REGIONAL RESPONSE TEAM

FEDERAL REGION III

RRT III

Environmental Protection Agency

U.S. Coast Guard

Department of Agriculture

Department of Commerce

Department of Defense

Department of Energy

Department of Health and Human Services

Department of Interior

Department of Justice

Department of Labor

Federal Emergency Management Agency

Commonwealths of: Pennsylvania Virginia District of Columbia

States of: Delaware Maryland West Virginia

From: Chairmen, Federal Region III Standing Regional Response Team

To: Distribution

Subj: FEDERAL REGION III OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

Date: June 1, 1991

Attached is the June 13, 1991 Federal Region III Oil and Hazardous Substances Pollution Contingency Plan.

We have revised the Federal Region III Contingency Plan (RCP) to reflect the changes in the March 8, 1990 NCP. This revison constitutes a major update of the RCP. The plan follows the outline of the NCP subparts A - K, with the addition of regional ANNEXES I - XI which provide Region III specific Federal, State and local participation and RRT policy and procedures. We have tried to make the RCP easier to read, through the elimination of unnecessary numbering, and duplication. We recommend the reader become familiar with the entire UPDATED plan. This plan is effective upon receipt and supersedes the previous plan in its entirety. The superseded plan should be destroyed.

Pending changes to the National Contingency Plan, as required by the Oil Pollution Act of 1990, future revisions to this plan may be required. Any change to this plan will be designated as such and consecutively numbered.

We invite comments and recommendations regarding this plan; they should be addressed to either Standing RRT Co-Chair. This plan will be kept under continual review and additional informational changes or corrections will be promulgated as necessary in accordance with the requirement of the NCP.

Dennis Carney
U.S. EPA Region III
Co-Chairman, Federal Region III
Standing Regional Response Team

P. A. Turlo, CDR, U.S.C.G.
U.S.C.G. District 5
Acting Co-Chairman,
Federal Region III
Standing Regional Response Team

Attachment

Commander (m), Fifth Coast Guard District
431 Crawford Street
Portsmouth, VA 23705-5004

Chief, Superfund Removal Branch
U.S. Environmental Protection Agency,
Region III
841 Chestnut Building
Philadelphia, PA 19107

printed on recycled paper

STANDARD FEDERAL REGION III

REGIONAL OIL AND HAZARDOUS SUBSTANCES

POLLUTION CONTINGENCY PLAN

JUNE 1991

RECORD OF AMENDMENTS

Amendment No.	Amendment Date	Entered By	Date Entered

TABLE OF CONTENTS

SUBPART A - INTRODUCTION

I. Purpose and Objectives

A) The Region III Regional Contingency Plan (RCP) is prepared in compliance with the National Contingency Plan (NCP). The RCP represents the chief working document for the Regional Response Team (RRT) in preparedness and response activities.

B) This Plan provides for a coordinated and integrated response by departments and agencies of the Federal Government to protect the environment in the event of an oil discharge or the release of hazardous materials. This Plan coordinates and provides directions for Federal, state, and local response systems and supports the development of local government and private capability to handle such incidents. The objective of this Plan is to provide for efficient, coordinated, and effective action by all government agencies to minimize damage from oil discharges and hazardous substance releases.

II. Authority and Applicability

A) The Federal Water Pollution Control Act (FWPCA), as amended by the Clean Water Act of 1977 (CWA), the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Oil Pollution Act of 1990 (OPA90) state that the President shall prepare and publish a National Contingency Plan for removal of oil and hazardous substances. Such a plan shall ensure effective and immediate removal of a discharge, and mitigaiton or prevention of a substantial threat of a discharge, of oil or a hazardous substance. Accordingly, the Environmental Protection Agency developed the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300).

B) The NCP calls for the establishment of a nationwide system of Regional Contingency Plans based on Standard Federal Regions. This plan is part of that system and encompasses Standard Federal Region III, which includes:

- Commonwealth of Pennsylvania,
- Commonwealth of Virginia,
- State of Delaware,
- State of Maryland,
- State of West Virginia,
- District of Columbia.

C) See ANNEX III for maps of the region.

D) This plan is applicable to response operations taken by all Federal, State and local agencies within Standard Federal Region III, pursuant to the authorities under CERCLA/SARA, Section 311 of the FWPCA, and the Oil Pollution Act of 1990.

III. Scope

A) This plan is effective for all areas within Standard Federal Region III. The plan applies to discharges or substantial threats of discharge of oil and to releases or substantial threats of release of hazardous substances, pollutants, or contaminants which may present an imminent and substantial danger to public health or welfare and the environment.

B) The provisions of this plan are applicable to all Federal agencies. This plan is based upon the NCP and may be complemented by Federal interagency and local assistance plans and agreements.

IV. Abbreviations and Acronyms - Abbreviations as used in the NCP are used in this Plan without change. A more complete list of abbreviations and acronyms used in this RCP can be found in APPENDIX 1.

A) Federal Department and Agency 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 - U.S. Environmental Protection Agency
FEMA - Federal Emergency Management Agency
HHS - Department of Health and Human Services
NCP - National Oil and Hazardous Substances Contingency Plan
NIOSH - National Institute for Occupational Safety and Health
NOAA - National Oceanic and Atmospheric Administration
NRC - National Response Center

NOTE: The abbreviation NRC WILL NOT be used in the RCP as a reference to the Nuclear Regulatory Commission.

OSHA - Occupational Safety and Health Administration
RSPA - Research and Special Programs Administration
USCG - U.S. Coast Guard
USDA - Department of Agriculture

B) Operational Abbreviations:

ARARs - Applicable or Relevant and Appropriate Requirements
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS - CERCLA Information System
CRC - Community Relations Coordinator
ERT - Environmental Response Team
FCO - Federal Coordinating Officer (in disaster areas)
FS - Feasibility Study
HRS - Hazard Ranking System
LEPC - Local Emergency Planning Committee
NRT - National Response Team
NRU - National Response Unit
NSF - National Strike Force
O&M - Operation and Maintenance
OSC - On-Scene Coordinator; Federal On-Scene Coordinators are usually predesignated by EPA and USCG
PIAT - Public Information Assistance Team
RA - Remedial action
RAT - Radiological Assistance Team
RCP - Regional Contingency Plan
RD - Remedial Design
RI - Remedial Investigation
ROD - Record of Decision
RPM - Remedial Project Manager
RQ - Reportable Quantity
RRC - Regional Response Center
RRT - Regional Response Team
SERC - State Emergency Response Commission
SI - Site Inspection
SMOA - Superfund Memorandum of Agreement
SSC - Scientific Support Coordinator

V. Definitions - An extensive glossary of terms used in the NCP and this plan can be found in APPENDIX 2.

A) Regional Response Team - Group responsible for regional planning and coordination of preparedness and response actions made up of federal agencies that make up the NRT plus state and local representatives.

B) Standing RRT - made up of all members agencies and provides the appropriate regional mechanism for development and coordination of preparedness activities before a response action is taken.

C) Incident-Specific RRT - formed from the standing team when RRT is activated for a response to provide coordination of assistance and advice to the OSC during response action. Agency participation will depend on the technical nature of the incident and its geographic location.

VI. Distribution - This plan will be distributed to all members of the RRT in accordance with ANNEX I and will be available at all designated RRC Regional Response Centers.

VII. Use of Number and Gender - As used in this plan, words in the singular also include the plural and masculine words also include the feminine and vice versa.

SUBPART B - RESPONSIBILITY AND ORGANIZATION FOR RESPONSE

I. Duties of the President Delegated to Federal Agencies - In Executive Orders 11735 and 12580 the President delegated certain functions and responsibilities vested in him by the CWA, CERCLA, and OPA, respectively.

II. General Organizational Concepts - The Federal Response System has been established by the CWA, SARA, and OPA. Through executive order and the National Contingency Plan an organization is in place that deals with four jurisdictions of planning and response -- National, Regional, State, and Local. Each level in turn is composed of three broad elements -- the response team, the response center, and the contingency plan.

III. National Response Team - A discussion of the NRT and its responsibilities and functions is presented in Section 300.110 of the NCP and remains unchanged in this plan.

IV. Regional Response Team - 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 during such response actions. The RRT consists of two principal components through the establishment of a Standing and Incident-Specific RRTs.

A) The Standing RRT - The Standing RRT serves as the regional body for planning and preparedness actions before a response action is taken.

1) The Standing RRT will:

a. provide for review of regional and local responses to discharges or releases.

b. consider available legal remedies, equipment readiness, and coordinate among responsible public agencies and private organizations.

c. recommend revisions of the National Contingency Plan to the NRT based on observations of response operations.

d. consider and recommend necessary changes to the RCP based on continuing review of response actions in the region.

e. review OSC actions to help ensure that Federal regional and area contingency plans are implemented satisfactorily.

f. respond to major discharges or releases outside the region when requested by NRT.

g. meet at least semi-annually to review response actions carried out during the preceding period, and consider changes in Federal regional and OSC contingency plans.

h. prepare annual work plans to coordinate emergency response and preparedness activities.

i. provide letter reports on their activities to the NRT twice a year, no later than January 31 and July 31. At a minimum, reports will summarize recent activities, organizational changes, operational concerns, and efforts to improve state and local preparedness.

j. provide technical assistance and training to local emergency planning committees and review local emergency response plans when requested to do so by the LEPC and SERC.

2) Standing RRT Membership

a. **Federal Agencies**
List of RRT representatives can be found in ANNEX II.

Dept of Agriculture	-	U. S. Forest Service, Broomall, PA
Dept of Commerce	-	NOAA Coastal Resource Coordinator, Philadelphia, PA
Dept of Defense	-	No RRT Representative, only NRT has designated representative.
Dept of Energy	-	VA/WV:Oak Ridge Operations Office, Oak Ridge, TN
	-	PA/DE/MD/DC:Brookhaven Area Office, Upton, NY
Dept of Health & Human Services	-	Public Health Service-Region III, Philadelphia, PA
Dept. of the Interior	-	Office of Environmental Affairs Philadelphia, PA
Dept. of Justice	-	Land & Natural Resources Division, Environmental Enforcement Section Washington, DC 20430
Dept. of Labor	-	OSHA Technical Support Philadelphia, PA
Dept. of State	-	No representative designated. NRT representative only.

Dept. of Transportation	-	Commander (m), Fifth Coast Guard district Portsmouth, VA
Environmental Protection Agency	-	EPA Region III, Superfund Removal Branch Philadelphia, PA
Federal Emergency Management Agency	-	FEMA Region III Philadelphia, PA

b. **State Agencies**

List of RRT representatives can be found in ANNEX II.

District of Columbia	-	Department of Consumer and Regulatory Affairs Environmental Control Division Washington, DC
Delaware	-	Department of Public Safety Emergency Planning & Operations Division Delaware City, DE
Maryland	-	Maryland Department of the Environment Hazardous/Solid Waste Management Administration Baltimore, MD
Pennsylvania	-	Dept of Environmental Resources Office of Environmental Protection Harrisburg, PA
Virginia	-	Department of Emergency Services Richmond, VA
West Virginia	-	Department of Natural Resources Charleston, WV

3) List of SERCs

District of Columbia	-	Office of Emergency Preparedness Washington, DC
Delaware	-	Dept. of Public Safety Emergency Planning and Operations Div. Delaware City, DE
Maryland	-	Maryland Emergency Management Agency Baltimore, MD
Pennsylvania	-	Pennsylvania Emergency Management Agency Harrisburg, PA
Virginia	-	Department of Waste Management Richmond, VA
West Virginia	-	Department of Natural Resources Charleston, WV

B) Incident-Specific RRT - An Incident-Specific RRT is formed from the standing team during a response.

1) An Incident-Specific RRT may be activated during a pollution emergency upon a request from the OSC, from the chairperson of the Incident-Specific RRT, or from any member of the standing RRT to the appropriate chairperson.

