs, the State agency acceptance of the support agency role during an EPA-lead response shall be documented in a letter or a SMOA. Superfund State contracts are unnecessary for this purpose.

(3) Cooperative agreements or Superfund State contracts are generally unnecessary for non-Fund-financed response actions unless a State intends to seek credit for remedial action

expenses under § 300.510. However, a SMOA will be required for a State to recommend the remedy to EPA for a Fund-financed action or for EPA to designate a State as the lead agency to carry out non-Fund-financed response actions.

(b) *Designation of Indian Tribe as lead agency.* An Indian Tribe may be authorized to undertake the lead for Fund-financed response actions in a cooperative agreement if:

(1) The Indian Tribe is Federally-recognized;

(2) The Indian Tribe has a tribal governing body that is currently performing governmental functions to promote the health, safety and welfare of the affected population or environment within a defined geographic area;

(3) The Indian Tribe demonstrates an ability to carry out response actions in accordance with the criteria and priorities established by the NCP;

(4) The Indian Tribe demonstrates that the functions to be performed in Fund-financed response actions are within the scope of its jurisdiction; and

(5) The Indian Tribe demonstrates a reasonable ability to administer effectively a cooperative agreement by the existence of the appropriate management and technical skills; by a history of successful managerial performance of public health/environmental programs; and by acceptable accounting and procurement procedures that comply with applicable assistance agreement regulations.

(c) *State involvement in PA/SI and NPL process.* EPA shall ensure State involvement in the listing and deletion process by providing States opportunities for review, consultation, or concurrence specified in this section.

(1) EPA shall consult with States as appropriate on the information to be used in developing HRS scores for sites.

(2) EPA shall provide the State a minimum of 20 calendar days and a maximum of 30 calendar days to review sites or facilities which were scored by EPA and which will be proposed for listing on the National Priorities List (NPL).

(3) EPA shall provide the State a minimum of 20 calendar days and a maximum of 30 calendar days to review and concur on the Notice of Intent to Delete a site from the NPL. Section 300.425 describes the EPA/State consultation and concurrence process for deleting sites from the NPL.

(d) *State involvement in RI/FS process.* A key component of the EPA/State partnership shall be the communication of potential Federal and State ARARs and TBCs.

(1) In accordance with §§ 300.400(g) and 300.430, the lead and support agencies shall identify their respective potential ARARs and TBCs and communicate them to each other in a timely manner and no later than the early stages of the comparative analysis, such that sufficient time is available for the lead agency to consider and incorporate all potential ARARs and TBCs without inordinate delays and duplication of effort.

(2) When a State and EPA have entered into a SMOA, the SMOA may specify a consultation process which requires the lead agency to solicit potential ARARs and TBCs at specified points in the remedial planning and remedy selection processes. At a minimum, the SMOA shall include the points specified in § 300.515(h)(2). The SMOA shall specify timeframes for support agency response to lead agency requests to ensure that potential ARARs and TBCs are identified and communicated in a timely manner.

(3) If EPA in its statement of a proposed plan intends to waive any State-identified ARARs, or does not agree with the State that a certain State standard is an ARAR, it shall formally notify the State when it submits the RI/FS report for State review or responds to the State's submission of the RI/FS report.

(4) EPA shall respond to State comments on waivers from or disagreements about State ARARs, as well as the preferred alternative when making the RI/FS report and proposed plan available for public comment.

(e) *State involvement in selection of remedy.* (1) At the conclusion of the RI/FS, the lead agency, in conjunction with the support agency, shall develop a proposed plan. The support agency shall have an opportunity to comment on the plan and the lead agency shall publish a notice of availability of the RI/FS report and a brief analysis of the proposed plan pursuant to §§ 300.430(e) and (f). Included in the proposed plan shall be a statement that the lead and support agencies have reached agreement or, where this is not the case, a statement explaining the concerns of the support agency with the lead agency's proposed plan.

(2)(i) EPA and the State shall identify, at least annually, sites for which RODs will be prepared during the next fiscal year, in accordance with § 300.515(h)(1). For all EPA-lead sites, EPA shall prepare the ROD and provide the State an opportunity to concur with the recommended remedy. For Fund-financed State-lead sites, EPA and the State shall designate sites for which the State shall prepare the ROD and seek

EPA's concurrence and adoption of the remedy specified therein and sites for which EPA shall prepare the ROD and seek the State's concurrence. For non-Fund-financed State-lead enforcement response actions taken at NPL sites, EPA and the State may designate sites for which the State shall prepare the ROD and seek EPA's concurrence in and adoption of the remedy specified therein. Either EPA or the State may choose not to designate a site as State-lead.

(ii) Both EPA and the State shall be involved in preliminary discussions on the alternatives addressed in the FS prior to preparation of the proposed plan and ROD. State concurrence on a ROD is not a prerequisite to EPA's selecting a remedy, i.e., signing a ROD, nor is EPA's concurrence a prerequisite to a State selecting a remedy at a non-Fund-financed State-lead enforcement site. Unless EPA concurs in writing with a State-prepared ROD, EPA shall not be deemed to have approved the State decision. A State may not proceed with a Fund-financed response action unless EPA has first concurred in and adopted the ROD. Section 300.510(a) specifies limitations on EPA proceeding with a remedial action without State assurances.

(iii) The lead agency shall provide the support agency with a copy of the signed ROD for remedial actions to be conducted pursuant to sections 104, 106, or 122 of CERCLA.

(iv) On State-lead sites identified for EPA concurrence, the State generally shall be expected to maintain its lead agency status through the completion of the remedial action.

(f) *Procedures for application of State ARARs waived by EPA or enhancement of remedy.* (1) If a State determines that a proposed Fund-financed remedial action should comply with substantive State standards that EPA has determined are not ARARs, or with State ARARs which EPA has determined to waive pursuant to CERCLA section 121(d)(4), the State shall fund the entire additional cost associated with compliance with such ARARs. The State may be required to continue the lead for RD/RA or for the additional requirements if it is a State-lead Fund-financed project or to assume the lead for remedial design and construction, or for the additional requirements only, if the project is Federal-lead.

(2) If a State determines that a Fund-financed remedial action should exceed the scope of the selected remedy, for example, enhancement of the selected remedy, the State shall fund the entire

additional cost associated with such enhancement. The State may be required to assume the lead for the remedial design and construction of the remedy or only the State-funded enhancement if that enhancement can be a separate phase or activity.

(3) If a State determines that an enforcement action under sections 106 or 122 of CERCLA should attain State requirements that EPA or a Federal District Court have determined need not be met in accordance with criteria in CERCLA section 121(d)(4), the State shall fund the additional requirements. The State may be required to undertake this work.

