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# **SUPERFUND REMOVAL PROCEDURES**

## **THE REMOVAL RESPONSE DECISION: SITE DISCOVERY TO RESPONSE DECISION**

Office of Emergency and Remedial Response  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

## NOTICE

The procedures set out in this document are intended solely for the guidance of Government personnel. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States. Environmental Protection Agency (EPA) officials may decide to follow the guidance provided in this document, or to act at variance with the guidance, based on an analysis of site circumstances. The Agency also reserves the right to change this guidance at any time without public notice.

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This document is part of a ten-volume series of guidance documents collectively titled the Superfund Removal Procedures. These stand-alone volumes update and replace Office of Solid Waste and Emergency Response (OSWER) Directive 9360.0-3B, the single-volume Superfund Removal Procedures manual, issued in February 1988.

Each volume in the series is dedicated to a particular aspect of the removal process and includes a volume-specific Table of Contents, Reference List, and Key Words Index. The series comprises the following nine procedural volumes:

The Removal Response Decision: Site Discovery to Response Decision

Action Memorandum Guidance

Response Management: Removal Action Start-up to Close-out

Removal Enforcement Guidance for On-Scene Coordinators

Public Participation Guidance for On-Scene Coordinators: Community Relations and the Administrative Record

Removal Response Reporting

Special Circumstances

Guidance on the Consideration of ARARs During Removal Actions

State Participation.

In addition, the series includes an Overview volume, containing a comprehensive Table of Contents, List of Exhibits, Key Words Index, List of Acronyms, and Glossary, for use as a quick reference document.

This document summarizes the relevant guidance and statutory authorities that On-Scene Coordinators (OSCs) must follow in determining whether a removal action may and should be conducted. "Appendix A. References" provides a comprehensive list of supporting guidance documents that may be consulted for additional information on relevant topics. Bracketed numbers [#] appear throughout the text to indicate specific references in Appendix A. Consult the reference documents for a more detailed explanation of removal program policies and procedures affecting removal actions during the circumstances noted in this volume. In addition, appropriate sections of statutes and regulations are cited throughout the text, with a full citation of each statute and regulation appearing in Appendix A. Appendix B contains the Key Words Index.

OSCs are responsible for conducting the decisionmaking process from site discovery to response decision. Upon being notified of a release or threatened release, OSCs conduct removal site evaluations to determine the need for a removal action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. Based on the results of these evaluations, OSCs may decide either to conduct a removal action or to refer the site to the Superfund remedial program, another Federal agency, or the appropriate State hazardous waste program for further action.



OSCs evaluate incidents and determine if a removal action is required.

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# RESPONSE DECISION FRAMEWORK

## Overview

The *Superfund Removal Response Procedures Removal Response Decision: Site Discovery to Response Decision* guidance document provides general guidance for OSCs involved in determining whether a removal action may and should be conducted. The document clarifies terms and concepts in the removal determination process, describes the roles and responsibilities of those involved in determining whether a removal action is necessary, and outlines procedures for making such a determination. The remainder of this introductory section presents an overview of the removal authority, outlines the criteria for removal actions, and describes the scope of response.

## Criteria For Removal Actions

CERCLA section 104 authorizes EPA to conduct a removal action whenever there is a release or threatened release of a hazardous substance into the environment, or a release or threatened release of a pollutant or contaminant that may present an imminent and substantial danger to the public health or welfare. CERCLA section 101(23) and (25) and NCP §300.5 define "removal" as:

- The cleanup or removal of released hazardous substances from the environment;
- Actions taken in the event of a release or threatened release of hazardous substances into the environment;
- Actions taken to monitor, assess, and evaluate the release or threatened release of hazardous substances;
- Enforcement response activities;
- Disposal of removed material; and
- Other actions to prevent, minimize, or mitigate damage to the public health or welfare or the environment.

Removal actions are relatively short-term responses that may take place at sites listed on the National Priorities List (NPL) as well as at sites not on the NPL. The specific situations in

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which CERCLA-funded removals may occur are guided by the criteria in §300.415(b)(2) of the NCP (see p. 3).

### Types of Substances

*Hazardous substances* under section 101(14) of CERCLA include the following:

- Any substance designated pursuant to section 311(b)(2)(A) of the Clean Water Act (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 (SWDA) (but not including any waste the regulation of which under the SWDA has been suspended by an 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 (CAA); and
- Any imminently hazardous chemical substance or mixture for which the Administrator has taken action under section 7 of the Toxic Substances Control Act (TSCA).

Hazardous substances released into the environment in amounts equal to or greater than their reportable quantity (RQ) must be reported to the National Response Center (NRC). EPA has promulgated adjusted RQs for over 700 hazardous substances (40 CFR 302.4). Additionally, RQ adjustments were promulgated for approximately 1500 radionuclides in May 1989 (54 FR 22524).

The term "*pollutant or contaminant*" according to section 101(33) of CERCLA includes, but is not 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.



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### THE PETROLEUM EXCLUSION

The terms "hazardous substance" and "pollutant or contaminant" *do not include petroleum*, such as crude oil or any fraction thereof, unless it is specifically listed or designated as a hazardous substance. In addition, natural gas, liquefied natural gas, and synthetic gas usable for fuel of pipeline quality (or mixtures of natural gas and such synthetic gas) are not designated as hazardous substances under CERCLA.

#### Types of Threats

CERCLA section 104(a)(1) authorizes Fund-financed removal actions in response to:

- Any release or substantial threat of release of a hazardous substance to the environment; and
- Any release or substantial threat of release of a pollutant or contaminant to the environment that may present an imminent and substantial danger to the public health or welfare.

EPA may initiate a removal action in response to any release or threatened release that, according to the criteria listed in §300.415(b)(2) of the NCP, is determined to be a threat to the public health, welfare, or the environment. These criteria are:

- Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants, or contaminants;
- Actual or potential contamination of drinking water supplies or sensitive ecosystems;
- Hazardous substances, pollutants, or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- High levels of hazardous substances, pollutants, or contaminants in soils largely at or near the surface, that may migrate;
- Weather conditions that may cause hazardous substances, pollutants, or contaminants to migrate or be released;
- Threat of fire or explosion;

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- The unavailability of other appropriate Federal or State response mechanisms to respond to the release; and
- Other situations or factors that may pose threats to public health or welfare of the United States or the environment.