2) Depending on the location of a pollution incident, one of six individuals may serve as the Chairperson of an incident specific RRT:

a. The Regional Administrator, EPA Region III, provides the Incident Specific RRT Chairman for all inland areas of Standard Federal Region III.

b. The Commander, Second Coast Guard District, provides the Incident Specific RRT Chairman for all areas where Standard Federal Region III overlaps Second Coast Guard District and the Coast Guard is serving as the OSC.

c. The Commander, Fifth Coast Guard District provides the Incident-Specific RRT Chairman for all area where Standard Federal Region III overlaps Fifth Coast Guard District and the Coast Guard is serving as the OSC.

d. The Commander, Ninth Coast Guard District, provides the Incident-Specific RRT Chairman and OSC for the Great Lakes coastal areas of Pennsylvania.

e. The Department of Defense (DOD) representative will serve as the Incident-Specific RRT Chairperson for hazardous substances incidents involving DOD OSCs. For oil incidents the Incident-Specific RRT will by chaired by EPA or USCG.

f. The Department of Energy (DOE) representative will serve as the Incident-Specific RRT Chairperson for hazardous substances incidents involving DOE OSCs. For oil incidents the Incident-Specific RRT will be chaired by EPA or USCG.

3) The Incident-Specific RRT will be activated as an intergovernmental Coordination Team by an authorized chairperson when a discharge:

a. exceeds the response capability available to the OSC in the place where it occurs.

b. transects state boundries.

c. transcends EPA regional or USCG district boundaries.

d. may pose a substantial threat to the public health or welfare or the environment, or to regionally significant amounts of property.

NOTE: The Incident-Specific RRT shall be activated automatically in the event of a major or potential major discharge or release.

4) When a discharge treatens or may threaten a natural resource the natural resource trustee will always be members of the Incident-Specific RRT.

5) When activated for a discharge or release, Agency representatives will meet at the call of the chairperson and may:

a. monitor and evaluate reports from the OSC. The Incident-Specific RRT may advise the OSC on the duration and extent of the Federal response and may recommend to the OSC specific actions in responding to the discharge or release,

b. request other Federal, state, or local government, or private agencies to provide resources under their existing authorities to assist the OSC in the response efforts,

c. aid the OSC in preparing information releases for the public and assist the OSC in communications with the NRT,

d. if the circumstances warrant, advise the regional or district head of the agency providing the OSC that a different OSC should be designated, and

e. submit situation reports to the NRC as significant developments occur. The times of activation and deactivation should be included in these reports generated by the RRT chairperson.

V. On-Scene Coordinators and Remedial Project Managers - This section outlines the role and responsibility of the OSC for the purpose of the RCP and is an addition to the general discussion of the OSC/RPM responsibilities presented in Section 300.115 of the NCP.

A) Predesignated OSC: The EPA and the USCG provide predesignated On-Scene Coordinators (OSCs) within their respective areas. Consistent with the NCP Sections 300.120 and 300.125, the OSC will supervise all federally funded response and cleanup efforts within Standard Federal Region III. As part of the planning and preparation for response, the OSC shall be predesignated by the EPA Regional Administrator for the inland zone and by USCG Commandant for the coastal zone. The specific geographical areas of responsibility for OSCs are outlined in ANNEX III.

B) The DOD and DOE shall designate the OSC for releases of hazardous substances, pollutants, or contaminants from DOD and DOE facilities and vessels.

C) The OSC shall ensure that all discharges/potential discharges where responsible parties have accepted liability to the degree necessary are monitored to insure all statutory/regulatory mandates are fulfilled.

D) The OSCs must ensure community relations are adequately addressed. This may be accomplished by establishing a joint information coordination center and the implementation of a community relations plan on-scene by working through members of the LEPC.

E) OSCs should be aware of the information contained in local emergency response plans which the LEPCs have developed.

F) The role and responsibility of the RPM is presented in the NCP and remains unchanged in this plan.

VI. Incident Notification Requirements - Notification of an oil discharge or a hazardous substance release in an amount equal to or greater than the reportable quantity must be made immediately to the NRC in accordance with 33 CFR Part 153, Subpart B, Section 103(a) of CERCLA and 40 CFR Parts 117 and 302. Notification shall be made to the NRC Duty Officer, at telephone number (800)424-8802 or (202) 267-2675. All notices of discharges or releases received at the NRC will be relayed to the OSC who will notify the appropriate state(s).

A) The National Response Center (NRC)

1) The NRC, located at USCG Headquarters in Washington, DC, is a national communications center, continuously manned for handling activities related to response actions. The NRC acts as the single point of contact for pollution incident reporting and as the NRT communications center.

2) The NRC maintains a technical library on oil and hazardous substances and can evaluate chemical hazard discharges. The NRC provides facilities for the NRT to use in coordination of national response action when required.

B) The Regional Response Center (RRC) - The RRC is the regional site for notification, communication, and inter-agency coordination by the lead agency during a pollution incident. The EPA and USCG maintain RRCs. See ANNEX VIII for RRC communications capabilities.

1) When an incident occurs in the Inland Zone of Region III, the RRC will be located in the EPA Regional Office Philadelphia, Pennsylvania. The RRC will provide a duty officer (OSC) and will coordinate communication, information, limited supplies and equipment and other personnel and facilities necessary to allow proper functioning and administration of this Plan.

2) When an incident occurs in the Coastal Zone or in specified harbor areas of Region III, the RRC will be located at the appropriate Coast Guard District office. The Coast Guard has three district offices that serve Federal Region III, although only one of them is physically located within the region. The geographical areas served by the Coast Guard RRCs are defined in detail in ANNEX III.

a. Incidents involving vessels in specified harbor areas in southwestern Pennsylvania and West Virginia:

Commander (m)
Second Coast Guard District
St. Louis, MO

b. Incidents occurring in Eastern Pennsylvania, Delaware, Maryland, Virginia, and the District of Columbia:

Commander (m)
Fifth Coast Guard District
Portsmouth, VA

c. Incidents occurring in the Great Lakes area of Northwestern Pennsylvania:

Commander (m)
Ninth Coast Guard District
Cleveland, OH

C) SERC and LEPC Notification - SARA Section 304(b) requires notification of the SERC and community emergency coordinator of the LEPC in the event of a spill or release of any SARA 302(a) extremely hazardous substance (EHS) in an amount equal to or greater than the reportable quantity (RQ) for the chemical. For any EHS chemical which is also on the CERCLA Section 103(a) list, notification should be made to the NRC, SERC and community emergency coordinator of the LEPC.

VII. RRT Alert (RRT Notification)

A) Notification is the act of alerting by telephone for information purposes some or all members of the response community of an actual or potential release of oil or hazardous substance. Prompt notification will allow response agencies, in addition to the OSC, to implement appropriate response actions.

B) This section addresses only how the Regional Response Team members will be notified. Upon notification of the incident, the RRT members should consider if any of their agency resources might be of assistance to the OSC. If so, the RRT members should take the initiative to inform the chair or the OSC of those resources, rather than waiting for a specific request for assistance from the OSC.

1) Notifications of the local response team, affected states, Special Forces, and natural resource trustees (state, USDA, DOE, DOC, DOI, and DOD) will be made directly by the OSCs based on agreed criteria, in a timely manner, usually within the first two hours of receiving the report.

2) Incident-Specific RRT members will be notified by the chair or his representative in a timely manner, on the first day of the incident if it occurs during the week or on the first workday if it occurs on a weekend. Notification should occur when the quantity of hazardous substance released is a potential or actual major threat to the environment or human health. The action levels for oil are displayed in the table below.

Type	Location (CG/EPA)	Quantity released
oil/potential	inland zone	over 10,000 gals
oil/actual	inland zone	over 1,000 gals
oil/potential	coastal zone	over 100,000 gals
oil/actual	coastal zone	over 10,000 gals

3) The Standing (complete) RRT will be notified of actual oil discharges over 100,000 gallons and significant hazardous substance releases.

4) The duty officer in the NRC or the RRC receiving the initial report should obtain the following information:
   a. Name of vessel or facility
   b. Location of vessel or facility (coordinates/nearest buoy; street address) and phone number.
   c. Location and time of release
   d. Materials released - quantity (actual release and potential), chemical composition, viscosity, specific gravity, and pour point for oil, check spelling of chemical
   e. On-scene weather
   f. Situation status
   g. Potential spiller/responsible party
   h. Time when next update will be available on E-mail hotline

5) If all of this information is not immediately available, notifications should still be made in a timely manner with the best available information. After the initial notification, subsequent situation updates will be available through the NOAA RRT E-mail system at 0800 daily for the duration of the incident.

VIII. RRT Activation

A) Activation is the alerting by telephone of some or all members of the Regional Response Team to an actual or potential discharge of oil or release of hazardous substance and requesting that they provide response assistance to the OSC or stand by to do so. The RRT can be activated for information purposes only (equivalent of notification), for an Incident-Specific RRT made up of some or all Standing RRT members. RRT representatives can request activation of the RRT.

B) At the discretion of the chair, an Incident-Specific RRT can also be convened on-scene. This, however, is an uncommon occurrence usually only during discharges or releases of major significance.

C) RRT members will initially be notified of RRT activation by the most rapid means available, normally the telephone. Upon activation, RRT members will automatically begin receiving copies of all message traffic from the RRC to the NRC. RRT telephone activation for information purposes only is the first step in RRT involvement. If required, the next level would be an RRT "assembly" via telephone conference call. RRT members can initially make a great contribution from their headquarters in meeting an OSC's requests for information and assistance. If there is an actual RRT on-scene assembly, each member's agency should be ready to provide assistance and advice over the telephone while the representative is enroute to the site of the assembly.

IX. On-Scene Communications

A) When more than one government (Federal or State) agency, i.e., in addition to the OSC, responds on-scene during an actual discharge of oil or release of hazardous substances, a common radio communications frequency and net will be designated to enhance on-scene communications and coordination among those agencies. Responders who need to be able to communicate with one another to effectively coordinate their activities include the principal (head) on-scene representatives of: the OSC, the affected state(s), the contractor and/or spiller, fire and police deparment, the USCG Strike Team, SSC, and U.S. Fish and Wildlife Service.

B) Typical radio communications requirements of a major response include: land to land, land to air, land to sea, sea to air, and spanning distances exceeding 20 miles.

C) The actual frequencies available for use are contained in the USCG OSC Local Contingency Plans in Section 1402.

D) Eventual interagency on-scene coordination frequencies (in the 800 Mhz) will be designated under FCC regional plans as required by regulation for the purpose of public safety. In the interim, it is the responsibility of the OSC to specify the frequency for on-scene interagency coordination for land-sea-air communications upon the arrival of the response elements on scene.

E) It is recommended that the OSC should pre-designate the on-scene coordination frequency by calling a meeting of the appropriate State and Federal communications specialists and tasking them to identify optimal working frequencies for land, sea, and air. Once this is accomplished, these pre-designated frequencies will be specified in the Local and Area Contingency Plans. If plan revisions are not imminently scheduled, correspondence will be sent to the appropriate responders informing them of the pre-designated on-scene coordination frequencies.

X. RRT Routine Correspondence -Standing RRT notices are used to provide routine information to RRT members and OSCs. Topics of these notices include standing RRT meetings, exercises, RCP changes, policy information, etc. The notices are issued as necessary by the RRT Chairs. Any RRT member wishing to have information included in an RRT Notice should submit it to:

Commander (m)
Fifth Coast Guard District
Federal Building
431 Crawford Street
Portsmouth, VA 23704-5004

U.S. Environmental
Protection Agency
Region III (3HW30)
Superfund Removal Branch
841 Chestnut Building
Philadelphia, PA 19107

XI. Response Operations - Response operations are described in the NCP Section 300.135 and remain unchanged in this plan.