(g) *State involvement in remedial action.* For Fund-financed remedial actions, the lead and support agencies shall conduct a joint inspection at the conclusion of construction of the remedial action to determine that the remedy has been constructed in accordance with the ROD and with the remedial design.

(h) *Requirements for State involvement in absence of SMOA.* In the absence of a SMOA, or in the event that a SMOA does not address any or all of the following categories of requirements for State involvement in remedial and enforcement response, the following shall be applicable in addition to all other requirements of this subpart:

(1) *Annual consultations.* EPA shall conduct consultations with States at least annually to establish priorities and identify and document in writing the lead for remedial and enforcement response for each NPL site within the State for the upcoming fiscal year. States shall be given the opportunity to participate in long-term planning efforts for remedial and enforcement response during these annual consultations.

(2) *Identification of ARARs and TBCs.* The lead and support agencies shall discuss potential ARARs and TBCs during the scoping of the RI/FS. The lead agency shall request potential ARARs and TBCs from the support agency no later than the time that the site characterization data are available. The support agency shall communicate in writing those potential ARARs to the lead agency within 30 working days of receipt of the lead agency request for these ARARs. After the initial screening of alternatives has been completed but prior to initiation of the comparative analysis conducted during the detailed analysis phase of the FS, the lead agency shall request that the support agency communicate any additional requirements that are applicable or relevant and appropriate to the alternatives contemplated within 30 working days of receipt of this request.

The lead agency shall consult the support agency during the remedial design to ensure that identified ARARs and TBCs are updated as needed.

(3) *State review of EPA-lead documents.* EPA shall provide an opportunity for States to review and comment on the EPA-lead RI/FS, proposed plan, ROD, and remedial design, and any proposed determinations on potential ARARs and TBCs. The State shall have a minimum of 10 working days and a maximum of 15 working days to provide comments to EPA on the RI/FS, ROD, ARAR/TBC determinations, and remedial design. The State shall have a minimum of 5 working days and a maximum of 10 working days to comment on the proposed plan.

(i) *Administrative record requirements.* The State, where it is the lead agency for a Fund-financed site, shall compile and maintain the administrative record for selection of a response action under Subpart I of this Part unless specified otherwise in the SMOA.

§ 300.520 State involvement in EPA-lead enforcement negotiations.

(a) EPA shall notify States of response action negotiations to be conducted by EPA with potentially responsible parties during each fiscal year.

(b) The State must notify EPA of such negotiations in which it intends to participate.

(c) The State may be a party to such settlements in which it is a participant in the negotiations.

§ 300.525 State involvement in removal actions.

(a) States may undertake Fund-financed removal actions pursuant to a cooperative agreement with EPA. State-lead removal actions taken pursuant to cooperative agreements must be conducted in accordance with § 300.415 on removal actions and applicable assistance regulations.

(b) States are not required under section 104(c)(3) of CERCLA to share in the cost of a Fund-financed removal action, unless the removal is conducted at an NPL site that was publicly operated at the time of disposal of hazardous substances therein and a Fund-financed remedial action is ultimately undertaken at the site. In this situation, States are required to share, 50 percent or greater, in the cost of all removal, remedial planning, and remedial action costs at the time of the remedial action.

(c) States are encouraged to provide for post-removal site control as

discussed in § 300.415(l) for all Fund-financed removal actions.

(d) States shall be responsible for identifying potential State ARARs for all Fund-financed removal actions and for providing such ARARs to EPA in a timely manner for all EPA-lead removal actions.

(e) EPA shall consult with States on all removal actions to be conducted in a State.

Subpart G—Trustees for Natural Resources

§ 300.600 Designation of Federal trustees.

(a) The President is required to designate in the National Contingency Plan those Federal officials who are to act on behalf of the public as trustees for natural resources. Federal officials so designated will act pursuant to section 107(f) of CERCLA and section 311(f)(5) of the Clean Water Act. Natural resources include:

(1) Natural resources over which the United States has sovereign rights; and

(2) Natural resources within the territory, contiguous zone, exclusive economic zone, and outer continental shelf belonging to, managed by, held in trust by, appertaining to, or otherwise controlled (hereinafter referred to as "managed or protected") by the United States.

(b) The following individuals shall be the designated trustee(s) for general categories of natural resources. They are authorized to act when there is injury to, destruction of, loss of, or threat to natural resources as a result of a release of a hazardous substance or a discharge of oil. Notwithstanding the other designations in this section, the Secretaries of Commerce and the Interior shall act as trustees of those resources subject to their respective management or protection.

(1) *Secretary of Commerce.* The Secretary of Commerce shall act as trustee for natural resources that are managed or protected by Federal agencies and that are found in or under waters navigable by deep draft vessels, in or under tidally influenced waters, or waters of the contiguous zone, the exclusive economic zone, and the outer continental shelf, and in upland areas serving as habitat for marine mammals and other protected species. However, before the Secretary takes an action with respect to an affected resource under the management or protection of another Federal agency, the concurrence of that other Federal agency is required. Examples of the Secretary's trusteeship include marine fishery resources and their supporting ecosystems;

anadromous fish; certain endangered species and marine mammals; and National Marine Sanctuaries and Estuarine Research Reserves.

(2) *Secretary of the Interior.* The Secretary of the Interior shall act as trustee for natural resources managed or protected by the Department of the Interior. Examples of the Secretary's trusteeship include migratory birds; certain anadromous fish, endangered species, and marine mammals; Federally-owned minerals; and certain Federally-managed water resources. The Secretary of the Interior shall also be trustee for those natural resources for which an Indian Tribe would otherwise act as trustee in those cases where the United States acts on behalf of the Indian Tribe.

(3) *Secretary for the land managing agency.* For natural resources located on, over, or under land administered by the United States, the trustee shall be the head of the Department in which the land managing agency is found. The trustees for the principal Federal land managing agencies are the Secretaries of the Department of the Interior, the Department of Agriculture, the Department of Defense, and the Department of Energy.

(4) *Head of authorized agencies.* For natural resources located in the United States but not otherwise described in this section, the trustee shall be the head of the Federal agency or agencies authorized to manage or protect those resources.

§ 300.605 State trustees.

State trustees shall act on behalf of the public as trustees for natural resources within the boundary of a State or belonging to, managed by, controlled by, or appertaining to such State. For the purposes of Subpart G of this Part, the definition of the term "State" does not include Indian Tribes.

§ 300.610 Indian Tribes.