The criteria listed above should be considered by OSCs in determining the appropriateness of a removal action.

### Types of Incidents

Authority to undertake removal actions is not limited to any particular category of incidents. Historically, Fund-financed removal projects have occurred at the following types of facilities:

- *Active Production Facility* – any ongoing operation that manufactures, recycles, handles, stores, or transports hazardous materials or wastes as a primary ingredient, product, or by-product of operations, or any location contaminated due to off-site migration of hazardous materials or wastes from such operation (e.g., fire/explosion at a chemical plant or warehouse, PCB contamination at an electronics manufacturing facility);
- *Inactive Production Facility* – any facility no longer in operation that manufactured, recycled, handled, stored, or transported hazardous materials or wastes as a primary ingredient, product, or by-product of operations, or any location contaminated due to off-site migration of hazardous materials or wastes from such previous operations (e.g., fire/explosion hazards at an inactive refinery, dioxin contamination at an abandoned treatment facility, radiation threat at a former processing facility);
- *Active Waste Management Facility* – any ongoing legal or illegal operation or site whose primary purpose is to handle, exchange, transfer, store, treat, or dispose of hazardous materials or wastes, or any location contaminated due to off-site migration of hazardous materials or wastes from such a facility or site (e.g., PCB migration at an active reclamation center, fire at an operating landfill);
- *Inactive Waste Management Facility* – any former legal or illegal operation or site whose primary purpose was to handle, exchange, transfer, store, treat, or dispose of hazardous materials or wastes, or any location contaminated due to off-site migration of hazardous materials or wastes from such a facility or site (e.g., an overflow of contaminated sludge from a lagoon at an abandoned chemical recycling center, fire/explosion hazards at a former oil recovery facility);

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- *Midnight Dump Site* – any illegal dumping of hazardous substances or suspected hazardous substances into the air, land, or water, whether accidental or deliberate (e.g., abandoned solvent drums on private property, contaminated rinsewater from chemical hauler dumped on roadside);
- *Transportation-related Site* – any release or threat of release of hazardous substances due to a transportation situation, accident, or malfunction (e.g., an overturned truck leaking chemicals, release of poisonous gas from a derailed train); and
- *Other Site* – any release of hazardous substances that does not conform to one of the above categories and/or any release where the source of the contaminant is unknown (e.g., drinking water contamination from an underground storage tank).

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is a database that tracks the status of activity at all Superfund sites. CERCLIS also classifies all removal actions into one of the above categories based upon information provided by the OSC.

### Potential for Non-Federal Response

The OSC should consider the potential for a response by the potentially responsible party (PRP), or State and local agencies. EPA should not conduct Fund-financed removal actions when timely and appropriate action by a PRP is expected or the response is within the independent financial and technical capabilities of State and local agencies [1].

## Scope Of Response

Amendments to CERCLA and revisions to the NCP have provided Superfund response personnel with the flexibility to address threats expeditiously at both NPL and non-NPL sites. Because removal actions vary according to their urgency, OSCs can manage a wide range of technical activities under removal authority. All responses, however, must be conducted within the statutory limitations on removal actions.

### Urgency of Removal Action

OSCs must estimate how urgent a situation is at the outset of a potential removal action (i.e., the maximum time that may elapse between site evaluation and initial response without posing additional significant risks to human health, welfare, and the environment). This estimate is essential for determining the extent of activities conducted prior to starting cleanup work, such as a PRP search and negotiations, preparing an engineering evaluation/cost analysis (EE/CA), and determining compliance with other environmental statutes.

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Not all actions classified as removal actions under the NCP are equally urgent. For example, situations involving fire/explosion or imminent, catastrophic contamination of a reservoir may require more prompt and expeditious attention than certain removals of drums or cleanups of surface impoundments. The three categories of removal actions, based upon the urgency of the situation, are:

- *Emergency* – Those removal actions where the release or threat of release requires that response activities begin on-site within hours of the lead agency's determination that a removal action is appropriate.
- *Time-critical* – Those removal actions 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 on-site activities must be initiated.
- *Non-time-critical* – Those removal actions where, 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 available before on-site activities must begin. The lead agency for non-time-critical removal actions will undertake an EE/CA or its equivalent.

Because removal program resources are limited, the Office of Emergency and Remedial Response (OERR) has established priorities for removal actions based upon these classifications. Emergencies are given top priority for removal resources. Time-critical removal actions at NPL sites are the next highest priority, followed by time-critical removal actions at non-NPL sites posing major health and environmental threats that cannot be addressed by other authorities. As resources permit, non-time-critical removal actions at NPL sites may be conducted [2].

Certain emergency situations may require an OSC to immediately initiate response activities by invoking the OSC's \$200,000 authority.<sup>1</sup> Emergencies that may require such immediate response include transportation accidents, releases at active or operating facilities, deliberate dumps, or when there is a risk of death, injury, or catastrophic environmental damage from releases at inactive/abandoned facilities or sites. If OSCs use their \$200,000 authority, they must prepare an Action Memorandum within one week of the start of the removal action, depending on the extent of mitigation efforts. OSCs should send copies of these Action Memoranda to their appropriate Regional management representative and Regional Coordinators, and place a copy in the site file. More detailed information can be found in the *Superfund Removal Procedures Action Memorandum Guidance* [3].

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<sup>1</sup> Where applicable, the redelegation of the \$200,000 authority to OSCs varies by Region. A revision to this authority has increased the ceiling from \$50,000 to \$200,000 for emergencies only.

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### Types of Actions

Section 300.415(e) of the NCP identifies several types of removal activities that may be appropriate for specific situations. This list is not intended to prevent response officials from taking other actions deemed necessary in response to a release or to preclude the lead agency from referring response actions to other appropriate Federal or State enforcement authorities.