XII. Multi-regional Responses

A) In the event that an actual or threatened discharge or release moves from the area covered by one regional contingency plan into another area, the authority to initiate pollution control actions shall likewise shift. In the event that an actual or potential incident affects areas covered by two or more regional plans, the response mechanisms called for by both plans shall be activated. The NRT will be notified in the event of a discharge which transcends regional boundaries and if necessary, the NRT will activate to coordinate cleanup efforts, personnel and equipment in the affected regions.

B) There shall be only one OSC at any time during the course of a response operation. Should a discharge or a release affect two or more areas, the OSC shall be designated by joint agreement of the USCG, EPA, and if appropriate, DOD. In making this designation, prime consideration will be given to the areas vulnerable to the greatest damage. The RRT shall designate the OSC if such agreement cannot be reached. The NRT shall designate the OSC if members of one RRT or two adjacent RRTs are unable to agree on the designation.

XIII. Special Teams and Assistance Available to OSC - Different Federal agencies can provide special forces, as delineated in the NCP, that an OSC may call upon for assistance during an oil discharge or hazardous material release. These special forces are described below. They may be requested through the agency's RRT member.

A) Department of Transportation - USCG Forces

1) **The National Strike Force (NSF)** consists of the LANT AREA (Atlantic Area Strike Force based out of Mobile, Alabama) and Pacific Strike Teams established by the USCG. The Strike Teams can provide communications support, advice, and assistance for oil and hazardous substances removal. The teams are equipped with specialized containment and removal equipment and have rapid transportation (i.e., aircraft, trucks) available. Coastal Region III falls within the geographical responsibility of the LANT AREA. Notification of the LANT AREA will serve to activate any of the NSF's capabilities.

2) When possible, the Strike Teams will assist in training OSC personnel in all facets of response activities including response staff organization, monitoring techniques, cleanup techniques, equipment use and deployment, and accounting procedures.

3) **OSC Emergency Task Force (ETF).** Each predesignated Coast Guard OSC maintains an ETF comprised of personnel from their staff. These personnel are trained and have the capability to assess a discharge situation for initiation of first response measures. They are also knowledgeable in the employment of Coast Guard and contractor owned response equipment to contain and remove discharges. Task force members also provide on-scene supervision and cleanup management under the guidance of the OSC. Information and evidence necessary to support legal actions against the potential discharger will also be gathered by task force personnel.

4) **Public Information Assist Team (PIAT).** The PIAT was created to assist OSCs in the dissemination of information to the media and the public. The PIAT members are trained in journalism, public relations, and photography and have knowledge of pollution response techniques, equipment, and applicable Federal laws. They are particularly useful in setting up and manning a news office. See ANNEX VII for details on the public information requirements and resources.

B) U.S. Environmental Protection Agency Forces

1) The **Environmental Response Team (ERT)** is located in Edison, New Jersey, and Cincinnati, Ohio. Their expertise supplements regional expertise that can assist an OSC in dealing with unique situations encountered during oil and hazardous substances incidents. ERT maintains trained personnel and can advise the OSC on:
   a. hazard calculations;
   b. risk assessment;
   c. multimedia sampling and analysis programs;
   d. on-site safety, including development and implementation of plans;
   e. cleanup techniques and priorities;
   f. water supply decontamination and protection;
   g. environmental assessments; and
   h. training courses.

2) The **Environmental Emergency Response Unit (EERU)** is contracted to ERT. The spill response group operates and maintains field ready equipment and provides site support services to the ERT. This unit is on call 24-hours a day. Its activities include monitoring equipment, conducting extent of contamination surveys and collecting multimedia samples. EERU provides both research and development (R&D). The R&D group tests prototype cleanup and control equipment and conducts courses to demonstrate the types of equipment tested.

3) The **Technical Assistance Team (TAT)** TAT is contracted to provide technical expertise for the response to and investigation of oil and hazardous substances incidents. The team has personnel trained in health and safety, multimedia field monitoring and sampling, incident documentation, cost monitoring, cleanup restoration, and disposal techniques for oil discharges and hazardous substances releases. TAT can also conduct initial response stabilization limited to $1,000 in cost.

4) The **Emergency Response Cleanup Services (ERCS)** contracting network may be used by the OSC to provide support for all Federally funded emergency cleanup operations on oil discharges and hazardous substances releases. ERCS contractors operate a 24-hour, seven day a week call centers to maintain response capability and accept and implement delivery orders. Delivery orders may be initiated in a predetermined response time to support the OSC with trained personnel and equipment to control, stabilize, cleanup, and subcontract transportation and disposal during oil and hazardous substances releases. Guidelines are contained in the ERCS Users' Manual.

C) Scientific Support Coordinator (SSC)

1) Scientific support is organized by EPA and NOAA to support the OSC by providing scientific assistance related to operational decisions, including the areas of oceanography, chemistry, location of environmentally sensitive areas, and the assessment of possible environmental impacts involved in cleanup operations. During responses to actual or potential discharges of oil or releases of hazardous substances, the OSC or the RRT Chairman may request either EPA (for inland areas) or NOAA (for coastal and marine areas) to coordinate scientific support. NOAA may, on agreement with EPA, also provide a Scientific Support Coordinator (SSC) for inland discharges or releases that threaten coastal waters. In general, the ERT serves as EPA's SSC. During a response, the SSC serves on the OSC's staff to provide scientific advice in support of the OSC's operational decisions and to coordinate on-scene scientific activity. The SSC works with Federal and state agencies, universities, shippers, and manufacturers in compiling information that will assist the OSC in developing strategies to minimize adverse effects.

2) The **Ocean Assessments Division (OAD)** of NOAA, through its Hazardous Materials Response Branch (HMRB) in Seattle WA, provides the regional SSCs for coastal areas, and NOAA's **Hazardous Materials Response Team (HAZMAT)** provides scientific support in the event of a discharge of oil or hazardous substance in marine waters. This scientific support network can be accessed 24 hours a day through the NOAA coastal SSC, NOAA RRT representative, or Regional Coast Guard MSO. The specific response duties of SSCs and HAZMAT may include:

a. providing liaison between natural resource, chemical, medical, and other scientific experts and the OSC;

b. modeling trajectories of discharged or released materials to predict movement of a pollutant, including time and location of its landfall, etc.;

c. assessing the nature, behavior, and fate of pollutants, e.g. chemical sampling and analysis, identification of toxic properties, and alteration of physical and chemical characteristics under various environmental conditions;

d. advising on safety precautions for response personnel;

e. identifying areas of special biological importance requiring protection;

f. helping to respond to requests from Federal and state agencies for assistance in scientific studies and environmental assessments, and

g. assisting public relation efforts on scientific issues.

3) Each regional NOAA SSC has the authority to respond immediately to pollution incidents and to commit additional HAZMAT technical resources when necessary for the response. The SSC Headquarters in Seattle will provide support to the OSC while the regional SSC is enroute to a release or discharge or otherwise not available.

4) During non-response periods, NOAA's SSCs can assist the OSC and the RRT by obtaining scientific data to improve regional and local contingency planning. This data includes forecasting spill trajectories with respect to specific areas or biologically important environments, locating environmentally sensitive regions, obtaining background data on the behavior of various pollutants under a range of environmental conditions, and predicting the environmental impact of alternative cleanup strategies.

XIV. Worker Health & Safety - This section remains as presented in the NCP Section 300.150 and as modified in this plan.

A) RRT members and their contractors are expected to conduct work at a hazardous waste site in accordance with OSHA's Standard "Hazardous Waste Operations and Emergency Response" found in 40 CFR 1910.120 and any relevant state laws.

B) OSCs shall ensure that contractors funded by Federal 331(k) or CERCLA/SARA funds comply with applicable OSHA regulations, including 40 CFR 1910.120.

XV. Public Information and Community Relations

A) The provisions of the NCP Section 300.155 apply by reference to all response and removal activities within Region III. The community relations requirements specified in the NCP Sections 300.415, 300.430, and 300.435 apply to removal actions and are intended to promote active communications 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.

B) During an actual major oil spill or significant hazardous substance release where on-scene activity is expected to last several days, the OSC should establish a joint information coordination center and activate joint information coordination center procedures. These procedures can include:

1) Establishing an incident-specific joint media center, including assisting in making logistical arrangements for adequate communications for that facility, e.g. installing multiple phone lines.

2) Arrange for State and Federal goverment public affairs representatives to be present at the media center.

3) Establishing a schedule for and organizing interagency media briefings during the incident.

4) Communicating to the responding agencies whatever joint information procedures are developed specific to that incident.

XVI. Documentation and Cost Recovery

A) The provisions of the NCP Section 300.160 apply by reference to all response and removal actions within Standard Federal Region III. Agencies participating in a response action shall document all intramural and extramural expenditures and submit a detailed report of actions taken and costs incurred to the Lead Agency within 60 days of the completion of the response action.

B) EPA has developed the Removal Cost Management System (RCMS Version 3.2, June 1989). It is designed to provide comprehensive cost management procedures for use by the EPA at emergency response actions (removals) authorized under CERCLA.

XVII. OSC Reports.

A) The OSC Report requirements of the NCP Section 300.165 apply to all EPA and USCG OSC activities within Standard Federal Region III including a formal OSC report for all CERCLA/SARA or OPA90 funded removals. Upon receipt of an OSC report, the RRT chairperson will distribute copies of the report to all affected RRT members. If no responses are received within three weeks, the RRT chairperson shall prepare an endorsement and forward the OSC report to the NRT, identifying the RRT members who received copies of the report. All responses received from RRT members will be included in the endorsement to the NRT and a copy of the endorsement will be provided to the agencies who provided responses.

B) In keeping with the NCP a copy of the OSC report will be sent to:

Executive Secretary
National Response Team
USCG Headquarters (G-MER)
2100 Second Street, S.W.
Washington, DC 20593-0001

XVIII. Federal Agency Participation - To implement Federal policy, Federal agencies have responsibilities to respond to an oil discharge or a hazardous substance release. The NCP Sections 300.170 and 300.175 outlines the responsibilities of each agency.

A) The EPA and the USCG respond to incidents and provide predesignated On-Scene Coordinators (OSCs) within their respective areas; however, DOD shall designate OSCs for releases of hazardous substances, pollutants, or contaminants from DOD facilities and vessels. The EPA will provide OSCs for all FWPCA discharges and non-DOD CERCLA releases into or threatening the inland zone, unless otherwise agreed. The USCG will provide OSCs for FWPCA discharges and, in the case of non-DOD CERCLA releases, for immediate removal activities of hazardous substances, pollutants or contaminants into, or threatening, the coastal zone. The USCG will initially provide predesignated OSCs for discharges and releases from hazardous waste management facilities within the coastal zone. This includes abandoned dumpsites or other similarly chronic incidents. MOU procedures for USCG Second District require that the USCG provide predesignated OSCs for all discharges into ports and harbors of the Monongahela, Allegheny, Ohio, and Big Sandy River Systems. The EPA will provide an OSC for such incidents within forty-eight hours of initial notification. The redelegation of responsibility has been established by joint EPA and USCG agreement. This agreement is contained in ANNEX X.

B) The Region III RRT serves as a regional body for Federal and Commonwealth/State agencies to coordinate planning and preparedness activities before, and response actions during, a pollution incident. Through this coordination of Federal and Commonwealth/State agencies, resources and other types of assistance are made available to the OSC. The Region III RRT Federal and State agency members are listed in Subpart B (page B-2) and details are given in ANNEX II of this plan.

C) ANNEX IV describes additional participation by Federal agencies.

XIX. Commonwealth/State and Local Participation

A) Every state governor is asked to assign a state office or representative to represent the state on the RRT and to designate the state agency that will direct state lead response operations. The state's representative may participate fully in all facets of RRT activity and state lead response operations. Each state RRT member also represents and coordinates the RRT involvement of various other state, county, and municipal organizations.