The Tribal chairmen (or heads of the governing bodies) of Indian Tribes, as defined in § 300.5, or a person designated by the Tribal officials, shall act on behalf of the Indian Tribes as trustees for the natural resources belonging to, managed by, controlled by, or appertaining to such Indian Tribe, or held in trust for the benefit of such Indian Tribe, or belonging to a member of such Indian Tribe, if such resources are subject to a trust restriction on alienation. The Tribal chairmen or heads of the Tribal governing bodies shall notify the President of such designations. Such officials are authorized to act when there is injury to, destruction of, loss of, or threat to

natural resources as a result of a release of a hazardous substance or a discharge of oil.

§ 300.615 Responsibilities of trustees.

(a) Where there are multiple trustees, because of coexisting or contiguous natural resources or concurrent jurisdictions, they shall coordinate and cooperate in carrying out these responsibilities.

(b) Trustees are responsible for designating to the RRTs, for inclusion in the Regional Contingency Plan, appropriate contacts to receive notifications from the OSCs/RPMs of potential damages to natural resources.

(c) Upon notification or discovery of injury to, destruction of, loss of, or threat to, natural resources, trustees may, as appropriate:

(1) Conduct a preliminary survey of the area affected by the discharge or release to determine if trust resources under their jurisdiction are, or potentially may be, affected;

(2) Cooperate with the OSC/RPM in coordinating assessments, investigations, and planning;

(3) Carry out damage assessments; or

(4) Devise and carry out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. In assessing damages to natural resources, the Federal, State, and Indian Tribe trustees have the option of following the procedures for natural resource damage assessments located at 43 CFR Part 11.

(d) Federal trustees have the authority to:

(1) Request that the Attorney General seek compensation from the responsible parties for the damages assessed and for the costs of an assessment and of restoration planning; and

(2) Participate in negotiations between the United States and potentially responsible parties (PRPs) to obtain PRP-financed or PRP-conducted assessments and restorations for injured resources or protection for threatened resources.

(3) Require, in consultation with the lead agency, any person to comply with the requirements of CERCLA section 104(e) regarding information gathering and access.

(e) Actions which may be taken by any trustee include, but are not limited to, any of the following:

(1) Requesting that an authorized agency issue an administrative order or pursue injunctive relief against the parties responsible for the discharge or release; or

(2) Requesting that the lead agency remove, or arrange for the removal of, or provide for remedial action with respect

to, any hazardous substances from a contaminated medium pursuant to section 104 of CERCLA.

Subpart H—Participation by Other Persons

§ 300.700 Activities by other persons.

(a) *General.* Any person may undertake a response action to reduce or eliminate a release of a hazardous substance, pollutant, or contaminant.

(b) *Summary of CERCLA authorities.* The mechanisms available to recover the costs of response actions under CERCLA are, in summary:

(1) Section 107(a), wherein any person may receive a court award of his or her response costs, plus interest, from the party or parties found to be liable;

(2) Section 111(a)(2), wherein a private party, a potentially responsible party pursuant to a settlement agreement, or certain foreign entities may file a claim against the Fund for reimbursement of response costs;

(3) Section 106(b), wherein any person who has complied with a section 106(a) order may petition the Fund for reimbursement of reasonable costs, plus interest; and

(4) Section 123, wherein a general purpose unit of local government may apply to the Fund under 40 CFR Part 310 for reimbursement of the costs of temporary emergency measures that are necessary to prevent or mitigate injury to human health or the environment associated with a release.

(c) *Section 107(a) cost recovery actions.* (1) The Federal government, States, including political subdivisions thereof, or Indian Tribes may recover from responsible parties governmental response costs not inconsistent with the NCP.

(2) Any other person is eligible to recover from responsible parties necessary costs consistent with the NCP incurred for response actions to releases of hazardous substances consistent with the NCP.

(3)(i) For the purpose of cost recovery under section 107(a)(4)(B) of CERCLA, EPA intends that a response action will be considered to be consistent with the NCP if the person taking the response action complies with an order issued by EPA pursuant to section 106 of CERCLA, a consent decree entered into pursuant to section 122 of CERCLA, or the following NCP provisions, where pertinent to the particular response chosen for the particular facility:

(A) Section 300.150 (on worker health and safety);

(B) Section 300.160 (on documentation and cost recovery);

(C) Section 300.400(c)(1), (4), (5), and (7) (on determining the need for a Fund-financed action), (e) (on permit requirements), and (g) (on identification of ARARs);

(D) Section 300.405(b), (c), and (d) (on reports of releases to the NRC);

(E) Section 300.410 (on removal site evaluation) except paragraphs (e)(5) and (6) and the reference to listing releases in CERCLIS in (h);

(F) Section 300.415 (on removal actions) except paragraphs (a)(2), (b)(2)(vii), (b)(4), and (g);

(G) Section 300.420 (on remedial site evaluation);

(H) Section 300.430 (on RI/FS and selection of remedy) except paragraph (f)(3)(iv)(F); and

(I) Section 300.435 (on RD/RA and operation and maintenance).

(ii) In addition, other persons undertaking response actions shall provide an opportunity for public comment concerning the selection of the response action. A response action shall not be considered consistent with the NCP unless:

(A) The person taking the response action complies with the following NCP provisions regarding public participation, with the exception of administrative record and information repository requirements stated therein:

(1) Section 300.155 (on public information and community relations);

(2) Section 300.415(n) (on community relations during removal actions);

(3) Section 300.430(c) (on community relations during RI/FS) except paragraph (5);

(4) Section 300.430(f)(1), (2), and (5) (on community relations during selection of remedy); and

(5) Section 300.435(c) (on community relations during RD/RA and operation and maintenance); or

(B) The person taking the response action complies with State or local requirements which provide a substantially equivalent opportunity for public involvement in the choice of remedy.

(iii) When selecting the appropriate remedial action, any other person shall, as appropriate, consider the methods of remedying releases listed in Appendix D of this Part.

(iv) Except for actions taken pursuant to CERCLA sections 104 or 106 or response actions for which reimbursement from the Fund will be sought, any action to be taken by the lead agency in §§ 300.415, 300.430, and 300.435 may be taken by the person carrying out the response action.

(d) *Section 111(a)(2) Claims.* (1) Persons, other than those listed in paragraphs (d)(1)(i) through (iii) of this

section, may be able to receive reimbursement of response costs by means of a claim against the Fund. The categories of persons excluded from pursuing this claims authority are:

(i) Federal government;

(ii) State governments, and their political subdivisions, unless they are potentially responsible parties covered by an order or consent decree pursuant to section 122 of CERCLA; and

(iii) Persons operating under a procurement contract or an assistance agreement with the United States with respect to matters covered by that contract or assistance agreement, unless specifically provided therein.

(2) In order to be reimbursed by the Fund, an eligible person must notify the Administrator of EPA or designee prior to taking a response action and receive prior approval, i.e., "preauthorization," for such action.