The following removal activities are generally appropriate in the situations described below:

- Fences, warning signs, or other security or site control precautions – where restricted access is required;
- Drainage controls (e.g., run-off or run-on diversion) – where needed to reduce migration of hazardous substances, pollutants, or contaminants off-site, or to prevent precipitation or run-off from other sources entering the site (e.g., flood waters from entering the release area from other areas);
- Stabilization of berms, dikes, or impoundments, or drainage or closing of lagoons – where needed to maintain the integrity of the containment structures;
- Placement of a cap on contaminated soils or sludges – where needed to reduce migration of hazardous substances, pollutants, or contaminants into soil, ground or surface water, or air;
- Use of 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;
- 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 contamination;
- Removal of drums, barrels, tanks, or other bulk containers that contain or may contain hazardous, ignitable, or explosive substances, pollutants, or contaminants – where it will reduce the likelihood of fire, explosion, spillage, leakage, and exposure to humans, animals, or the food chain;
- Containment, treatment, disposal, or incineration of hazardous materials – where needed to reduce the likelihood of human, animal, or food chain exposure; and
- Provision of alternative water supply – where it will reduce the likelihood of exposure to contaminated water.

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### Statutory and Other Limits on Removal Actions

CERCLA section 104(c)(1) states that Fund-financed removal actions, other than those studies and investigations authorized by section 104(b), *cannot continue after \$2 million have been obligated for the action or twelve months have elapsed* from the date of initial response<sup>2</sup> unless the lead agency grants an exemption to these statutory limits [4]. The OSC should determine as early as possible if an exemption will be needed.

In addition to the limitations on cost and duration, CERCLA section 104(a)(3) states that a removal action may not be taken in response to a release or threatened release:

- 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;
- From products that are part of the structure of, and result in exposure within, residential buildings or business or community structures; and
- Into public or private drinking water supplies due to deterioration of the system through ordinary use.

Section 104(a)(4) of CERCLA, however, provides that EPA may respond to any release or threatened release, including those situations listed above, if it is determined that the incident constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner.

In addition, *the concurrence of the Director of OERR must be obtained prior to the initiation of removal actions taken at non-NPL sites where the proposed action is nationally significant or precedent-setting* [5]. Because the assessment of the potential long-term implications of initiating certain removal actions is largely interpretive, OSCs and Regional personnel should consult the *Guidance on Non-NPL Removal Actions Involving Nationally Significant or Precedent-Setting Issues* [5] whenever considering a removal action at a non-NPL site.

Finally, it is important to consider the issue of post-removal site control (PRSC) when making decisions about removal sites. PRSC refers to activities that are necessary to sustain the integrity of a removal action following its conclusion.

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<sup>2</sup> This twelve-month period is calculated starting from the date of initial response. Even if the work is conducted intermittently, Fund-financed removal actions cannot continue for more than twelve months after the date of initial response.

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# ROLES AND RESPONSIBILITIES

## Overview

Depending upon the urgency of the situation, there are a variety of resources available to assist OSCs in determining whether a removal action is necessary. These include national, Regional, and specialized response teams; contractor resources; other Federal agencies; and State and local governments. The OSC, however, is ultimately responsible for ensuring that all procedures in the response decisionmaking process (see pp. 17-26) are conducted and documented adequately.

## Response Teams

The NCP established two teams to assist in Superfund responses: the National Response Team (NRT) and the Regional Response Team (RRT). They provide the OSC with important technical, coordination, and communication resources that can be used to develop emergency preparedness plans and to respond to specific releases. In addition to these two teams, the Environmental Response Team (ERT) and the Radiological Emergency Response Teams (RERTs) serve as EPA's in-house consultants. The ERT specializes in treatment technologies, with specialists in biology, chemistry, hydrology, geology, and engineering available to assist during removal actions. The RERTs specialize in radiation monitoring, radionuclide analysis, radiation health physics, and risk assessment.

### National Response Team

Under §300.110 of the NCP, national planning and coordination is accomplished through the NRT. As defined by §300.110(a), the NRT consists of representatives from EPA, the United States Coast Guard (USCG), and the following Federal agencies:

- Department of Defense
- Department of Energy
- Department of Agriculture
- Department of Commerce
- Department of Health and Human Services
- Department of the Interior
- Department of Justice
- Department of Labor
- Department of Transportation
- Department of Treasury

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- Department of State
- Federal Emergency Management Agency
- General Services Administration
- Nuclear Regulatory Commission.

Each agency designates a member to the team and sufficient alternates to ensure representation, as agency resources permit. Other agencies may request membership through the Chairman of the NRT.

According to §300.110(j) of the NCP, the NRT should be activated as an emergency response team if requested by any NRT member or when an oil discharge or hazardous substance release:

- Exceeds the response capability of the Region in which it occurs;
- Transects Regional boundaries; or
- Involves a significant threat to public health or welfare or the environment, substantial amounts of property, or substantial threats to natural resources.

When activated for a response action, the NRT may:

- Monitor/evaluate reports from the OSC and recommend, through the RRTs, specific response actions;
- Request resources from other Federal, State, or local governments or private agencies under their existing authorities to combat a discharge or release, or to monitor response operations; and
- Coordinate the supply of equipment, personnel, or technical advice to the affected Region from other Regions.

### *Regional Response Team*

RRT membership parallels that of the NRT, but also includes State and local representatives. The role of the RRT is to develop and coordinate Region-wide emergency and planning activities before a response action is taken and to provide advice and coordination to support the OSC. Specific functions the RRT may perform under §300.115(j)(4) of the NCP include:



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- Monitoring and evaluating reports from the OSC, advising the OSC on the extent and duration of response, and recommending specific response actions to respond to the discharge or release;
- Requesting resources for response or monitoring operations from other Federal, State, or local governments, or private agencies;
- Assisting the OSC with preparing public information releases and communicating with the NRT;
- Recommending designation of another OSC, if circumstances warrant; and
- Submitting Pollution Reports (POLREPs) to EPA.

Pursuant to §300.115(j)(1) of the NCP, an RRT may be activated by the Chairman as an incident-specific response team when a discharge or release:

- Exceeds the response capability available to the OSC at the location of the discharge or release;
- Transects State boundaries;
- May pose a substantial threat to either the public health, welfare, or the environment, or to regionally significant amounts of property. Regional contingency plans (RCPs) specify detailed criteria for activation of RRTs; or
- Is a worst case discharge.

An RRT may also be activated during any discharge or release by an oral request from either the OSC or an RRT representative to the Chairman of the team. This request must subsequently be confirmed in writing. During a prolonged removal 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 that are directly affected or can provide direct response assistance. When an RRT is activated, affected States may participate in all RRT deliberations. State government representatives on the RRT have the same status as any Federal member of the RRT. The RRT can be deactivated when the incident-specific RRT Chairman determines that the OSC no longer requires RRT assistance.