B) The Local Emergency Planning Committees (LEPCs) are responsible for the development of a local emergency response plan in accordance with SARA, Sections 301 to 303. The local emergency response plan must be reviewed by a SERC. The governor of each state designates the SERC. The RRTs may review the plans and provide assistance if the SERC or LEPC so requests.

C) Federal Area Contingency Plans should provide for coordination with local government organizations such as county, city or town governments. This is especially important for traffic control, land access, and disposal of oil or hazardous materials removed in response operations.

D) The appropriate Commonwealth/state department, through the state representative on the RRT, coordinates wildlife preservation measures for non-migratory animals. When necessary, the closing of areas to commercial fishing and shellfish harvest due to health hazards will be accomplished by the appropriate commonwealth/state agency.

E) Additional participation by states is described in ANNEX V.

XX. Non-Government Participation - There are several non-governmental entities that can provide assistance during a pollution response action within Federal Region III. A partial listing of this information may be provided in ANNEX VI and further information is contained in other Federal OSC contingency plans.

SUBPART C - PLANS

I. General - This subpart summarizes emergency preparedness activities relating to discharges of oil and releases of hazardous substances, pollutants, or contaminants; 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" (EPCRA) but referred to herein as "Title III." Regulations implementing Title III are codified at 40 CFR Subchapter J parts 302 through 372.

II. Planning and Coordination Structure

A) National - As described in the NCP Section 300.110, the NRT is responsible for national planning and coordination.

B) Regional - As described in the NCP Section 300.115, the RRTs are responsible for regional planning and coordination.

C) State - As provided by SARA Sections 301 and 303, the State Emergency Response Commission (SERC) of each state, appointed by the Governor, designates emergency planning districts, appoints Local Emergency Planning Committees (LEPCs), supervises and coordinates their activities, and reviews local emergency response plans, which are described in the NCP Section 300.215. SERCs also establish procedures for receiving and processing requests from the public for information generated by Title III reporting requirements and designate an official to coordinate this information.

D) Local - As provided by SARA Sections 301 and 303, local emergency planning districts are designated by the SERC to facilitate the preparation and implementation of emergency plans. Each LEPC is to prepare a local emergency response plan for the local 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 the community emergency coordinator.

III. Federal Contingency Plans - There are three levels of federal contingency planning: the National Contingency Plan, Regional Contingency Plans (RCPs), and OSC/Area 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 ANNEX II.

A) The National Contingency Plan - The purpose and objectives, authority, and scope of the NCP are described in the NCP Sections 300.1 through 300.3.

B) Regional Contingency Plan

1) This Federal RCP was developed by the Region III RRT, including representatives of Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia to coordinate timely, effective response by various federal agencies and other organizations to discharges of oil or releases of hazardous substances, pollutants, or contaminants. This plan has the same basic format as the NCP Subparts, with Annexes added to provide additional information. This plan will be updated and revised on an annual basis. Changes to this plan may be submitted by any participating agency to either of the Standing RRT Co-Chairmen:

Commander (m)
Fifth Coast Guard District
431 Crawford Street
Portsmouth, VA 23705-5004

U.S. Environmental
Protection Agency
Region III (3HW30)
Superfund Removal Branch
841 Chestnut Building
Philadelphia, PA 19107

2) This RCP includes information on useful facilities and resources in the region, from government, commercial, academic, and other sources. Coordination of this plan with SERC and LEPC plans should be accomplished by working with the SERCs in Region III.

C) OSC/Area Contingency Plans.

1) In order to provide for a coordinated, effective federal, state, and local response, each OSC, in consultation with the RRT, may develop an OSC/Area contingency plan for response in the OSC area of responsibility. OSC/Area contingency plans are 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/Area contingency plans should coincide with those agreed upon among EPA, USCG, DOE, and DOD to determine OSC areas of responsibility. Jurisdictional boundaries of local emergency planning districts established by states should 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/Area contingency plan, OSCs should coordinate with SERCs and LEPCs affected by the OSC area of responsibility.

2) The OSC/Area contingency plan shall provide for a well-coordinated response that is integrated and compatible with appropriate response plans of state, local, and other nonfederal entities, and especially with Title III local emergency response plans in the OSC area of responsibility. The OSC/Area 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; and a local structure for responding to discharges or releases.

D) A copies of the regional plans for Regions bordering on Region III are maintained at designated RRCs within Region III.

III. State Contingency Plans

A) The SERCs have the lead role in developing a state emergency response plan and in providing guidance to the LEPC in formulation of their plans. State emergency response plans are to assure coordination between local emergency response plans and may establish additional state standards for local emergency response plans.

B) Questions concerning a state's contingency plan should be directed to the RRT member for that state. Addresses and phone numbers are listed in ANNEX II. Additionally, a copy of each state's plan will be maintained at each RRC.

IV. Local contingency plans

A) The LEPCs have the primary role in the preparation and development of local emergency response plans. Title III requires that a local emergency response plan prepared by the LEPC include at least the following:

1) Identification of facilities subject to Title III, identification of routes likely to be used for extremely hazardous substances, and identification of facilities adding to risk or subject to additional risk due to proximity to facilities;

2) Methods and procedures to be followed by facility owners and operators and local emergency and medical personnel responding to a release;

3) Designation of community emergency coordinator and facility coordinators;

4) Communication procedures for notification by coordinators to persons designated in the contingency plan;

5) Methods for determining releases and area or population affected;

6) Description of emergency equipment to be used and identification of persons responsible;

7) Evacuation plans including precautionary evacuation and alternative routes;

8) Training programs for emergency response and medical personnel;

9) Methods and schedules for exercising the contingency plan.

10) All parts of the plan should be coordinated with the applicable elements of the RCP and relevant OSC/Area Contingency Plans.

SUBPART D - OPERATIONAL RESPONSE PHASES FOR OIL REMOVAL

This subpart remains as presented in the NCP Sections 300.300 through 300.335 with additions as noted below:

I. Discovery and Notification (Phase I)

A) 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 current local telephone number). All notices of discharges or releases received at the NRC are relayed immediately by telephone to the OSC or lead agency.

B) If the NRC cannot be reached:

1) Reports of discharges within the Inland Zone of Region III, as defined in ANNEX III, may be made to the EPA Regional Office by calling (215)597-9898.

2) Reports of discharges within the Coastal Zone, as defined in ANNEX III, may be made to the appropriate U.S. Coast Guard District Office:

General Location	District Office
Rivers of Western Pennsylvania and West Virginia	Commander, Second Coast Guard District (314) 539-2655 (FTS) 262-2655
Eastern Pennsylvania, Delaware, Eastern Maryland, and Virginia	Commander, Fifth Coast Guard District (804) 398-6231 (FTS) 393-6231
Great Lakes portion of Western Pennsylvania	Commander, Ninth Coast Guard District (216) 522-3984 (FTS) 942-3994

II. Preliminary Assessment and Initiation of Action (Phase II)- For all discharge of oil which might affect natural resources, the OSC shall notify DOC/NOAA, DOI, and the appropriate state agencies. For discharge of oil from DOD facilities or vessels, the EPA or Coast Guard will provide the OSC based on boundaries outlined in ANNEX III. DOD vessels and facilities will make required notifications to the NRC.

III. Containment, Countermeasures, Cleanup and Disposal (Phase III) - Oil and contaminated material recovered in cleanup operations shall be disposed of in accordance with applicable state regulations. In general, oil and oil contaminated debris are to be recycled, incinerated or land filled at an approved dumpsite. Oil recovered from Oil Spill Liability Trust Fund financed cleanups must be processed in accordance with GSA regulations. The appropriate RRC should be contacted early in the cleanup for disposal instructions before storage problems become critical.

IV. Documentation and Cost Recovery (Phase IV) - Evidentiary and cost documentation procedures and requirements are specified in the USCG Marine Safety Manual (Commandant Instruction M16000.11), 33 CFR Part 153, and the Marine Environmental Protection Annexes of the 2nd, 5th, and 9th Coast Guard District Standard Operating Procedures (SOP).

V. General Pattern of Response - This section remains as presented in the NCP Section 300.320

VI. Wildlife Conservation - This section remains as presented in the NCP Section 300.330

VII. Funding

NOTE: This section will be modified after further clarifying regulations implementing the OPA are promulgated.
The following is the current section in RCP88.

THE FWPCA, OUTER CONTINENTAL SHELF LANDS ACT (OCSLA), AND DEEPWATER PORT ACT ESTABLISHED FUNDS TO BE USED TO PAY FOR THE REMOVAL OF OIL FROM THE WATERS OF THE UNITED STATES WITHIN LIMITS DESCRIBED IN EACH ACT. SEE NCP.
PARTICULAR NOTE MUST BE MADE THAT THESE FUNDS ARE NOT ESTABLISHED TO RELEASE SPILLERS FROM THEIR RESPONSIBILITY TO REMOVE THE DISCHARGE. THE INTENT IS TO ALLOW FEDERAL ACTION IN THE ABSENCE OF ADEQUATE ACTION ON THE PART OF THE SPILLER.

A) FEDERALLY ADMINISTERED FUNDS FOR OIL SPILL RESPONSE AVAILABLE FOR USE IN COASTAL REGION III INCLUDE:

1. THE OIL POLLUTION FUND ESTABLISHED BY THE FWPCA, PURSUANT TO SECTION 311(K). 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. GOVERNING REGULATIONS ARE CONTAINED IN 33 CFR PARTS 136 AND 150.

3. THE FUND AUTHORIZED BY THE OCSLA, AS AMENDED. GOVERNING REGULATIONS ARE ALSO CONTAINED IN 33 CFR PARTS 136 AND L50.

B) PURSUANT TO SECTION 311(C)(2)(H) OF THE FWPCA, THE NATIONAL OIL AND HAZARDOUS SUBSTANCES CONTINGENCY PLAN OUTLINES THE PROCEDURES FOR ALLOWING STATE-CONDUCTED REMOVAL OPERATIONS. SUBSEQUENT STATE REIMBURSEMENT FOR REMOVAL EXPENSES WILL BE CONSIDERED ONLY IF A DETERMINATION HAS BEEN MADE BY THE FEDERAL OSC THAT THE ACTIONS OF THE PARTY RESPONSIBLE FOR THE DISCHARGE ARE NOT PROPER, IN ACCORDANCE WITH 33 USC 1321(C)(1)(FWPCA). WITHOUT A 33 USC 1321(C)(1) DETERMINATION BY THE FEDERAL OSC DURING THE INCIDENT, AND PRIOR TO INITIATION OF STATE REMOVAL ACTIONS, A STATE CANNOT OBTAIN REIMBURSEMENT FOR COSTS INCURRED IN STATE REMOVAL ACTIVITIES. IN ADDITION TO DETERMINING THAT THE DISCHARGER'S ACTIONS ARE IMPROPER, AS DEFINED BY THE NATIONAL OIL AND HAZARDOUS SUBSTANCES CONTINGENCY PLAN, STATE REMOVAL ACTION IS NECESSARY WHEN IT CAN MINIMIZE OR MITIGATE SIGNIFICANT DAMAGE WHICH FEDERAL REMOVAL ACTIONS CANNOT OR WHEN THE COST WHICH WILL BE INCURRED BY THE STATE WILL NOT BE SIGNIFICANTLY GREATER THAN THAT WHICH WOULD BE INCURRED BY FEDERAL DEPARTMENTS OR AGENCIES. ALSO, IN ACCORDANCE WITH THE NATIONAL PLAN, THE OSC MUST MAINTAIN ADEQUATE CONTROL OF REMOVAL OPERATIONS TO CERTIFY THAT THE ACTIVITIES OF THE STATE AND THE CORRESPONDING EXPENSES INCURRED WERE AUTHORIZED FOR REIMBURSEMENT FROM THE 311(K) POLLUTION FUND. IT MUST BE EMPHASIZED THAT REIMBURSEMENT IS THE ONLY METHOD OF FUNDING STATE REMOVAL ACTIONS. ONLY EXPENSES NOT NORMALLY FUNDED BY THE STATE'S REGULAR APPROPRIATIONS MAY BE CONSIDERED FOR REIMBURSEMENT FROM THE POLLUTION FUND. THIS POLICY RECOGNIZES THE RESPONSIBILITY OF THE OSC TO DETERMINE THE PROPRIETY OF ANY REMOVAL ACTIONS UNDERTAKEN BY THE PARTY RESPONSIBLE FOR THE

DISCHARGE AND ALLOW THE OSC TO MAINTAIN EFFECTIVE CONTROL OVER REMOVAL ACTIVITIES IN HIS/HER GEOGRAPHIC AREA OF RESPONSIBILITY IN ACCORDANCE WITH THE PROVISIONS OF THE NATIONAL OIL AND HAZARDOUS SUBSTANCES CONTINGENCY PLAN. THE DETERMINATION THAT STATE INVOLVEMENT IN REMOVAL OPERATIONS IS NECESSARY AND THAT STATE EXPENSES INCURRED ARE REASONABLE MUST BE MADE IN A TIMELY MANNER ON A CASE-BY-CASE BASIS. ONLY COSTS THAT ARE NOT ORDINARILY FUNDED BY AN AGENCY'S REGULAR APPROPRIATION AND THAT ARE NOT INCURRED DURING NORMAL OPERATIONS ARE REIMBURSABLE FROM THE FUND. STATE RESOURCES ARE TO BE USED IN ACCORDANCE WITH FORMAL AGREEMENTS ESTABLISHED BETWEEN FEDERAL DEPARTMENTS, AGENCIES, THE STATE, AND THE COAST GUARD.