(3) Preauthorization is EPA's prior approval to submit a claim against the Fund for necessary response costs incurred as a result of carrying out the NCP. All applications for preauthorization will be reviewed to determine whether the request should receive priority for funding. EPA, in its discretion, may grant preauthorization of a claim. Preauthorization will be considered only for:

(i) Removal actions pursuant to § 300.415;

(ii) CERCLA section 104(b) activities;

(iii) Remedial actions at National Priorities List sites pursuant to § 300.435.

(4) To receive EPA's prior approval, the eligible person must:

(i) Demonstrate technical and other capabilities to respond safely and effectively to releases of hazardous substances, pollutants, or contaminants; and

(ii) Establish that the action will be consistent with the NCP in accordance with the elements set forth in paragraphs (c)(3) (i), (ii), and (iii) of this section.

(5) EPA will grant preauthorization to a claim by a party it determines to be potentially liable under section 107 of CERCLA only in accordance with an order issued pursuant to section 106 of CERCLA, or a settlement with the Federal government in accordance with section 122 of CERCLA.

(6) Preauthorization does not establish an enforceable contractual relationship between EPA and the claimant.

(7) Preauthorization represents EPA's commitment that if funds are appropriated for response actions, the response action is conducted in accordance with the preauthorization decision document, and costs are reasonable and necessary,

reimbursement will be made from the Superfund, up to the maximum amount provided in the preauthorization decision document.

(8) For a claim to be awarded under section 111 of CERCLA, EPA must certify that the costs were necessary and consistent with the preauthorization decision document.

(e) *Section 106(b) petition.* Subject to conditions specified in CERCLA section 106(b), any person who has complied with an order issued after October 10, 1986 pursuant to section 106(a) of CERCLA, may seek reimbursement for response costs incurred in complying with that order unless the person has waived that right.

(f) *Section 123 reimbursement to local governments.* Any general purpose unit of local government or a political subdivision that is affected by a release may receive reimbursement for the costs of temporary emergency measures necessary to prevent or mitigate injury to human health or the environment subject to the conditions set forth in 40 CFR Part 310. Such reimbursement may not exceed \$25,000 for a single response.

(g) *Release from liability.* Implementation of response measures by potentially responsible parties or by any other person does not release those parties from liability under section 107(a) of CERCLA, except as provided in a settlement under section 122 of CERCLA or a Federal court judgment.

Subpart I—Administrative Record for Selection of Response Action

§ 300.800 Establishment of an administrative record.

(a) *General requirement.* The lead agency shall establish an administrative record that contains the documents that form the basis for the selection of a response action. The lead agency shall compile and maintain the administrative record in accordance with this subpart.

(b) *Administrative records for Federal facilities.* (1) If a Federal agency other than EPA is the lead agency for a Federal facility, the Federal agency shall compile and maintain the administrative record for the selection of the response action at that facility in accordance with this subpart. EPA may furnish documents which the Federal agency shall place in the administrative record file to ensure that the administrative record includes all documents that form the basis for the selection of the response action.

(2) EPA or the U.S. Coast Guard shall compile and maintain the administrative record when it is the lead agency for a Federal facility.

(3) If EPA is involved in the selection of the response action at a Federal facility on the NPL, the Federal agency acting as the lead agency shall provide EPA with a copy of the index of documents included in the administrative record file, the RI/FS workplan, the RI/FS released for public comment, the proposed plan, any public comments received on the RI/FS and proposed plan, and any other documents EPA may request on a case-by-case basis.

(c) *Administrative record for State-lead sites.* If a State is the lead agency for a site, the State shall compile and maintain the administrative record for the selection of the response action at that site in accordance with this subpart. EPA may require the State to place additional documents in the administrative record file to ensure that the administrative record includes all documents which form the basis for the selection of the response action. The State shall provide EPA with a copy of the index of documents included in the administrative record file, the RI/FS workplan, the RI/FS released for public comment, the proposed plan, any public comments received on the RI/FS and proposed plan, and any other documents EPA may request on a case-by-case basis.

(d) *Applicability.* This subpart applies to all response actions taken under section 104 of CERCLA or sought, secured, or ordered administratively or judicially under section 106 of CERCLA, as follows:

(1) Remedial actions where the remedial investigation commenced after the promulgation of these regulations; and

(2) Removal actions where the action memorandum is signed after the promulgation of these regulations.

(e) For those response actions not included in paragraph (d) of this section, the lead agency shall comply with this subpart to the extent practicable.

§ 300.805 Location of the administrative record.

The lead agency shall establish a docket at an office of the lead agency or other central location at which documents included in the administrative record file shall be located and a copy of the documents included in the administrative record file shall also be made available for public inspection at or near the site at issue, except as provided below:

(a) Sampling and testing data, quality control and quality assurance documentation, and chain of custody forms, need not be located at or near the site at issue or at the central location,

provided that the index to the administrative record file indicates the location and availability of this information.

(b) Guidance documents not generated specifically for the site at issue need not be located at or near the site at issue, provided that they are maintained at the central location and the index to the administrative record file indicates the location and availability of these guidance documents.

(c) Publicly available technical literature not generated for the site at issue, such as engineering textbooks, articles from technical journals, and toxicological profiles, need not be located at or near the site at issue or at the central location, provided that the literature is listed in the index to the administrative record file or the literature is cited in a document in the record.

(d) Documents included in the confidential portion of the administrative record file shall be located only in the central location.

(e) The administrative record for a removal action where the release or threat of release requires that on-site removal activities be initiated within hours of the lead agency's determination that a removal is appropriate and on-site removal activities cease within 30 days of initiation, need be available for public inspection only at the central location.

§ 300.810 Contents of the administrative record.

(a) *Contents.* The administrative record file for selection of a response action typically, but not in all cases, will contain the following types of documents:

(1) Documents containing factual information, data, and analysis of the factual information and data that may form a basis for the selection of the response action. Such documents may include verified sampling data, quality control and quality assurance documentation, chain of custody forms, site inspection reports, preliminary assessment and site evaluation reports, ATSDR health assessment, documents supporting the lead agency's determination of imminent and substantial endangerment; public health evaluations, and technical and engineering evaluations. In addition, for remedial actions, such documents may include approved work plans, State documentation of applicable or relevant and appropriate requirements, and the RI/FS;

(2) Guidance documents, technical literature, and site-specific policy

memoranda that may form a basis for the selection of the response action. Such documents may include guidance on conducting remedial investigations and feasibility studies, guidance on determining applicable or relevant and appropriate requirements, guidance on risk/exposure assessments, engineering handbooks, articles from technical journals, memoranda on the application of a specific regulation to a site, and memoranda on off-site disposal capacity;

(3) Documents received, published, or made available to the public under § 300.815 for remedial actions, or § 300.820 for removal actions. Such documents may include notice of availability of the administrative record file, community relations plan, proposed plan for remedial action, notices of public comment periods, public comments and new information received by the lead agency, and responses to significant comments;

(4) Decision documents. Such documents may include action memoranda and records of decision;

(5) Enforcement orders. Such documents may include administrative orders and consent decrees; and

(6) An index of the documents included in the administrative record file.