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### **Environmental Response Team**

The ERT is a component of OERR and maintains a 24-hour response capability consisting of support personnel specializing in all aspects of hazardous substance response, including hazard evaluation, risk assessment, and multi-media sampling. The ERT is available to: respond to emergencies; consult on water and air quality criteria and health and safety protocols; interpret and evaluate analytical data; participate in engineering and scientific studies; develop and implement site-specific safety programs; provide enforcement; and supervise contractor site work. The authority to activate the ERT rests with the appropriate Regional Coordinator. When an OSC determines that ERT assistance is necessary, the OSC should call (703) 603-8760 during duty hours or, during non-duty hours, the ERT representative at the 24-hour response number (908) 321-6660. Upon activation, the appropriate ERT personnel and resources are dispatched to operate under the direct operational control of the OSC.

### **Radiological Emergency Response Teams**

Requests for support from the RERTs may be made 24 hours a day via the NRC or directly to the Radiological Response Coordinator in EPA's Office of Radiation and Indoor Air (ORIA). The response teams have been established to provide response and support for incidents or sites containing radiological hazards. These teams can provide on-site support, including mobile monitoring laboratories for field analysis of samples and fixed laboratories for radiochemical sampling and analysis.

## **Contractors**

When necessary, the OSC can use contractor resources, including the Superfund Technical Assessment and Response Team (START) contracts and the National Contract Laboratory Program (NCLP), to assist with site evaluation efforts. These contractors provide EPA with technical capabilities, such as field and analytical services, to support the removal decision. Although Emergency and Rapid Response Services (ERRS) contractors may provide emergency, time-critical, and rapid remedial cleanup support to the Superfund program, they should never be used for site evaluation support.

### **START**

In 1990, EPA issued its long-term contracting strategy for the Superfund program [13]. One of the contracts developed under this strategy was the joint Field Investigation Team/Technical Assistance Team (FIT/TAT) contract, now referred to as the Superfund Technical Assessment and Response Team contract. The START contract provides technical support capabilities for both the removal and site assessment programs. Tasks typically

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performed under these contracts include sampling, sample analyses, process audits/inspections, and contingency planning. Under the START contracts, technical support is provided by fully trained, multi-disciplinary teams that may include personnel such as engineers, technicians, geologists, toxicologists, biologists, and chemists.

To arrange for START assistance, the OSC should contact the START Regional Deputy Project Officer (DPO) or START PO. The DPO/PO is responsible for preparing and issuing a written work order (the Technical Direction Document (TDD)) to the START contractor. When time-critical response is required, the DPO/PO may issue an oral order to initiate START assistance followed within five working days by the TDD, which contains the scope of work, a schedule of deliverables, a budget, and reporting requirements [6].

### National Contract Laboratory Program

The NCLP provides a national system of chemical analytical laboratories to augment EPA in-house support for response actions. The program includes routine analytical services for organic and inorganic compounds in standard matrices; routine analytical services for dioxin; high-hazard sample preparation prior to laboratory analysis; and special analytical services consisting of non-standardized analyses for organic and inorganic compounds in a variety of matrices. The OSC can access the NCLP through the Regional Sample Control Center (RSCC) official designated by each Regional Office.

The NCLP has also developed an analytical service designed to provide rapid turnaround of data from the analysis of water, soil/solid, oil/oily, and wipe samples. This quick turnaround method (QTM) analytical service, with a turnaround requirement of 48 hours (72 if more than three fractional analyses are requested), produces data of known and documented quality. QTM analytical methods are available for analyses of volatiles, polynuclear aromatic hydrocarbons (PAHs), phenols, polychlorinated biphenyls (PCBs), and pesticides. Data produced from these analytical methods can be used whenever decisions do not require that the identity of target compounds be confirmed and when quantities can be approximated. The QTM can be used for site inspections, site characterizations, treatability studies, engineering designs, remedial actions, time-critical and non-time-critical removal assessments when target compounds are known or highly suspected, and when sample results are needed quickly.

Access to the QTM CLP analytical service is typically accomplished through an authorized requestor, such as the RSCC coordinator, or through a Regional emergency response authorized requestor. Because emergency response situations often require very quick turnaround of data, OSCs have the option of designating an authorized requestor to schedule QTM analytical requests for emergency responses. This procedure allows OSCs to request QTM analyses directly from the Sample Management Office (SMO), provides for flexibility in scheduling, and is consistent with current operations in most Regions. If emergency

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situations occur during non-business hours, the authorized requestor should leave a voice mail message for the appropriate SMO coordinator to ensure that samples will be scheduled as soon as business hours resume.

### **Other Federal Agencies**

In addition to in-house and contractor resources, the OSC may request the services of other Federal agencies, when appropriate. The USCG and the Agency for Toxic Substances and Disease Registry (ATSDR) are two agencies that frequently assist or coordinate with the OSC.

#### **United States Coast Guard**

The USCG is responsible for providing OSCs for the initial response to discharges or releases in the coastal zone. The USCG's response capabilities include performing removal site evaluations to establish whether an incident meets the criteria of a CERCLA removal action, monitoring non-Federal removal actions, and conducting medical monitoring and enforcement activities. The USCG also develops response training and guidance materials.

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

The three USCG Strike Teams (located on the Atlantic, Pacific, and Gulf coasts) provide trained personnel and specialized equipment to assist the OSC in training for spill response, stabilizing and containing the spill, and in monitoring or directing the response actions of the responsible parties and/or contractors. The OSC has a specific team designated for initial contact and may contact that team directly for any assistance.

The NSFCC can provide the following support to the OSC:

- Technical assistance, equipment, and other resources to augment the OSC staff during spill response;
- Assistance in coordinating the use of private and public resources in support of the OSC during a response to or a threat of a worst case discharge of oil;
- Review of the area contingency plan, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations;

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- Assistance in locating spill response resources for both response and planning, using the NSFCC's national and international computerized inventory of spill response resources;
- Coordination and evaluation of pollution response exercises; and
- Inspection of district prepositioned pollution response equipment.

The PIAT is an element of the NSFCC staff that is available to assist OSCs to meet the demands for public information during a response or exercise. Its use is encouraged any time the OSC requires outside public affairs support. Requests for PIAT assistance may be made through the NSFCC or NRC.