C) EPA OSCS MAY OBTAIN ACCESS TO THE 311(K) FUND BY CONTACTING THE APPROPRIATE U.S. COAST GUARD DISTRICT OFFICE. AFTER NORMAL BUSINESS HOURS, THESE DATA MAY BE OBTAINED BY USING THE PHONE NUMBERS LISTED IN SECTION 300.57 OF THIS SUBPART. THIS DATA CAN BE OBTAINED BY DIRECTLY CONTACTING THE RELEVANT COAST GUARD DISTRICT AS LISTED IN ANNEX II.

D) ONCE AN EPA OSC ACTIVATES THE 311(K) FUND, HE/SHE MAY INITIATE A CONTRACT FOR CLEANUP, SELECT A CLEANUP CONTRACTOR FROM THE APPROPRIATE COAST GUARD BOA, OR NEGOTIATE FOR STATE REMOVAL ACTIONS. IF A BOA CONTRACTOR IS USED, ALL DOCUMENTATION AND CERTIFICATION AS REQUIRED BY THE BOA MUST BE SUBMITTED WITH THE INVOICE FOR PAYMENT. NEITHER STATES NOR BOA CONTRACTORS WILL BE REIMBURSED FOR SUBCONTRACTED SERVICES OR EQUIPMENT WITHOUT THE APPROVAL OF A COAST GUARD CONTRACTING OFFICER. SUCH APPROVAL MUST BE PLANNED FOR IN ADVANCE, AS CONTRACTING OFFICERS ARE GENERALLY ONLY AVAILABLE DURING NORMAL WORKING HOURS. ARRANGEMENTS FOR CONTRACTING OFFICERS MAY BE MADE THROUGH THE SPECIFIC COAST GUARD DISTRICT OFFICE AS LISTED IN ANNEX II.

E) A COPY OF MARYLAND/COAST GUARD MEMORANDUM OF AGREEMENT FOR REIMBURSEMENT FROM THE 311(K) FUND IS INCLUDED IN ANNEX VII. IT IS THE OSC'S RESPONSIBILITY TO INSURE ADEQUATE DOCUMENTATION FOR REIMBURSEMENT FROM THE 311(K) FUND.

SUBPART E - HAZARDOUS SUBSTANCE RESPONSE

I. General - This Subpart remains as presented in the NCP with the additions and clarifications as noted below.

A) CERCLA activities within Region III will be conducted in accordance with NCP Section 300.125 and as modified by this plan.

B) Response activities will be initiated by the appropriate lead agency, as identified in ANNEX III, when there is a substantial threat or a release involving:

1) a material or combination of materials designated as a hazardous substance in 40 CFR Section 302.4; or

2) any other pollutant or contaminant which presents an imminent and substantial danger to the public health or welfare.

C) In those instances where the lead agency is unable to provide surveillance over actions taken by responsible parties or third parties, the lead agency shall provide notification to the RRT representatives that have trustee responsibilities for natural resources in the area of the incident. This notification will be made in addition to any notifications provided in accordance with the NCP Section 300.125.

D) The role of lead agency, support agencies and responsible parties is to be defined for each phase of hazardous substance response. Actions to be taken are to be communicated to all parties.

II. Discovery and Notification - The provisions of Subpart B. VI. of this plan are also applicable to reports involving hazardous substances, pollutants, or contaminants.

III. Removal Site Evaluation - This section remains as presented in the NCP and as further defined by COMDINST and EPA Guidance.

IV. Removal Action

A) CERCLA/SARA will be the source for all Federal response efforts initiated under this subpart. Specific authorization from the Commandant, U.S. Coast Guard is required to utilize the Oil Spill Liability Trust Fund. Its use must be restricted to those specific chemicals designated as hazardous substances under the CWA that either impact or potentially impact the navigable waters of the U.S.

B) Exhibit 5 to ANNEX X outlines the requirement for Coast Guard OSC usage of the CERCLA fund. This M.O.U. has been modified. USCG District Commanders may now obligate $250,000 per response without prior authorization. The remainder of the M.O.U. remains unchanged. COMDNOTE 16465 (ALDIST 181/85) applies. Authorization for specific Coast Guard obligations and the ten digit accounting number may be obtained during normal working hours from EPA headquarters at (202) 260-4583. Request for funding in excess of the M.O.U. after normal working hours should be made through the NRC to the Emergency Response Division Duty officer.

C) Removal efforts involving any significant hazardous materials incident may require the expertise of various members of the RRT. The capabilities of the members of the RRT are listed in ANNEX IV and ANNEX V. The capabilities which will be of particular concern during Phase III removal actions are listed below.

1) EPA removal guidance is established in the transmittal of Superfund Removal Procedures, Revision Number Three, February 1989, and subsequent revisions. Each EPA region has personnel experienced in hazardous substance response. EPA has personnel trained and equiped for immediate entry into the site of a chemical release. EPA can provide full air monitoring and multimedia sampling capabilities. The OSC may request technical advice from Regional Personnel, ERT and/or the Technical Assistance Team (TAT) contractor, through the RRC Duty Officer.

2) Each Coast Guard COTP/MSO has staff knowledgeable in the legal technicalities of chemical response and the shipment of hazardous materials/wastes. The OSC also has immediate access to several chemical information systems. The Coast Guard COTP/MSOs in Region III do not have the capability of providing personnel for immediate entry into the site of a

chemical release. The Coast Guard LANT AREA Strike Team does maintain the capability of providing trained personnel and equipment for immediate response to hazardous substance releases. The OSC may request the support of the Coast Guard LANT AREA Strike Team through the NRC.

3) DOI provides technical assistance on the environmental resources at risk, including natural resources for which DOI is the Federal Trustee, as well as other areas of DOI jurisdiction and/or expertise.

4) NOAA provides technical assistance on the environmental resources at risk from a hazardous materials incident as part of their role of natural resource trustee as well as other areas of DOC/NOAA jurisdiction and/or expertise.

5) FEMA enters into an IAG with EPA when evacuation/temporary relocation needs are beyond the capabilities of the local governments. When CERCLA funds are utilized, FEMA will monitor all CERCLA funds spent on evacuation and provide EPA with the necessary documentation.

6) The Centers for Disease Control(CDC) will provide a representative on scene to assist the OSC in determining the nature of health hazards at a release, supply data on the health effects of various chemicals, and coordinate obtaining local health services.

7) State agencies - can provide assistance in applying state law, site monitoring, and evaluating environmental resources at risk.

D) In addition to the above RRT involvement, the OSC can use various forces available through the above agencies, e.g. NSF, SSC, etc.

E) The spiller must be made aware of his responsibility to clean-up his spill and his potential liabilities under CERCLA/SARA and OPA90. This may include issuing an administrative order as specified. Whenever an administrative order is issued, the OSC will inform the appropriate state. Administrative orders may not be issued to vessels. COMDINST M16465.29 applies.

V. Remedial Site Evaluation Phase and National Priorities List Determination - The NCP Sections 300.420 through .440 detail the remediation procedures of CERCLA/SARA and remain unchanged for this plan.

VI. Remedial Action - The EPA will conduct or coordinate through a SMOA all remedial actions within Region III, with the exception of remedial action involving vessels. The Coast Guard will conduct remedial action for incidents involving vessels in accordance with the NCP.

SUBPART F - STATES INVOLVEMENT IN HAZARDOUS SUBSTANCES RESPONSE

I. General.

A) EPA shall ensure meaningful and substantial state involvement in hazardous substance response as specified in SUBPART F of the NCP. EPA shall provide an opportunity for state participation in removal, pre-remedial, remedial, and enforcement response activities. EPA shall encourage states to enter into an EPA/State Superfund Memorandum of Agreement (SMOA) under NCP Sesction 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 NCP SECTION-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. NCP SECTION-300.525 specifies requirements for state involvement in removal actions. In addition 40 CFR Part 35, Subpart O, "Cooperative Agreements and Superfund State Contracts for Superfund Response Actions," contains further requirements for state participation during response.

II. EPA/State Superfund Memorandum of Agreement (SMOA)

A) The SMOA may establish the nature and extent of EPA and state interaction during EPA-lead and state-lead response. EPA will enter into SMOA discussions if requested by a state. NCP SECTION 300.505(a) contains details which may be addressed in a SMOA and remain unchanged in this plan.

B) The SMOA and any modifications thereto will be executed by the EPA Regional Administrator and the head of the state agency designated as lead agency for state implementation of CERCLA.

C) Site-specific agreements entered into pursuant to section 104(d)(1) of CERCLA will be developed in accordance with 40 CFR Part 35, Subpart O. The SMOA will not supersede such agreements.

D) EPA and the state shall consult annually to determine priorities and make lead and support agency designations for removal, pre-remedial, remedial, and enforcement response to be conducted during the next fiscal year and to discuss future priorities and long-term requirements for response. NCP SECTION 300.505(d) includes areas to be discussed during consultation and these remain unchanged in this plan.

E) If a state is designated 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.

F) In the absence of a SMOA, EPA and the state shall comply with the requirements in NCP 300.515(h). If the SMOA does not address all of the requirements specified in § 300.515(h), EPA and the state shall comply with any unaddressed requirements in that section.

III. State assurances

A. A Fund-financed remedial action undertaken pursuant to CERCLA 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. Further requirements pertaining to state and political subdivision involvement in CERCLA response are found in 40 CFR part 35, Subpart O.

B. A detailed discussion of state assurances is presented in NCP SECTION 300.519 and remains unchanged in this plan.

IV. 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. The requirements for states, political subdivisions, or Indian tribes to receive funds as a lead or support agency for response are addressed at 40 CFR Part 35, Subpart O.

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, SMOA, or cooperative agreement. Superfund state contracts are unnecessary for this purpose.

3) Cooperative agreements and Superfund state contracts are only appropriate for non-Fund-financed response actions if a state intends to seek credit for remedial action expenses under NCP SECTION-300.510.

B) A detailed discussion of state involvement in remedial and enforcement response is presented in NCP SECTION 300.515 and remains unchanged in this plan.

V. State involvement in EPA-lead enforcementnegotiations

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 is not foreclosed from signing a consent decree if it does not participate substantially in the negotiations.