(b) *Documents not included in the administrative record.* The lead agency is not required to include documents in the administrative record file which do not form a basis for the selection of the response action. Such documents include but are not limited to draft documents, internal memoranda, and day-to-day notes of staff unless such documents contain information that forms the basis of selection of the response action and the information is not included in any other document in the administrative record file.

(c) *Privileged documents.* Privileged documents shall not be included in the record file except as provided in paragraph (d) of this section or where such privilege is waived. Privileged documents include but are not limited to documents subject to the attorney-client, attorney work product, deliberative process, or other applicable privilege.

(d) *Confidential file.* If information which forms the basis for the selection of a response action is included only in a document containing confidential or privileged information and is not otherwise available to the public, the information, to the extent feasible, shall be summarized in such a way as to make it disclosable and placed in the publicly available portion of the administrative record file. The

confidential or privileged document itself shall be placed in the confidential portion of the administrative record file. If information, such as confidential business information, cannot be summarized in a disclosable manner, the information shall be placed only in the confidential portion of the administrative record file. All documents contained in the confidential portion of the administrative record file shall be listed in the index to the file.

§ 300.815 Administrative record for a remedial action.

(a) The administrative record file for the selection of a remedial action shall be made available for public inspection at the commencement of the remedial investigation phase. At such time, the lead agency shall publish in a major local newspaper of general circulation a notice of the availability of the files containing the administrative record.

(b) The lead agency shall provide a public comment period as specified in § 300.430(f) so that interested persons may submit comments on the selection of the remedial action for inclusion in the administrative record file. The lead agency is not required to respond to comments that were submitted prior to the public comment period. A written response to significant comments submitted during the public comment period shall be included in the administrative record file.

(c) The lead agency shall comply with the public participation procedures required in § 300.430(f) and shall document such compliance in the administrative record.

(d) Documents generated or received after the record of decision is signed shall be added to the administrative record file only as provided in § 300.825.

§ 300.820 Administrative record for a removal action.

(a) If, based on the site evaluation, the lead agency determines that a removal action is appropriate and that a planning period of at least six months exists before on-site removal activities must be initiated:

(1) The administrative record file shall be made available for public inspection when the engineering evaluation/cost analysis (EE/CA) is made available for public comment. At such time, the lead agency shall publish in a major local newspaper of general circulation a notice of the availability of the file containing the administrative record.

(2) The lead agency shall provide a public comment period as specified in § 300.415 so that interested persons may submit comments on the selection of the removal action for inclusion in the

administrative record file. The lead agency is not required to respond to comments that were submitted prior to the public comment period. A written response to significant comments submitted during the public comment period shall be included in the administrative record file.

(3) The lead agency shall comply with the public participation procedures of § 300.415(n) and shall document compliance with § 300.415(n)(3) (i) through (iii) in the administrative record file.

(4) Documents generated or received after the action memorandum is signed shall be added to the administrative record file only as provided in § 300.825.

(b) For all removal actions not included in paragraph (a) of this section:

(1) Documents included in the administrative record file shall be made available for public inspection no later than 60 days after initiation of on-site removal activity. At such time, the lead agency shall publish in a major local newspaper of general circulation a notice of availability of the file containing the administrative record.

(2) The lead agency shall, as appropriate, provide a public comment period of not less than 30 days beginning at the time the administrative record is made available to the public. The lead agency is not required to respond to comments that were submitted prior to the public comment period. A written response to significant comments submitted during the public comment period shall be included in the administrative record file.

(3) Documents generated or received after the action memorandum is signed shall be added to the administrative record file only as provided in § 300.825.

§ 300.825 Record requirements after decision document is signed.

(a) The lead agency may add documents to the administrative record file after the decision document selecting the response action has been signed if:

(1) The documents concern a portion of a response action decision that the decision document does not address or reserves to be decided at a later date; or

(2) An explanation of significant differences required by § 300.435(c), or an amended decision document is issued, in which case, the explanation of significant differences or amended decision document and all documents that form the basis for the decision to modify the response action shall be added to the administrative record file.

(b) The lead agency may hold additional public comment periods or extend the time for the submission of

public comment after a decision document has been signed on any issues concerning selection of the response action. Such comment shall be limited to the issues for which the lead agency has requested additional comment. All additional comments submitted during such comment periods that are responsive to the request, and any response to these comments, shall be placed in the administrative record file.

(c) The lead agency is required to consider comments submitted by interested persons after the close of the public comment period only to the extent that the comments contain significant information not contained elsewhere in the administrative record which could not have been submitted during the public comment period and which substantially support the need to significantly alter the response action. All such comments and any responses thereto shall be placed in the administrative record file.

Subpart J—Use of Dispersants and Other Chemicals

§ 300.900 General.

(a) Section 311(c)(2)(G) of the Clean Water Act requires that EPA prepare a schedule of dispersants and other chemicals, if any, that may be used in carrying out the NCP. This subpart makes provisions for such a schedule.

(b) This subpart applies to the navigable waters of the United States and adjoining shorelines, the waters of the contiguous zone, and the high seas beyond the contiguous zone in connection with activities under the Outer Continental Shelf Lands Act, activities under the Deepwater Port Act of 1974, or activities that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States, including resources under the Magnuson Fishery Conservation and Management Act of 1976.

(c) This subpart applies to the use of any chemical agents or other additives as defined in Subpart A of this Part that may be used to remove or control oil discharges.

§ 300.905 NCP Product Schedule.

(a) *Oil Discharges.* (1) EPA shall maintain a schedule of dispersants and other chemical or biological products that may be authorized for use on oil discharges in accordance with the procedures set forth in § 300.910. This schedule, called the NCP Product Schedule, may be obtained from the Emergency Response Division (OS-210), U.S. Environmental Protection Agency,

Washington, DC 20460. The telephone number is 1-202-382-2190.

(2) Products may be added to the NCP Product Schedule by the process specified in § 300.920.

(b) [Reserved]

§ 300.910 Authorization of use.

(a) The OSC, with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the States with jurisdiction over the navigable waters threatened by the release or discharge and the DOC/DOI natural resource trustees, may authorize the use of dispersants, surface collecting agents, biological additives, or miscellaneous oil spill control agents on the oil discharge, provided that the dispersants, surface collecting agents, biological additives, or miscellaneous oil spill control agents are listed on the NCP Product Schedule.