District Response Groups (DRGs) assist the OSC by providing technical assistance, personnel, and equipment, including prepositioned equipment. Each DRG consists of all USCG personnel and equipment, including marine firefighting equipment, in its district, additional prepositioned equipment, and a District Response Advisory Team (DRAT) that is available to provide support to the OSC in the event that a spill exceeds local response capabilities.

### National Response Center

Funded by 15 Federal agencies and maintained by the USCG, the NRC acts as the single Federal point of contact for all pollution incident reporting and serves as the NRT communications center. Upon receipt of a notification of a release, the NRC immediately notifies the appropriate predesignated OSC. In addition, the NRC evaluates incoming information and immediately advises the Federal Emergency Management Agency of a potential major disaster or evacuation situation. The NRC also tracks medium, major, and potentially major spills and provides incident summaries to all NRT members and other interested parties. The NRC also transmits release reports to the Department of Transportation's (DOT's) Volpe National Transportation Systems Center (VNTSC), where these reports are compiled and input into the Emergency Response Notification System (ERNS). ERNS is a data base that integrates both initial notification information concerning oil and hazardous substance releases and additional information for those incidents that have been verified.

### Agency for Toxic Substances and Disease Registry

ATSDR is responsible for conducting health-related activities regarding releases of hazardous substances. ATSDR may perform on-site health assessments to determine the potential nature and magnitude of any imminent health threat and may issue public health advice (in which case the OSC should attach such findings as an appendix to the appropriate Action

## **ROLES AND RESPONSIBILITIES**

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Memorandum). ATSDR may also provide assistance on worker health and safety issues through an ATSDR interagency agreement (IAG) with the Occupational Safety and Health Administration (OSHA) and/or the National Institute of Occupational Safety and Health (NIOSH). ATSDR maintains a 24-hour hotline number, which is (404) 639-0615.

### **Department of Defense**

The Department of Defense (DOD) is the removal response authority for incidents involving DOD military weapons and munitions or weapons and munitions under the jurisdiction, custody, or control of DOD, or other hazardous substances under the jurisdiction, custody, or control of DOD.

### **State and Local Governments**

Because State and local public safety organizations are often the first government representatives at the scene of a discharge or release, they are expected to initiate public safety measures that are both capable of protecting public health and welfare and consistent with the NCP. In addition, these public safety organizations are responsible for directing evacuations pursuant to existing State or local procedures.

States are also responsible for identifying State applicable or relevant and appropriate requirements (ARARs), and may enter into cooperative agreements under CERCLA section 104 to enable them to assume the lead for a Fund-financed non-time-critical removal action, in accordance with the procedures set forth in 40 CFR Part 35, Subpart O. Before any Fund-financed removal activities are initiated at a site, State and local governments may be required to ensure the provision of post-removal site control procedures until either a permanent remedy is implemented or no further site control measures are needed [7]. For facilities not addressed under CERCLA, States are encouraged to undertake response actions themselves or to use their authorities to compel/negotiate with PRPs to undertake actions.

To assist in coordinating response efforts, each State governor is asked to designate one State office/representative to represent the State on the appropriate RRT. The governor is also asked to designate a lead agency that will direct State-lead response operations, designate the OSC for State-lead response actions, designate Support Agency Coordinators (SACs) for Federal-lead response actions, and coordinate and communicate with any other State agencies, as appropriate. Local governments are invited to participate in activities of the appropriate RRT, as provided by State law or arranged for by the State's representative. Indian tribal governments also may arrange for representation with the appropriate RRT.

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# RESPONSE DECISION PROCEDURES

## Overview

Exhibit 1 summarizes the removal response decisionmaking process. Following discovery of the incident or notification to the NRC, the OSC initiates a removal site evaluation and other CERCLA section 104(b) investigations, as necessary. Based upon the results of these activities, and in conjunction with an assessment of how the incident meets the statutory and regulatory criteria for a removal action, the results of PRP investigations, and the potential for involvement by States or other entities, the OSC must determine the need to initiate a Fund-financed removal action. These procedures may vary according to the urgency of the situation. For example, in emergencies, response personnel may need to base their decisions on relatively limited data, while less urgent incidents allow for more extensive environmental monitoring and sampling and a longer planning phase.