VI. 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 NCP SECTION 300.415 on removal actions, and 40 CFR Part 35, Subpart O.

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 operated by a state or political subdivision 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 (including 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 NCP SECTION 300.415(k) 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 will consult with a state on all removal actions to be conducted in that state.

SUBPART G - TRUSTEES FOR NATURAL RESOURCES

I. 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 territorial sea, 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 pursuant to section 107(f) of CERCLA or section 311(f)(5) of the Clean Water 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 managed or protected by the Department of Commerce or by other 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, he shall, whenever practicable, seek to obtain the concurrence of that other federal agency. 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.

II. 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.

III. Responsibilities of trustees
Described in NCP SECTION 300.615 and remain unchanged in this plan.

SUBPART H - Activities by other persons

General. Any person may undertake a response action to reduce or eliminate a release of a hazardous substance, pollutant, or contaminant. Details are given in NCP SECTION 300.700 and remain the same in this plan.

SUBPART I - AMINISTRATIVE RECORD FOR SELECTION OF HAZARDOUS SUBSTANCE RESPONSE ACTION

I. 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 hazardous substance 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 for 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 they are 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.

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 for 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.

D) Applicability.
Contained in NCP Section 300.800 (d) and remains the same in this plan.

II. Location of the administrative record file - Contained in NCP SECTION 300.805 and remains the same in this plan.

III. Contents of the administrative record file - Contained in NCP SECTION 300.810 and remains the same in this plan.

IV. Administrative record file for a remedial action - Contained in NCP SECTION 300.815 and remains the same in this plan.

V. Administrative record file for a removal action - Contained in NCP SECTION 300.820 and remains the same in this plan.

VI. Record requirements after the decision document is signed - Contained in NCP SECTION 300.825 and remains the same in this plan.

SUBPART J - USE OF DISPERSANTS AND OTHER CHEMICALS

I. General - This subpart applies to the use of any chemical agents or other additives as defined in NCP Subpart A that may be used to remove or control oil discharges. This applies to both Federal and State-lead responses.

II. NCP Product Schedule

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.

B) EPA maintains 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 NCP SECTION 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.

C) See ANNEX XI for the EPA Product Schedule. The EPA RRT representative should be contacted for any additions or deletions before utilizing this schedule.

D) Products may be added to the NCP Product Schedule by the process specified in NCP SECTION 300.920

III. Authorization of Use

A) In any oil pollution incident the OSC must choose the best method from the response "tools" available to him. By policy of the Federal Region III RRT, the physical recovery and removal of oil is the preferred clean-up technique. However, under certain conditions dispersants can be a very effective tool to be used by the OSC. Region III OSCs are aware of the types of circumstances where dispersants present the best response tool, and have conducted contingency planning for their use.

B) There will be situations where oil cannot be contained and removed before it impacts a very sensitive environmental or economic resource. In addition, there are situations where the mechanical clean up of oil from the shoreline will result in significant environmental damage. In the above circumstances dispersants will be evaluated as a response technique. The use of dispersants is basically an environmental trade-off. A decision is made to specifically impact one area in order to diminish the impacts on another more environmentally sensitive

area. A similar decision could be made to impact one portion of the environment to protect an economically sensitive area. In life-threatening situations the OSC can apply dispersants on his/her own authority. In all other situations, including State-lead responses, an Incident Specific RRT will be involved in the decision making to use dispersants. The following items are available to assist the Incident Specific RRT in its decision making.

1) Dispersants Checklist - OSCs have a Dispersants Checklist for every conceivable dispersants application. The OSC will supply the appropriate members of the RRT with the information contained in the checklist. The checklist provides information on the circumstances of the spill, trajectories, environmental resources at risk, and available dispersants. The purpose of the checklist is to supply RRT decision makers with the information necessary to make a decision on the possible use of dispersants. The Region III Streamlined Dispersants Checklist is contained in ANNEX XI.

2) Dispersant Employment Evaluation Plan (DEEP) - During response operations the OSC with the help of the SSC and incident-specific RRT will identify the environmental resources at risk from an undispersed oil slick. The DEEP can then be used to evaluate the desirability of using dispersants to protect those habitats. DEEP is found in ANNEX XII.

C) Steps To a Dispersants Operation - NCP SECTION 300.910 gives the minimum approvals necessary for the use of dispersants. The following is the expected course of events and necessary approvals for a dispersants operation in Federal Region III.

1) The OSC will investigate every reported oil spill in the Region. As necessary, reported oil spills will be evaluated using the following means:

a. Environmental Sensitivity Index (ESI) maps. These maps have been prepared by NOAA and contain information on the location of environmental resources and the sensitivity of shorelines of Delaware, Maryland, Virginia, and Pennsylvania.

b. Oil spill trajectory obtained from NOAA and the NRC.

c. Interpretation of the ESI maps and further information on the effects of dispersed and non-dispersed oil on environmental resources at risk through the SSC.

d. Use of the DEEP as a guideline to assist in evaluating the complex and often difficult considerations of dispersant use.

2) If it becomes apparent that dispersants may be a viable response tool, the OSC will begin work on the Dispersants Checklist contained in ANNEX XI. The OSC will also complete the dispersants checklist if the spiller is requesting permission to apply dispersants. Generally, the SSC will assist the OSC in completing the checklist.

3) The OSC will use the information contained in the checklist, the ASTM habitat guidelines and the DEEP to continue evaluation of potential dispersant use.

4) The OSC will request concurrence from the appropriate members of the Incident Specific RRT through the Chairperson if either the OSC or the spiller wishes to apply dispersants. If the spiller is requesting permission to apply dispersants through the OSC he can, at his expense, make logistical arrangements to be prepared to apply dispersants in the event approval is granted. For Federally funded cleanups the OSC can use the Oil Spill Liability Trust Fund to make logistical arrangements pending approval of dispersants use.

5) In accordance with the NCP, an OSC's recommendation to use dispersants requires the concurrence of the EPA RRT representative and the respective state(s) RRT representatives and consultation with the DOI and DOC natural resource trustees. However, it is the practice of the Federal Region 3 RRT for the OSC to seek concurrence to use dispersants on behalf of the OSC or the spiller by establishing a conference call with all of the following members of the appropriate Incident Specific RRT:
    a. Appropriate OSC
    b. USCG RRT representative
    c. EPA RRT representative
    d. Appropriate state(s) RRT representative
    e. NOAA RRT representative
    f. DOI RRT representative

6) The Incident Specific RRT members involved in the conference call will be briefed on the incident and the request to use dispersants using the Dispersants Checklist. Where possible the RRC will forward a completed Dispersants Checklist to RRT members by electronic means before the above conference call is placed.

7) Upon concurrence from the Federal trustees, incident specific RRT representatives, including the concurrence of the affected states, a dispersants application may be authorized by the OSC. All dispersants application in Region III will be monitored by the appropriate OSC using the monitoring portion of the DEEP. LANT AREA personnel will generally be available to assist the OSC in monitoring dispersant operations.

8) In a life-threatening situation the OSC can apply dispersants without going through the above approval process. However, the OSC will notify the Incident Specific RRT as soon as practicable of any dispersants used under life-threatening conditions and obtain concurrence for continued use.

IV. Data requirements - Data requirements for dispersants, surface collecting agents, biological additives, burning agents and miscellaneous oil spill control agents are found in NCP SECTION 300.915.

V. Interface With Other Districts - Any dispersant operation on the regional boundary will require coordination with appropriate RRT members from the bordering region. The Incident Specific RRC will coordinate information transfer and conference call arrangements for the necessary interface with a bordering region.

VI. Other Uses Of Chemicals - Other chemicals such as herding agents can be effectively used in conjunction with mechanical methods. The approval procedure outlined above will be used for a request by the OSC or the spiller to use other chemical agents. Sinking agents will not be utilized in Region III.

SUBPART K - FEDERAL FACILITIES [Reserved]

APPENDIX 1 - List of Acronyms

AIG - Address Indicator Group
API - American Petroleum Institute
ASTM - American Society for Testing and Materials
ATSDR - Agency for Toxic Substances and Disease Registry
BOA - Basic Ordering Agreement
CAER - Community Awareness and Emergency Response Program of the Chemical Manufacturer's Association
CAMEO - Computer Aided Management for Emergency Operations
CCGD2 - Commander, Coast Guard District Two, St. Louis, MO
CCGD5 - Commander, Coast Guard District Five, Portsmouth, VA
CCGD9 - Commander, Coast Guard District Nine, Cleveland, OH
CDC - Centers for Disease Control
CERCLA- Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS- CERCLA Information System
CGIF - Commission of Game and Inland Fisheries (Virginia)
CHEMTREC - Chemical Transportation Emergency Center
CHRIS - Chemical Hazard Response Information System
CIS - Chemical Information System
CMA - Chemical Manufacturers Association
COE -
COMDT - Commandant, U. S. Coast Guard, Washington, DC
COMLANT AREA - Commander, Atlantic Area
COTP - Captain of the Port
CRC - Community Relations Coordinator
CRP - Community Relations Plan
DEEP - Dispersant Employment Evaluation Plan
DNREC - Department of Natural Resources and Environmental Control(Delaware)
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
EDIS - Environmental Data and Information Services
EERU - Environmental Emergency Response Unit
EHS - Extremely Hazardous Substances
EPA - U.S. Environmental Protection Agency
EPIC - Environmental Photographic Interpretation Center
EPCRA - "Emergency Planning and Community Right-to-Know Act of 1986" also known as Title III of SARA
ERCS - Emergency Response Cleanup Services
ERNS - Emergency Response Notification System used by RRC maintained by EPA.
ERT - Environmental Response Team

ESI - Environmental Sensitivity Index
ETF - Emergency Task Force
ETG - Emergency Task Group
FCO - Federal Coordinating Officer (in disaster areas)
FCO - Federal Coordinating Officer
FEMA - Federal Emergency Management Agency
FIT - Field Investigation Team
FOSC - Federal On-Scene Coordinator (predesignated by EPA,USCG, DOE,or DOD)
FRERP - Federal Radiological Emergency Response Plan
FS - Feasibility Study
FTS - Federal Telecommunications System
FWPCA - Federal Water Pollution Control Act
FWS - Fish and Wildlife Service
HACS - Hazard Assessment Computer System (USCG)
HHS - Department of Health and Human Services
HMRB - Hazardous Materials Response Branch
HRS - Hazard Ranking System
IAG - Inter-Agency Agreement
IHSA - Intervention on the High Seas Act
LCP - Local Contingency Plan
LEPC - Local Emergency Planning Committee
MALRT - MultiAgency Local Response Team
MDE - Maryland Department of Environment
MEP - Marine Environmental Protection Branch
MMS - Minerals Management Service
MOU - Memorandum of Understanding
MSO - Marine Safety Office
MSRC - Marine Spill Response Corporation
MWRA - The Maryland Water Resources Administration
NCP - National Oil and Hazardous Substances Pollution Contingency Plan
NESDIS - National Environmental Satellite, Data and Information Service
NESS - National Environmental Satellite Service
NIOSH - National Institute for Occupational Safety and Health
NMFS - National Marine Fisheries Service
NOAA - National Oceanic and Atmospheric Administration
NOS - National Ocean Service
NPDES - National Pollutant Discharge Elimination System (permits)
NPS - National Park Service
NRC - National Response Center
NRT - National Response Team
NRU - National Response Unit
NSF - National Strike Force
NWS - National Weather Service
OAD - Ocean Assessment Division
OAR - Office of Oceanic and Atmospheric Research
OCS - Outer Continental Shelf
OCSLA - Outer Continental Shelf Lands Act
OEA - Office of Environmental Affairs

OHMTADS - Oil & Hazardous Materials Technical Assistance Data System(EPA)
OPA90 - Oil Pollution Act of 1990
OPCEN - Coast Guard District Operations Center
OSC - On-Scene Coordinator
OSHA - Occupational Safety and Health Administration
PADER - Department of Environmental Resources (Pennsylvania)
PIAT - Public Information Assistance Team
POLREP - Pollution Report
RCP - Regional Contingency Plan
RPM - Remedial Project Manager
RQ - Reportable Quantity
RRC - Regional Response Center
RRT - Regional Response Team
RSPA - Research and Special Programs Administration
SARA - Superfund Amendments and Reauthorization Act
SERC - State Emergency Response Commission
SKIM - Spill Cleanup Inventory System
SMOA - Superfund Memorandum of Agreement
SSC - Scientific Support Coordinator
TAT - Technical Assistance Team
USA - U.S. Army
USACE -
USCG - U.S. Coast Guard
USDA - Department of Agriculture
USGS - U. S. Geological Survey
USN - U.S. Navy
VDES - Department of Emergency Services (Virginia)
VIMS - The Virginia Institute of Marine Science
VMRC - The Virginia Marine Resources Commission

Appendix 2 Definitions from NCP

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

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.