(b) The OSC, with the concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representatives from the States with jurisdiction over the navigable waters threatened by the release or discharge and the DOC/DOI natural resource trustees, may authorize the use of burning agents on a case-by-case basis.

(c) The OSC may authorize the use of any dispersant, surface collecting agent, other chemical agent, burning agent, biological additive, or miscellaneous oil spill control agent, including products not listed on the NCP Product Schedule, without obtaining the concurrence of the EPA representative to the RRT, the RRT representatives from the States with jurisdiction over the navigable waters threatened by the release or discharge, or the DOC/DOI natural resource trustees when, in the judgment of the OSC, the use of the product is necessary to prevent or substantially reduce a hazard to human life. The OSC is to inform the EPA RRT representative and, as appropriate, the RRT representatives from the affected States and the DOC/DOI natural resource trustees of the use of a product as soon as possible and, pursuant to the provisions in paragraph (a) of this section, obtain their concurrence for its continued use once the threat to human life has subsided.

(d) Sinking agents shall not be authorized for application to oil discharges.

(e) RRTs shall, as appropriate, consider, as part of their planning activities, the appropriateness of using the dispersants, surface collecting agents, biological additives, or miscellaneous oil spill control agents listed on the NCP Product Schedule, and the appropriateness of using burning

agents. Regional Contingency Plans (RCPs) shall, as appropriate, address the use of such products in specific contexts. If the RRT representatives from the States with jurisdiction over the waters of the area to which a RCP applies approve in advance the use of certain products as described in the RCP, the OSC may authorize the use of the products without obtaining the specific concurrences described in paragraph (a) of this section.

§ 300.915 Data requirements.

(a) *Dispersants.* (1) Name, brand, or trademark, if any, under which the dispersant is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alterations to the effectiveness of the product.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Dispersant Toxicity—Use standard toxicity test methods described in Appendix C to Part 300.

(8) Effectiveness—Use standard effectiveness test methods described in Appendix C to Part 300. Manufacturers are also encouraged to provide data on product performance under conditions other than those captured by these tests.

(9) Flash Point—Select appropriate method from the following: ASTM—D 56-82; ASTM—D 92-85; ASTM—D 93-85; ASTM—D 1310-86; ASTM—D 3278-80.¹

(10) Pour Point—Use ASTM—D 97-85.¹

(11) Viscosity—Use ASTM—D 445-86.¹

(12) Specific Gravity—Use ASTM—D 1298-84.¹

¹ 1988 Annual Book of ASTM Standards. American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. This incorporation by reference has been submitted for approval by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of the book may be obtained from the publisher. Copies may be inspected at the U.S. Environmental Protection Agency, 401 M St., S.W., Room LG, Washington, D.C., or at the Office of the Federal Register, 1100 L Street, N.W., Room 8401, Washington, D.C.

(13) pH—Use ASTM—D 1293-84.¹

(14) Dispersing Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages will include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface active agents, solvents, and additives.

(15) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Using standard test procedures, state the concentrations or upper limits of the following materials:

(i) Arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, plus any other metals that may be reasonably expected to be in the sample. Atomic absorption methods should be used and the detailed analytical methods and sample preparation shall be fully described.

(ii) Cyanide. Standard calorimetric procedures should be used.

(iii) Chlorinated hydrocarbons. Gas chromatography should be used and the detailed analytical methods and sample preparation shall be fully described.

(16) The technical product data submission shall include the identity of the laboratory that performed the required tests, the qualifications of the laboratory staff, including professional biographical information for individuals responsible for any tests, and laboratory experience with similar tests. Laboratories performing toxicity tests for dispersant toxicity must demonstrate previous toxicity test experience in order for their results to be accepted. It is the responsibility of the submitter to select competent analytical laboratories based on the guidelines contained herein. EPA reserves the right to refuse to accept a submission of technical product data because of lack of qualification of the analytical laboratory, significant variance between submitted data and any laboratory confirmation performed by EPA, or other circumstances that would result in inadequate or inaccurate information on the dispersing agent.

(b) *Surface Collecting Agents.* (1) Name, brand, or trademark, if any, under which the product is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alterations to the effectiveness of the product.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Toxicity—Use standard toxicity test methods described in Appendix C to Part 300.

(8) Flash Point—Select appropriate method from the following: ASTM—D 56-82; ASTM—D 92-85; ASTM—D 93-85; ASTM—D 1310-86; ASTM—D 3278-80.¹

(9) Pour Point—Use ASTM—D 97-85.¹

(10) Viscosity—Use ASTM—D 445-86.¹

(11) Specific Gravity—Use ASTM—D 1298-84.¹

(12) pH—Use ASTM—D 1293-84.¹

(13) Test to Distinguish Between Surface Collecting Agents and Other Chemical Agents.

(i) Method Summary—Five milliliters of the chemical under test are mixed with 95 milliliters of distilled water and allowed to stand undisturbed for one hour. Then the volume of the upper phase is determined to the nearest one milliliter.

(ii) Apparatus.

(A) Mixing Cylinder: 100 milliliter subdivisions and fitted with a glass stopper.

(B) Pipettes: Volumetric pipette, 5.0 milliliter.

(C) Timers.

(iii) Procedure—Add 95 milliliters of distilled water at 22° C, plus or minus 3° C, to a 100 milliliter mixing cylinder. To the surface of the water in the mixing cylinder, add 5.0 milliliters of the chemical under test. Insert the stopper and invert the cylinder five times in ten seconds. Set upright for one hour at 22° C, plus or minus 3° C, and then measure the chemical layer at the surface of the water. If the major portion of the chemical added (75 percent) is at the

water surface as a separate and easily distinguished layer, the product is a surface collecting agent.

(14) Surface Collecting Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages should include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface action agents, solvents, and additives.

(15) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Follow specifications in paragraph (a)(15) of this section.

(16) Analytical Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(16) of this section.

(c) *Biological Additives.* (1) Name, brand, or trademark, if any, under which the additive is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use, depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Statements and supporting data on the effectiveness of the additive, including degradation rates, and on the test conditions under which the effectiveness data were obtained.

(8) For microbiological cultures, furnish the following information:

(i) Listing of all microorganisms by species.

(ii) Percentage of each species in the composition of the additive.

(iii) Optimum pH, temperature, and salinity ranges for use of the additive, and maximum and minimum pH, temperature, and salinity levels above or below which the effectiveness of the additive is reduced to half its optimum capacity.

(iv) Special nutrient requirements, if any.