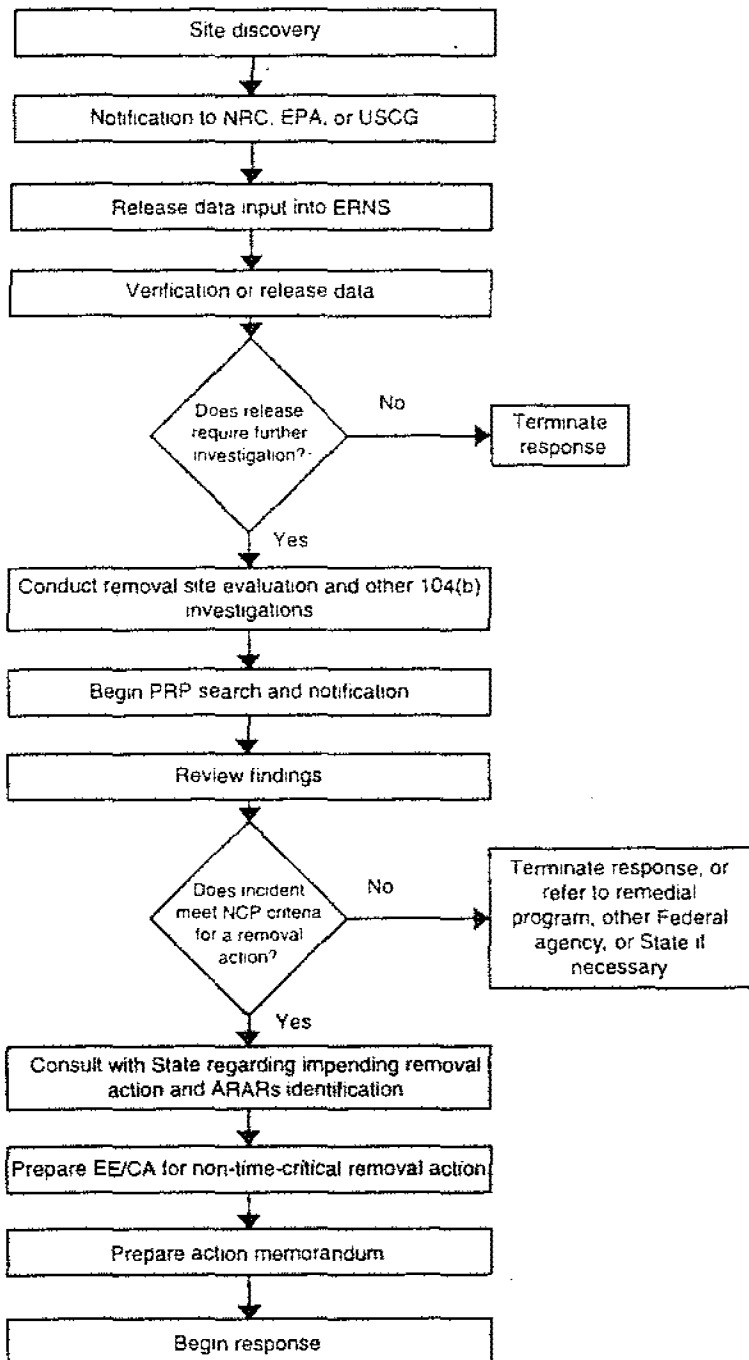
## Discovery or Notification

According to §300.405 of the NCP, a release may be discovered through the following mechanisms, among others:

- Notification in accordance with sections 103(a) or (c) of CERCLA, whereby any person in charge of a vessel or an onshore or offshore facility is required to notify the NRC as soon as that person has knowledge of any release of a hazardous substance involving a reportable quantity (RQ);
- Investigation by governmental authorities, conducted under section 104(e) of CERCLA or other statutory authorities;
- Notification of a release by a Federal or State permittee when required by the permit (e.g., under the Clean Air Act (CAA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA), Safe Drinking Water Act (SDWA));
- Inventory or survey activities, or random or incidental observation by government agencies, PRPs, or the public; or

## RESPONSE DECISION PROCEDURES

EXHIBIT 1. OVERVIEW OF REMOVAL ACTION DECISIONMAKING PROCESS\*



\* Order of events for illustrative purposes only. Some events may be concurrent.

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## **RESPONSE DECISION PROCEDURES**

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- Submission of a citizen petition to EPA or the appropriate Federal facility requesting a preliminary assessment, in accordance with section 105(d) of CERCLA.

When necessary, notification must also be made in accordance with other environmental statutes and regulations, including: CWA section 311; RCRA Subtitle C; Toxic Substances and Control Act (TSCA) section 8(e); reporting requirements established under the Hazardous Materials Transportation Act; and requirements established by the Nuclear Regulatory Commission for reporting releases of certain radioactive substances.

In addition to the mechanisms outlined above, section 304 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) requires notification of releases involving hazardous substances and extremely hazardous substances (EHSs), as defined under section 302(a), from facilities at which hazardous chemicals are produced, used, or stored. Of the 360 EHSs, 134 also have RQs established pursuant to CERCLA section 102. The remaining EHSs may be designated as CERCLA substances in the near future. Until that time, facility owners or operators must report only EHSs classified as CERCLA substances to the NRC. Those substances that are classified as EHSs, as well as CERCLA hazardous substances, also must be reported to State Emergency Response Commissions (SERCs) and Local Emergency Planning Committees (LEPCs) according to the criteria listed under EPCRA section 304(a)(2).

Following notice of a release, the OSC must determine whether the incident may require a removal action pursuant to §300.415(b) of the NCP. If the release meets the NCP criteria, the OSC should begin a removal site evaluation; otherwise, the OSC should refer the release to either EPA remedial response staff to conduct a site evaluation pursuant to §300.420 of the NCP, or another appropriate Federal or State authority.

### **Removal Site Evaluation**

Section 300.410 of the NCP directs EPA to conduct, as appropriate, a removal site evaluation of a release or threatened release identified for a possible removal action as promptly as possible. The removal site evaluation comprises a removal preliminary assessment (PA) and a removal site inspection (SI). During a removal site evaluation, the OSC should consider the type of contaminant, concentration and form, action levels, and mitigation options. The OSC has responsibility for conducting this evaluation for EPA-lead removal actions.

According to §300.410(c)(1) of the NCP, the removal PA may include but is not limited to:

- Identification of the source and nature of the release or threat of release;
- Evaluation of the threat to public health by ATSDR or other sources (e.g., State public health agencies);

## **RESPONSE DECISION PROCEDURES**

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- Evaluation of the magnitude of the threat;
- Evaluation of factors necessary to make the determination of whether a removal action is necessary; and
- Determination of whether a non-Federal party is undertaking proper response.

In addition to the above information, the OSC must incorporate any special procedures or technical criteria EPA has established for a variety of special, complex cases. These cases include removal actions involving temporary relocation; contamination of drinking water, structures, or private residences [8]; floodplains and wetlands [9]; Native American lands; and contamination anywhere due to radioactive wastes or naturally occurring substances [10].

Depending upon the characteristics of the release and urgency of the situation, the removal PA may require anywhere from an hour to several weeks. The OSC may undertake a variety of activities to collect the necessary information. For example, a removal PA may include the collection or review of data such as site management practices, information from generators, photographs, analysis of historical photographs, literature searches, and personal interviews. In general, the removal PA for emergencies will rely primarily on readily available, existing information and on any available sample data. When the incident allows for longer evaluation, the removal PA may include more analytical and monitoring efforts. For example, the OSC should conduct more extensive sampling to better document the actual or potential threats to public health, welfare, or the environment. When time allows, OSCs also should use existing environmental and health standards as triggers for initiating response and as guidelines in determining response actions. Assistance for removal PAs is commonly provided by ERT, ATSDR, or START. (Because START is a contractor resource, assistance for removal PAs provided by START should be limited to assessment activities, and should not include any type of removal action evaluation.)

The OSC is also responsible for initiating a PRP search during the removal PA to identify and compel/negotiate with legally responsible parties to take corrective action. OSCs have several resources for assistance with the PRP search, including Regional enforcement staff, the Office of Regional Counsel, and contractor resources. In addition, OSCs or other enforcement personnel must notify the appropriate National Enforcement Investigations Center (NEIC) immediately when criminal activity is suspected [11]. Enforcement activities are ongoing throughout the course of a removal action.

If additional information is needed, the OSC can perform a removal SI that may include an on- or off-site (perimeter) inspection, taking safety into consideration. Moreover, OSCs may conduct further studies or investigations as part of the removal site evaluation under CERCLA section 104(b).