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.

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.

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

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.

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, liquified natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

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

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.

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 releases in the United States that are priorities for long-term remedial evaluation and response.

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

Navigable waters as defined by 40 CFR § 110.1, means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
(b) Interstate waters, including interstate wetlands;
(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    (1) That are or could be used by interstate or foreign travelers for recreational or other purposes;
    (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;
    (3) That are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as navigable waters under this section;
(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and
(f) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

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 Oil Polution Act of 1990, means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of CERCLA (42 U.S.C. 9601) and which is subject to provisions of that act.

Oil pollution fund means the Oil Spill Liability Trust Fund as specified in the OIl Pollution Act of 1990.

On-scene coordinator (OSC) means the federal official predesignated 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 means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.

Operation and maintenance (O&M) means measures required to maintain

the effectiveness of response actions.

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

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

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 all remedial site sampling activities, which presents in specific terms the organization (where applicable), objectives, functional activities, and specific quality assurance (QA) and quality control (QC) activities designed to achieve the data quality objectives of a specific project(s) or continuing operation(s). The QAPP is prepared for each specific project or continuing operation (or group of similar projects or continuing operations). The QAPP will

be prepared by the responsible program office, regional office, laboratory, contractor, recipient of an assistance agreement, or other organization. For an enforcement action, potentially responsible parties may prepare a QAPP subject to lead agency approval.

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

Relevant and appropriate requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.

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

Remedial investigation (RI) is a process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection

and site characterization, and is generally performed concurrently and in an interactive fashion with the feasibility study. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

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

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

Remove or removal as defined by Oil Pollution Act of 1990, refers to cotainment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property,

shorelines, and beaches.

Remove or removal as defined by section 101(23) of CERCLA, 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, post-removal site control, where appropriate, and any emergency assistance which may be provided under the Disaster Relief Act of 1974. For the purpose of the NCP, the term also includes enforcement activities related thereto.

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 significant 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.

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.

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

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

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.

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.

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.

STANDARD FEDERAL REGION III

REGIONAL OIL AND HAZARDOUS SUBSTANCES

POLLUTION CONTINGENCY PLAN

ANNEXES

JUNE 1991

TABLE OF CONTENTS

ANNEX I - DISTRIBUTION

A) Two copies of this plan and all subsequent changes or revisions will be forwarded to the Federal and State agencies listed in SUBPART B Section IV.A)2) and those Coast Guard commands listed in Section B below.

B) In addition to these copies identified above, the following distribution has been made:

U.S. Coast Guard

- LANT AREA Strike Team - (1)
- Reserve Training Center (t-mss) - (1)
- Commander, First Coast Guard District (m) - (1)
- Commander, Second Coast Guard District (m) - (1)
- Commander, Fifth Coast Guard District (m) - (1)
- Commander, Seventh Coast Guard District (m) - (1)
- Commander, Ninth Coast Guard District (m) - (1)
- Commander, Atlantic Area (Aos) - (1)
- Commandant (G-MER) - (1)
- National Response Team (G-MER-12) - (1)
- National Response Center - (1)

C) Additional copies, subsequent changes or revisions may be requested from the co-chairs of the Standing RRT.

ANNEX II - REGIONAL RESPONSE TEAM DIRECTORY

A) The RRT consists of regional representatives of participating Federal agencies and representatives of state governments. Each agency shall designate one member and a sufficient number of alternates to insure representation at an RRT activation in the event that the member is unavailable. Participating states may also designate one member and at least one alternate member to be notified in appropriate circumstances. The agency membership on the RRT is established by the NCP. However, individuals representing the primary agencies may vary depending on the local area in which the spill occurs. All agencies and states may also provide additional representatives as observes to meetings of the RRT. All designated members of Incident-Specific RRTs will also participate in the planning efforts of the Standing RRT.

B) EXHIBIT A lists the primary and alternate representatives for all agencies represented on the Federal Region III RRT. This listing will be routinely updated following each semi-annual RRT meeting. All agencies shall immediately notify the co-chairman of any changes, in writing, in their agency's representatives as they occur. The Standing RRTs primary functions are to insure adequate planning, training and advanced coordination have been accomplished in order to provide all necessary assistance to the OSC's response efforts.

C) EXHIBIT B lists modifications to be made to the Standing RRT List (EXHIBIT A) when Incident-Specific RRT is activated to assist the OSC responding to that specific incident. Incident-Specific RRTs will be chaired by the agency providing the OSC.

D) EXHIBIT C lists the specific DOD personnel who will request activation of Incident-Specific RRT when the DOD is providing the OSC. When EPA or Coast Guard OSCs are involved in a DOD discharge, the RRT will be activated at the request of the DOD personnel or at the request of the OSC and in consultation with the DOD personnel.

E) EXHIBIT D list the ancillary RRT Members from United States Coast Guard Marine Safety Offices.

F) EXHIBIT E is a list of the State Trustees for Natural Resources.

G) EXHIBIT F is a list of the EPA Region III OSCs.

H) EXHIBIT G is a list of officials designated by Governor of the United States Authorized to access the Oil Spill Liability Trust Fund (OSLTF)

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT A
FEDERAL REGION III
STANDING RRT MEMBERSHIP

Co-Chairman:	Capt. Richard C. Vlaun	Chief, Marine Safety Div. Fifth Coast Guard District
Co-Chairman:	Mr. Dennis P. Carney	Chief, Superfund Removal Branch

---

DEPARTMENT OF AGRICULTURE

Northeast Area State & Private Forestry 5 Radnor Corporate Center 100 Matson Ford Road P.O. Box 6775 Radnor, PA 19087-4585	Mr. Kenneth H. Knauer, PRI Work: (215) 975-4103 24 Hr: (302) 239-6745 Fax: (215) 975-4200
Same As Above	Mr. Charles L. Hatch, ALT Work: (215) 975-4120 Home: (215) 491-0111 Fax: (215) 975-4200

DEPARTMENT OF COMMERCE

NOAA Coastal Resource Coordinator c/o U.S. EPA (3HW02) 841 Chestnut Building Philadelphia, PA 19107	Mr. Peter Knight, PRI Work: (215) 597-3636 Home: (215) 723-5256 24 Hr: (206) 526-6317 E Mail: CRC3
NOAA Hazmat Liaison c/o USCG (G-MEP) 2100 Second St., S.W. Washington, DC 20593	CDR Pam Chelgren-Koterba, ALT Work: (202) 267-6120 24 Hr: (206) 526-6317 Pager: (800) 759-7243 Pin #5798805 Fax: (206) 267-4825

***NOTE: Contains personnel telephone numbers. Not for release to the public**

DEPARTMENT OF COMMERCE-CONTINUED

NOAA Scientific Support Coordinators:

FOR THE STATES OF MARYLAND AND VIRGINIA:

USCG, RTC (+mer)
Yorktown, VA 23690-5000

Mr. Gary Ott
Work: (804) 898-2320
24 Hr: (206) 526-6317
Home: (804) 898-7318
Fax: (804) 898-2296
E Mail: GARYO

FOR THE STATES OF DELAWARE AND PENNSYLVANIA:

Building 110-Box 2
Governors Island, NY 10004

Mr. Edwin Levine
Mr. Steve Meador, Asst.
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24 Hr.: (206) 526-6317
Pager: (800) 759-7243
Pin #5798815
Fax: (212) 668-6370
E Mail: NYSSC

FOR THE STATES OF WEST VIRGINIA AND PENNSYLVANIA (inland waters):

C/O CGD9
1240 E. 9th Street
Cleveland, OH 44199

Mr. Ken Barton
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24 Hr.: (206) 526-6317
Fax: (216) 522-7759

DEPARTMENT OF DEFENSE

The DOD has a designated representative for the NRT only. There is no designated DOD representative on the Standing RRT.

U.S. Army Corps of Engineers
North Atlantic Division
Room 1217, 90 Church Street
New York, NY 10007

Ms. Sue McKnight, PRI
Work: (212) 264-7854
24 Hr: (212) 264-7091
Fax: (212) 264-5213
E Mail: COE3

U.S. Army Corps of Engineers
Baltimore District
(CENAB-CO-M)
P.O. Box 1715
Baltimore, MD 21203-1715

Mr. Gilbert Dent, ALT
Work: (410) 962-4223
24 Hr: (410) 962-2013
Home: (410) 235-4023
Fax: (410) 962-0076

***NOTE: Contains personnel telephone numbers. Not for release to the public**

DEPARTMENT OF DEFENSE- CONTINUED

United States Navy Naval Base Code N3, Building N26 Norfolk, VA 23511-6002	CDR Michael Haskins, PRI Work: (804) 444-3649 24 Hr: (804) 444-7097 Fax: (804) 444-1163 E Mail: NAVY3
Commander, Naval Base Director, Operations & Plans Department Code N3, Bldg. N26 Norfolk, VA 23511-6002	Mr. Steve L. Gibson, ALT Work: (804) 444-1818 24 Hr: (804) 444-7097 Fax: (804) 444-1163 E Mail: NAVY3
United States Army * First U.S. Army Headquarters Attn: AFKA-OP-MP Ft. George G. Meade, MD 20755-7000	Lt. Colonel Don Prewitt, PRI Major Margurite Greene, ALT Work: (301) 677-7983/2610 24 Hr: (301) 677-4805/4827

* The First U.S. Army Headquarters may also be contacted if any Air Force assistance is needed.

DEPARTMENT OF ENERGY

FOR THE STATES OF DELAWARE, MARYLAND, PENNSYLVANIA:

Brookhaven Lab Brookhaven Area Office 53 Bell Avenue Uptown, NY 11973	Mr. Michael Holland, PRI Work: (516) 282-3552 24 Hr: (516) 282-2200 (DOE Hotline) Fax: (516) 341-1377 E Mail: DOE3
Same As Above	Mr. Steve Centore, ALT Work: (516) 282-7309 Home: (516) 369-4173 24 Hr: (516) 282-2200 (DOE Hotline) Fax: (516) 341-1377 E Mail: DOE3

***NOTE: Contains personnel telephone numbers. Not for release to the public**

DEPARTMENT OF ENERGY-CONTINUED

FOR THE STATES OF VIRGINIA AND WEST VIRGINIA AND THE DISTRICT OF COLUMBIA. TO CONTACT DOE REGION II FOR RADIOLOGICAL ASSISTANCE CALL (615) 576-1005.