(v) Separate listing of the following, and test methods for such determinations: Salmonella, fecal coliform, Shigella, Staphylococcus

Coagulase positive, and Beta Hemolytic Streptococci.

(9) For enzyme additives furnish the following information:

(i) Enzyme name(s).

(ii) International Union of Biochemistry (I.U.B.) number(s).

(iii) Source of the enzyme.

(iv) Units.

(v) Specific Activity.

(vi) Optimum pH, temperature, and salinity ranges for use of the additive, and maximum and minimum pH, temperature, and salinity levels above or below which the effectiveness of the additive is reduced to half its optimum capacity.

(vii) Enzyme shelf life.

(viii) Enzyme optimum storage conditions.

(10) Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(16) of this section.

(d) *Burning Agents.* EPA does not require technical product data submissions for burning agents and does not include burning agents on the NCP Product Schedule.

(e) *Miscellaneous Oil Spill Control Agents.* (1) Name, brand or trademark, if any, under which the miscellaneous oil spill control agent is sold.

(2) Name, address, and telephone number of the manufacturer, importer, or vendor.

(3) Name, address, and telephone number of primary distributors or sales outlets.

(4) Special handling and worker precautions for storage and field application. Maximum and minimum storage temperatures, to include optimum ranges as well as temperatures that will cause phase separations, chemical changes, or other alternatives to the effectiveness of the product.

(5) Shelf life.

(6) Recommended application procedures, concentrations, and conditions for use depending upon water salinity, water temperature, types and ages of the pollutants, and any other application restrictions.

(7) Toxicity—Use standard toxicity test methods described in Appendix C to Part 300.

(8) Flash Point—Select appropriate method from the following: ASTM—D 56-82; ASTM—D 92-85; ASTM—D 93-85; ASTM—D 1310-86; ASTM—D 3278-80.¹

¹ 1988 Annual Book of ASTM Standards. American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. This incorporation by reference has been submitted for approval by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of the book may be obtained from the publisher. Copies may be inspected at the U.S. Environmental Protection Agency, 401 M St., S.W., Room LG, Washington, D.C., or at the Office of the Federal Register, 1100 L Street, N.W., Room 8401, Washington, D.C.

¹ 1988 Annual Book of ASTM Standards. American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. This incorporation by reference has been submitted for approval by the Director of the Federal Register in

(9) Pour Point—Use ASTM—D 97—85.¹
 (10) Viscosity—Use ASTM—D 445—86.¹

(11) Specific Gravity—Use ASTM—D 1298—84.¹

(12) pH—Use ASTM—D 1293—84.¹

(13) Miscellaneous Oil Spill Control Agent Components. Itemize by chemical name and percentage by weight each component of the total formulation. The percentages should include maximum, minimum, and average weights in order to reflect quality control variations in manufacture or formulation. In addition to the chemical information provided in response to the first two sentences, identify the major components in at least the following categories: surface active agents, solvents, and additives.

(14) Heavy Metals, Cyanide, and Chlorinated Hydrocarbons. Follow specifications in paragraph (a)(15) of this section.

(15) For any miscellaneous oil spill control agent that contains microbiological cultures or enzyme additives, furnish the information specified in paragraphs (c)(8) and (c)(9) of this section, as appropriate.

(16) Analytical Laboratory Requirements for Technical Product Data. Follow specifications in paragraph (a)(16) of this section.

§ 300.920 Addition of products to schedule.

(a) To add a dispersant, surface collecting agent, biological additive, or miscellaneous oil spill control agent to the NCP Product Schedule, the technical product data specified in § 300.915 must be submitted to the Emergency Response Division (OS-210), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. If EPA determines that the required data were submitted, EPA will add the product to the schedule.

(b) EPA will inform the submitter in writing, within 60 days of the receipt of technical product data, of its decision on adding the product to the schedule.

(c) The submitter may assert that certain information in the technical product data submissions is confidential business information. EPA will handle such claims pursuant to the provisions in 40 CFR Part 2, Subpart B. Such information must be submitted separately from non-confidential information, clearly identified, and clearly marked "Confidential Business

accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of the book may be obtained from the publisher. Copies may be inspected at the U.S. Environmental Protection Agency, 401 M St., S.W., Room LG, Washington, D.C., or at the Office of the Federal Register, 1100 L Street, N.W., Room 8401, Washington, D.C.

Information." If the submitter fails to make such a claim at the time of submittal, EPA may make the information available to the public without further notice.

(d) The submitter must notify EPA of any changes in the composition, formulation, or application of the dispersant, surface collecting agent, biological additive, or miscellaneous oil spill control agent. On the basis of this data, EPA may require retesting of the product if the change is likely to affect the effectiveness or toxicity of the product.

(e) The listing of a product on the NCP Product Schedule does not constitute approval of the product. To avoid possible misinterpretation or misrepresentation, any label, advertisement, or technical literature that refers to the placement of the product on the NCP schedule must either reproduce in its entirety EPA's written statement that it will add the product to the NCP Product Schedule under § 300.920(b), or include the disclaimer shown below. If the disclaimer is used, it must be conspicuous and must be fully reproduced. Failure to comply with these restrictions or any other improper attempt to demonstrate the approval of the product by any NRT or other U.S. Government agency shall constitute grounds for removing the product from the NCP Product Schedule.

Disclaimer

[PRODUCT NAME] is on the U.S. Environmental Protection Agency's NCP Product Schedule. This listing does NOT mean that EPA approves, recommends, licenses, certifies, or authorizes the use of [product name] on an oil discharge. This listing means only that data have been submitted to EPA as required by Subpart J of the National Contingency Plan, § 300.915.

Subpart K—Federal Facilities [Reserved]

3. Units 1.0, 2.0, and 4.0 of Appendix C to Part 300 are amended by revising the first sentence of subunit 1.1, and subunits 2.5 (step 13), and 2.6 (steps 15 and 16) and IX, and adding reference 4 to the list of references to read as follows:

Appendix C to Part 300—Revised Standard Dispersant Effectiveness and Toxicity Tests

1.0 Introduction

1.1 Scope and Application. These methods apply to "dispersants" involving Subpart J (Use of Dispersants and Other Chemicals) in 40 CFR Part 300 (National Oil and Hazardous

Substances Pollution Contingency Plan).

2.0 Revised Standard Dispersant Effectiveness Test

2.5 ***

13. Spectrophotometrically determine the absorbance of the extract using the identical wavelength and cell used to calibrate the spectrophotometer. From the calibration curve, determine the concentration of oil in the chloroform.

Compute the concentration of oil in the sample as follows:

$$C_{do} = \frac{C_i \times (\text{volume of chloroform used})}{(\text{volume of sample})} \quad (2)$$

where:

C_{do} is the concentration of dispersed oil in the sample and

C_i is the measured concentration of oil in the chloroform extract.