## **RESPONSE DECISION PROCEDURES**

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Section 300.410(f) of the NCP provides that a removal site evaluation will be terminated, as appropriate, when the OSC or lead agency determines:

- There is no release or threat of release;
- The source is neither a vessel nor a facility as defined in §300.5 of the NCP;
- The release does not involve a hazardous substance or a pollutant or contaminant that may pose an imminent and substantial danger to public health or welfare;
- The release consists of a situation specified in §§300.400(b)(1), (2), and (3) of the NCP that is subject to limitations on response (see p. 8);
- The amount, quantity, or concentration released does not warrant Federal response;
- 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
- The removal site evaluation is completed.

The results of the removal site evaluation should be documented and included in the administrative record. OSCs are strongly encouraged to submit POLREPS to the appropriate Regional Coordinators, the RRT, and other appropriate agencies, documenting situations where removal PAs were initiated, but no removal actions were conducted. At the conclusion of the removal site evaluation, if the OSC determines that natural resources have been or are likely to be damaged by the release, the OSC or lead agency must promptly notify State and Federal trustees of the affected natural resources so that the trustees may initiate appropriate actions according to Subpart G of the NCP. If remedial action under §300.430 of the NCP is indicated, the OSC should refer the incident, together with all information from the removal site evaluation, to remedial response personnel for further activity.

### **CERCLA Section 104(b) Investigations**

Section 104(b) of CERCLA provides for planning, legal, fiscal, economic, engineering, architectural, and other studies or investigations that may be necessary or appropriate to plan and direct response actions. CERCLA section 104(c)(1) *exempts these costs and the time expended implementing these activities from the 12-month/\$2 million statutory limitations* (see p. 6).

## **RESPONSE DECISION PROCEDURES**

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Studies or investigations under section 104(b) may be conducted as part of the removal site evaluation for an observed or suspected hazardous substance release when the OSC requires more information to determine the need for, extent of, or best method to conduct a removal action. The ERT, START, and NCLP can provide support for 104(b) investigations.

### **Responsible Party Search and Notification**

Section 300.415(a)(2) of the NCP requires that the lead agency, to the extent practicable, search for PRPs and attempt to have them perform the necessary removal action. Factors to consider when determining the potential for PRP involvement in the response include the urgency of the release, the status of enforcement activities, and the financial capability of the responsible party. In certain instances where a pure product has been released, the manufacturer or distributor responsible for the release can be prevailed upon to undertake retrieval of the product. Before seeking CERCLA funding, the OSC, with assistance from the Office of Regional Counsel, should make a reasonable effort to identify and compel/negotiate with legally responsible parties to undertake the necessary response actions. The level of effort determined to be reasonable in identifying and compelling/negotiating with potentially responsible parties will depend upon the immediacy and seriousness of the release situation. Efforts to identify responsible parties must include, at a minimum, oral inquiries of available sources who may be knowledgeable of the situation [1].

When possible, the Regional program office should issue notice letters to identified PRPs concerning their possible liability and inform them of the intended response action prior to the initiation of a removal action. Regional enforcement staff in the Office of Regional Counsel, in consultation with OSCs, develop notice letters, which are issued subsequently by the Regional Administrator or the Administrator's designee. During emergency situations, however, OSCs may notify PRPs in person or over the telephone. The Regional Office then confirms the oral notification and any requests for response by sending the PRP a general notice letter, which should be reviewed by the Office of Regional Counsel when time permits. For non-time-critical removal actions, special notice letters may be issued to invoke formal negotiations and a 60-120 day moratorium on EPA response actions [1].

### **Coordinating With Other Agencies**

In addition to PRP response, the OSC must evaluate the potential for response by other Federal, State, or local agencies. Other Federal agencies have lead responsibility for undertaking and financing removal actions at their own facilities, except emergencies at non-DOD and non-DOE facilities. Factors to consider when evaluating the potential for State and local response are the urgency of the situation and the ability and willingness of relevant agencies to take action.

## **RESPONSE DECISION PROCEDURES**

If a Fund-financed removal action is appropriate, the OSC should consult with the State before initiating action and request a list of ARARs from the appropriate State agency. In addition, the OSC must notify State and Federal trustees of potential injuries to natural resources. For emergency removal actions, however, the OSC should not delay response in order to identify ARARs.

### **Compliance With ARARs**

As provided in §300.415(j) of the NCP, removal actions must meet ARARs of other Federal and State environmental and public health laws to the extent practicable, considering the exigencies of the situation. The timing of ARARs identification, therefore, varies from site to site, depending upon the urgency of the situation. The removal process is intended to be flexible, and the need for prompt response may require that the removal action be implemented immediately, prior to the identification of ARARs.

For emergency removal actions, OSCs should not delay response in order to identify potential ARARs. During most time-critical removal actions, OSCs should identify potential ARARs during the removal site evaluation phase and assess them before initiating any response actions. During non-time critical removal actions, sufficient time should be available for OSCs to ensure that ARAR determinations are based upon a reasonable understanding of site characteristics. In particular, preparing the engineering evaluation/cost analysis (EE/CA) as described below should allow OSCs to fully consider ARARs during all non-time-critical removal actions [12].

### **Engineering Evaluation/Cost Analysis**

EE/CAs are required for non-time-critical removal actions. The EE/CA process includes:

- Conducting a removal site evaluation to indicate that the site meets the criteria for initiating a removal action;
- Notifying PRPs of their liability;
- Preparing an EE/CA approval memorandum documenting that the site meets removal action criteria and securing management approval to conduct the EE/CA; and
- Preparing the EE/CA study documenting the comparative analysis of removal action options.

The resulting EE/CA should contain information on site characteristics, identification of removal action objectives, and identification and analysis of removal action alternatives. The

## **RESPONSE DECISION PROCEDURES**

completed EE/CA must be placed in the administrative record. At the same time, a notice of EE/CA availability must be published in a local newspaper with a brief summary of the EE/CA and an announcement of a public comment period of at least 30 days. Upon conclusion of the public comment period, a written response to significant comments is prepared and placed in the administrative record [13].