Note that the standard sample volume is 500 ml and the volume of chloroform used should also be expressed in ml.

Repeat steps 1 through 13 at least three times for each of the three required volumes of dispersant.

2.6 ***

15. Spectrophotometrically determine the absorbance of the extract using the identical wavelength and cell used to calibrate the spectrophotometer. From the calibration curve, determine the corresponding concentration of oil in the chloroform. Compute the dispersant blank correction for 25 ml of dispersant as follows:

$$D = \frac{C_2 \times (\text{volume of chloroform used})}{(\text{volume of sample})} \quad (3)$$

where:

D is the blank correction for 25 ml of dispersant, and

C_2 is the measured concentration of oil in the chloroform extract.

Note that the standard sample volume is 500 ml and the volume of chloroform used should also be expressed in ml.

The Dispersant Blank Correction (DBC) for other volumes of dispersant used in a test may then be computed as:

$$DBC = \frac{D \times (\text{volume in ml of dispersants used})}{25 \text{ ml}} \quad (4)$$

16. Clean the test tank and prepare the synthetic seawater at $23 \pm 1^\circ\text{C}$ as described in Step 1. Do not install the containment cylinder. Prepare 100 ml of test oil as described in Steps 4 and 5, and add it to the test tank. Continue the test procedures as described in Steps 8 through 13. The Oil Blank Correction (OBC) is:

$$OBC = \frac{C_1 \times (\text{volume of chloroform used})}{(\text{volume of sample})} \quad (5)$$

* * * * *

4.0 Summary Technical Product Test Data Format

* * * * *

IX. Physical Properties of Dispersant/Surface Collecting Agent (4):

1. Flash Point: ($^\circ\text{F}$).
2. Pour Point: ($^\circ\text{F}$).
3. Viscosity: — at — $^\circ\text{F}$ (centistokes).
4. Specific Gravity: — at — $^\circ\text{F}$.
5. pH: (10 percent solution if hydrocarbon based).
6. Surface Active Agents (Dispersants).¹
7. Solvents (Dispersants).¹
8. Additives (Dispersants).
9. Solubility (Surface Collecting Agents).

* * * * *

4. Appendix D is being added to Part 300 to read as follows:

Appendix D to Part 300—Appropriate Actions and Methods of Remedying Releases

(a) This Appendix D to Part 300 describes types of remedial actions generally appropriate for specific situations commonly found at remedial sites and lists methods for remedying releases that may be considered by the lead agency to accomplish a particular response action. This list shall not be considered inclusive of all possible methods of remedying releases and does not limit the lead agency from selecting any other actions deemed necessary in response to any situation.

(b) In response to contaminated soil, sediment, or waste, the following types of

response actions shall generally be considered: removal, treatment, or containment of the soil, sediment, or waste to reduce or eliminate the potential for hazardous substances or pollutants or contaminants to contaminate other media (ground water, surface water, or air) and to reduce or eliminate the potential for such substances to be inhaled, absorbed, or ingested.

(1) Techniques for removing contaminated soil, sediment, or waste include the following:

- (i) Excavation.
- (ii) Hydraulic dredging.
- (iii) Mechanical dredging.

(2) Techniques for treating contaminated soil, sediment, or waste include the following:

(i) Biological methods, including the following:

- (A) Treatment via modified conventional wastewater treatment techniques.
- (B) Anaerobic, aerated, and facultative lagoons.
- (C) Supported growth biological reactors.
- (D) Microbial biodegradation.

(ii) Chemical methods, including the following:

- (A) Chlorination.
- (B) Precipitation, flocculation, sedimentation.
- (C) Neutralization.
- (D) Equalization.
- (E) Chemical oxidation.

(iii) Physical methods, including the following:

- (A) Air stripping.
- (B) Carbon absorption.
- (C) Ion exchange.
- (D) Reverse osmosis.
- (E) Permeable bed treatment.
- (F) Wet air oxidation.
- (G) Solidification.
- (H) Encapsulation.
- (I) Soil washing or flushing.
- (J) Incineration.

(c) In response to contaminated ground water, the following types of response actions will generally be considered: elimination or containment of the contamination to prevent further contamination, treatment and/or removal of such ground water to reduce or eliminate the contamination, physical containment of such ground water to reduce or eliminate potential exposure to such contamination, and/or restrictions on use of the ground water to eliminate potential exposure to the contamination.

(1) Techniques that can be used to contain or restore contaminated ground water include the following:

(i) Impermeable barriers, including the following:

- (A) Slurry walls.
- (B) Grout curtains.
- (C) Sheet piling.
- (ii) Permeable treatment beds.

(iii) Ground water pumping, including the following:

- (A) Water table adjustment.
- (B) Plume containment.
- (iv) Leachate control, including the following:

- (A) Subsurface drains.
- (B) Drainage ditches.
- (C) Liners.

(2) Techniques suitable for the control of contamination of water and sewer lines include the following:

- (i) Grouting.
- (ii) Pipe relining and sleeving.
- (iii) Sewer relocation.

(d)(1) In response to contaminated surface water, the following types of response actions shall generally be considered: elimination or containment of the contamination to prevent further pollution, and/or treatment of the contaminated water to reduce or eliminate its hazard potential.

(2) Techniques that can be used to control or remediate surface water include the following:

- (i) Surface seals.
- (ii) Surface water diversions and collection systems, including the following:

- (A) Dikes and berms.
- (B) Ditches, diversions, waterways.
- (C) Chutes and downpipes.
- (D) Levees.
- (E) Seepage basins and ditches.
- (F) Sedimentation basins and ditches.
- (G) Terraces and benches.

(iii) Grading.

(iv) Revegetation.

(e) In response to air emissions, the following techniques will be considered:

- (1) Pipe vents.
- (2) Trench vents.
- (3) Gas barriers.
- (4) Gas collection.
- (5) Overpacking.
- (6) Treatment for gaseous emissions, including the following:
- (i) Vapor phase adsorption.
- (ii) Thermal oxidation.
- (f) Alternative water supplies can be provided in several ways, including the following:
- (i) Individual treatment units.
- (ii) Water distribution system.
- (iii) New wells in a new location or deeper wells.

- (iv) Cisterns.
- (v) Bottled or treated water.
- (vi) Upgraded treatment for existing distribution systems.

(g) Temporary or permanent relocation of residents, businesses, and community facilities may be provided where it is determined necessary to protect human health and the environment.

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¹ If the submitter claims that the information presented under this subheading is confidential, this information should be submitted on a separate sheet of paper clearly labeled according to the subheading and entitled "Confidential Information."