### **Determining the Need For a Removal Action**

§300.415(a) of the NCP provides that in determining the appropriate extent of response at a release, the OSC will:

- Review the removal site evaluation, any information produced through a remedial site evaluation if one has been conducted previously, and current site conditions, to determine if a removal action is appropriate;
- Make an initial effort, where responsible parties are known, to determine whether they can and will perform the necessary removal action;
- Make an initial effort, where responsible parties are unknown, to locate them and have them perform the necessary removal action; and
- Document that the time frame for response is more appropriate for removal than remedial response.

At any release, regardless of whether the site is on the NPL, the OSC may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the actual or potential release and the resulting threat if the OSC determines, based on the factors in §300.415(b)(2) of the NCP, that there is a threat to public health, welfare, or the environment. The OSC should consider the following factors in determining the appropriateness of a removal action: (1) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants; (2) actual or potential contamination of drinking water supplies or sensitive ecosystems; (3) hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release; (4) high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; (5) weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; (6) threat of fire or explosion; (7) the availability of other appropriate Federal or State response mechanisms to respond to the release; and (8) other situations or factors that may pose threats to public health or welfare or environment.

## **RESPONSE DECISION PROCEDURES**

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Exhibit 2 presents a checklist of activities that should be conducted prior to undertaking a removal action, depending upon the urgency of the situation. OSCs must ensure that appropriate activities are thoroughly documented in order to demonstrate that a decision to undertake a removal action is consistent with CERCLA, the NCP, and program delegations, policies, and procedures. This documentation, along with the final decision document – the Action Memorandum – is placed in the administrative record.

## RESPONSE DECISION PROCEDURES

### EXHIBIT 2. RESPONSE DECISIONMAKING CHECKLIST

The following checklist has been developed to assist OSCs in conducting or coordinating the activities needed to determine whether a removal action is necessary. The OSC should determine that the following activities are completed when appropriate:

#### Notification

- ☐ Notify NRC of release or threatened release if incident was reported directly to EPA.
- ☐ Notify State and Federal trustees of damage or potential damage to natural resources.
- ☐ Notify potentially responsible parties of liability (orally, if necessary, followed by written confirmation).

#### Removal Site Evaluation

- ☐ Conduct removal preliminary assessment based upon readily available information, such as a review of data, photographs, and personal interviews.
- ☐ Submit Pollution Reports to the Regional Coordinator to document situations where removal PAs were initiated, but the determination was made not to conduct a removal action.
- ☐ Conduct removal site inspection if time is available to obtain more information, such as sampling results and off-site investigations.
- ☐ Conduct other CERCLA section 104(b) investigations as necessary (NOTE: 104(b) investigation costs do not count towards the removal action project ceiling or the \$2 million statutory limit).
- ☐ Document findings of removal site evaluation and associated investigations appropriately.
- ☐ Compare results of removal site evaluation against CERCLA/NCP removal criteria; refer incident to State, remedial program, or other Federal agency as appropriate.

#### Coordination with States

- ☐ Consult with State regarding impending removal action
- ☐ Request list of potential applicable or relevant and appropriate requirements from State.

#### Decision Documentation

- ☐ Prepare EE/CA for non-time-critical removal actions.
- ☐ Publish notice of availability and brief description of the EE/CA, and hold a public comment period of at least 30 days, as appropriate.
- ☐ Prepare written response to significant comments.
- ☐ Determine the need for an exemption to the \$2 million or 12-month statutory limits on removal actions.
- ☐ Prepare appropriate Action Memorandum.



## APPENDIX A. REFERENCES<sup>2</sup>

### Guidance

- [1] OSWER Dir. 9837.2-A, "Enforcement Project Management Handbook" (January 1991).
- [2] OSWER Dir. 9360.0-18, "Removal Program Priorities" (March 31, 1988).
- [3] OSWER Dir. 9360.3-01, "Superfund Removal Procedures: Action Memorandum Guidance" (December 1990).
- [4] OSWER Dir. 9360.0-12A, "Final Guidance on Implementation of the 'Consistency' Exemption to the Statutory Limits on Removal Actions" (June 12, 1989).
- [5] OSWER Dir. 9360.0-19, "Guidance on Non-NPL Removal Actions Involving Nationally Significant or Precedent-Setting Issues" (March 3, 1989).
- [6] OSWER Dir. 9360.6-08, "Technical Assistance Team (TAT) Contracts Users' Manual" (December 1991).
- [7] OSWER Dir. 9360.2-02, "Policy on Management of Post-Removal Site Control" (December 3, 1990).
- [8] OSWER Dir. 9360.1-10, "Interim Final Guidance on Removal Action Levels at Contaminated Drinking Water Sites" (October 6, 1987).
- [9] OSWER Dir. 9280.0-02B, "Policy on Floodplains and Wetlands Assessments for CERCLA Actions" (August 6, 1988).
- [10] OSWER Dir. 9360.0-8, "Removal Actions at Methane Release Sites (Release of Naturally Occurring Substances)" (January 23, 1986).
- [11] OSWER Dir. 9360.3-06, "Superfund Removal Procedures: Removal Enforcement Guidance for On-Scene Coordinators" (April 1992).

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<sup>2</sup> Bracketed numbers appear throughout the text and correspond to the references listed in this appendix. These references may be consulted for additional information on specific topics affecting the removal response decision.

## **Guidance (continued)**

[12] OSWER Dir. 9360.3-02, "Superfund Removal Procedures: Guidance on the Consideration of ARARS During Removal Actions" (August 1991).

[13] OSWER Dir. 9360.0-32, "Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA" (August 1993).

## **Statutes and Regulations**

The Clean Air Act, as amended, 42 USC 7401-7671q.

The Clean Water Act of 1977, 33 USC 1251-1376.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 USC 9601-9675.

Cooperative Agreements and Superfund State Contracts for Superfund Response Actions, 40 CFR Part 35, Subpart O.

The Emergency Planning and Community Right-to-Know Act of 1986, 42 USC 11001-11050.

The Hazardous Materials Transportation Act of 1976, as amended, 49 USC 1805-1812.

The National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300, 55 FR 8666-8865 (March 28, 1990).

The Resource Conservation and Recovery Act of 1976, as amended, 42 USC 6901-6987.

The Safe Drinking Water Act of 1974, as amended, 42 USC 300R-300J-9.

The Solid Waste Disposal Act of 1976, as amended, 42 USC 6903-6948.

The Toxic Substances Control Act of 1976, 15 USC 2601-2654.

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