Emergency Operations Center
Oak Ridge Operations Office
P.O. Box 2001-Administration Rd.
Oak Ridge, TN 37831

Mr. Donald A. Lane, PRI
Work: (615) 576-9746
24 Hr: (615) 576-1005
Fax: (615) 576-9772

Same As Above

Mr. Bobby Davis, 1ST ALT
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24 Hr: (615) 576-1005
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Emergency Ops Center
CEBAF
1200 Jefferson Avenue
Newport News, VA 23606

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service-Region III
3535 Market Street
Room 10140-Mail Stop 14
P.O. Box 13716
Philadelphia, PA 19101

Mr. Charles Walters, ACT/PRI
C/O U.S. EPA (3HW01)
Work: (215) 597-7291
Home: (609) 751-8722
Otherwise available through
EPA RRC: (215) 597-9898

ATSDR
U.S. Environmental Protection Agency
Region III
Haz. Waste Mgmt. Div. (3HW01)
841 Chestnut Street
Philadelphia, PA 19107

Mr. Charles Walters, PRI
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EPA RRC: (215) 597-9898

Same As Above

Mr. Jack Kelly, ALT
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***NOTE: Contains personnel telephone numbers. Not for release to the public**

DEPARTMENT OF THE INTERIOR

Office of Environmental Affairs
U.S. Custom House-Room 217
200 Chestnut Street
Philadelphia, PA 19106-2904

Mr. Donald Henne, PRI
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Same As Above

Mr. Michael T. Chezik, ALT
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U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035-9589

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Fax: (413) 253-8482

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DEPARTMENT OF JUSTICE

Env. & Natural Resources Division
Environmental Enforcement Section
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Fax: (202) 616-6583
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Senior Admiralty Counsel
Torts Branch, Civil Division
1425 N.Y. Avenue, N.W.
Room 13079
Washington, DC 20005

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DEPARTMENT OF LABOR

OSHA Technical Support
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DEPARTMENT OF STATE

NRT representative only. No RRT representative has been designated.

DEPARTMENT OF TRANSPORTATION

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Capt. Richard C. Vlaun, PRI
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CDR George Matthew, ALT
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ENVIRONMENTAL PROTECTION AGENCY

Hazardous Waste Management Division
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***NOTE: Contains personnel telephone numbers. Not for release to the public**

FEDERAL EMERGENCY MANAGEMENT AGENCY

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FEDERAL HIGHWAY ADMINISTRATION

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GENERAL SERVICES ADMINISTRATION

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DISTRICT OF COLUMBIA

Department of Consumer & Regulatory Affairs Environmental Regulation Administration 2100 Martin Luther King, Jr. Avenue, S.E. Suite 203 Washington, DC 20020	Ms. Ferial S. Bishop, PRI Work: (202) 404-1136 24 Hr: (202) 727-6161 Fax: (202) 404-1141 E Mail: R3DC
Department of Consumer & Regulatory Affairs Environmental Regulation Administration Pesticides, Hazardous Waste and Underground Storage Tank Div. 2100 Martin Luther King, Jr. Avenue, S.E. Suite 203 Washington, DC 20020	Mr. Angelo Tompros, ALT Work: (202) 404-1167 x3011 24 Hr: (202) 727-6161 Fax: (202) 404-1150 E Mail: R3DC
Department of Consumer & Regulatory Affairs Environmental Regulation Administration Water Resources Management Div. 2100 Martin Luther King, Jr. Avenue, S.E. Suite 203 Washington, DC 20020	Mr. James Collier, ALT Work: (202) 404-1120 24 Hr: (202) 727-6161 Fax: (202) 404-1141 E Mail: R3DC
Office of Emergency Preparedness Plans and Training Division- 8th Floor 2000 14th Street, N.W. Washington, DC 20009	Mr. John C. Lewis, PRI 24 Hr: (202) 727-6161 E Mail: R3DC
Same As Above	Ms. Pamela Thurber, ALT 24 Hr: (202) 727-6161 Home: (202) 882-3267 E Mail: R3DC
D.C. Fire Department 2225 Fifth Street, N.E. Washington, DC 20002	Batallion Chief James M. Johnson, Jr., PRI 24 Hr: (202) 673-3348 E Mail: FDDC

***NOTE: Contains personnel telephone numbers. Not for release to the public**

STATE OF DELAWARE

Department of Public Safety
Emergency Planning and Operations
Division
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Delaware Department of Natural
Resources & Environmental Control
Div. of Air & Waste Management
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Dover, DE 19903

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24 Hr: (302) 739-5072
Home: (302) 697-1204
Fax: (302) 739-5060
E Mail: R3DE2

STATE OF MARYLAND

Department of the Environment
Hazardous & Solid Waste
Management Administration
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Mr. John Chlada, PRI
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24 Hr: (410) 974-3551
Home: (302) 697-1204
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MD Department of Environment
2103 Annapolis Road
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Mr. Arthur O'Connell, PRI
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24 Hr: (410) 974-3551
Fax: (410) 333-3728
E Mail: R3MD2

COMMONWEALTH OF PENNSYLVANIA

Department of Environmental
Resources
Environmental Emergency Response
P.O. Box 2063
Harrisburg, PA 17105-2763

Mr. Charlie High, PRI
Work: (717) 787-5027
24 Hr: (717) 787-4343
24 Hr: (800) 541-2050
Home: (717) 948-3531
Fax: (717) 783-9186
E Mail: R3PA

***NOTE: Contains personnel telephone numbers. Not for release to the public**

COMMONWEALTH OF PENNSYLVANIA- CONTINUED

Department of Environmental
Resources
Environmental Emergency Response
200 Pine Street
Williamsport, PA 17701

Mr. Robert Fisher, ALT
Work: (717) 327-3646
24 Hr: (717) 327-3696
Home: (717) 745-3472
Fax: (717) 327-3565
E Mail: R3PA

COMMONWEALTH OF VIRGINIA

Department of Emergency Services
310 Turner Road
Richmond, VA 23225-6491

Mr. James Holloway II, PRI
Work: (804) 674-2413
24 Hr: (804) 674-2400
Fax: (804) 674-2661
E Mail: R3VA

Same As Above

Mr. Linwood A. Grant, ALT
Work: (804) 674-2388
24 Hr: (804) 674-2400
Fax: (804) 674-2431
E Mail: R3VA

STATE OF WEST VIRGINIA

Division Of Environmental
Protection
10 McJunkin Road
Nitro, WV 25143

Mr. Stephen C. Keen, PRI*
Work: (304) 759-0502
24 Hr: (800) 642-3074
Fax: (304) 759-0528

*Temporary until representatives get officially assigned.

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-1
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
DISTRICT OF COLUMBIA

1. All Standing RRT Representatives designated by the Incident Specific Chairperson.

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-2
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
DELAWARE

1. All Standing RRT Representatives designated by the Incident Specific Chairperson.

Dept. of Natural Resources
and Environmental Control
Water Quality Section
89 Kings Highway
P.O. Box 1401
Dover, DE 19903

Mr. Bennett Anderson
Work: (302) 739-4590

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-3
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
MARYLAND

1. All Standing RRT Representatives designated by the Incident Specific Chairperson.

D.O.D., Army Corp of Engineers
Baltimore District
(CENAB-CO-M)
P.O. Box 1715
Baltimore, MD 21203-1715

Mr. Gilbert Dent
Work: (410) 962-4223
24 Hr: (410) 962-2013
Home: (410) 235-4023
Fax: (410) 962-0076

Baltimore City Fire Department
1100 Hillen Street
Baltimore, MD 21202

Captain Jim Henry
Work: (410) 396-5756
24 Hr: (410) 396-5684
Home: (410) 876-8978
Fax: (410) 396-1985

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-4
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
PENNSYLVANIA

1. All Standing RRT Representatives designed by the Incident Specific Chairperson.

2. Delete the United States Coast Guard Standing RRT membership listing. The Commonwealth of Pennsylvania is serviced by three Coast Guard Districts. Refer to Annex III to identify in which Coast Guard District a specific incident has occurred and add one of the following as appropriate:

USCG (EASTERN PENNSYLVANIA)

United States Coast Guard
Commander (m)
Fifth Coast Guard District
431 Crawford Street
Portsmouth, VA 23705-5004

CAPT Richard C. Vlaun
Work: (804) 398-6637
24 Hr: (804) 398-6231
E Mail: CDG5

Same As Above

CDR George Matthews, ALT
Work: (804) 398-6638
24 Hr: (804) 398-6231
E Mail: CDG5

D.O.D. Army Corp. of Engineers
Philadelphia District
Emergency Mgmt. Branch Room 621
100 Penn Square East
Wanamaker Building
Philadelphia, PA 19107

Mr. Brian Mulvenna, PRI
Ms. Kathleen Bisceglie, ALT
Work/24 Hr: (215) 656-6756
Fax: (215) 656-6767

USCG (SOUTHWESTERN PENNSYLVANIA)

Commander (m)
Second Coast Guard District
1430 Olive Street
St. Louis, MO 63103

CAPT Robert Luchun, PRI
CAPT Tom Rodino, ALT
Work: (314) 539-2655
24 Hr: (314) 539-3706
Fax: (314) 539-3637
E Mail: CGD2

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-4
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
PENNSYLVANIA-CONTINUED

USCG (NORTHWESTERN PENNSYLVANIA)

Commander (m) United States Coast Guard Ninth Coast Guard District 1240 East 9th Street Cleveland, OH 44199-2060	CAPT Robert W. Mason Work/24 Hr: (216) 522-3984 Fax: (216) 522-2738 E Mail: CGD9
Ohio River Valley Water Sanitation Commission (ORSANCO) 5735 Kellogg Avenue Cincinnati, OH 45228-1112	Mr. Jonathan McSayles 24 Hr: (513) 231-7719 Fax: (513) 231-7761
U.S. Army Corp of Engineers Pittsburgh District William S. Moorehead Federal Building 1000 Liberty Avenue Pittsburgh, PA 15222	Mr. Ralph Backhaus Work: (412) 644-6833 Home: (412) 487-7759

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-5
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
VIRGINIA

1. All Standing RRT Representatives designated by the Incident Specific Chairperson.

2. For incident specific activations involving state waters, delete the Department of Emergency Service and add:

Virginia Department of Environmental Quality 4900 Cox Road Glen Allen, VA 23060	Mr. David Ormes, PRI Work: (804) 527-5197 24 Hr: (804) 527-5200 Fax: (804) 527-5311 E Mail: R3VWCB
Same As Above	Mr. Brett Burdick, ALT Work: (804) 527-5324 24 Hr: (804) 527-5200 Fax: (804) 527-5311 E Mail: R3VWCB
U.S. Fish & Wildlife Service P.O. Box 480 Mid-County Ctr., US Rte. 17 White Marsh, VA 23183	Mr. Ken Seeley, ALT Work: (804) 693-6694 Home: (804) 642-0885 Fax: (804) 693-9032 E Mail: R3FWS
Same As Above	Ms. Nancy Morse, ALT Work: (804) 693-6694 Home: (804) 642-5802 Fax: (804) 693-9032 E Mail: R3FWS
D.O.D. Army Corp of Engineers Norfolk District 803 Front Street Norfolk, VA 23501-1096	Mr. John Baxter Work: (804) 441-7631 Home: (804) 483-6870

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT B-6
FEDERAL REGION III
INCIDENT SPECIFIC RRT MEMBERSHIP
WEST VIRGINIA

1. All Standing RRT Representatives designated by the Incident Specific Chairperson.

2. Delete the United States Coast Guard Standing RRT membership listing and insert:

USCG

Commander (m) Second Coast Guard District 1430 Olive Street St. Louis, MO 64103	CAPT Robert Luchun, PRI CAPT Tom Rodino, ALT Work: (314) 539-2655 24 Hr: (314) 539-3706 Fax: (314) 539-2637 E Mail: CGD2
U.S. Corp of Engineers Huntington District Emergency Mgmt. Section 502 8th Street Huntington, WV 25701	Mr. Carl E. Miller, Jr. Work: (304) 529-5284 Home: (304) 523-0203
Ohio River Valley Water Sanitation Commission (ORSANCO) 5735 Kellogg Avenue Cincinnati, OH 45228-1112	Mr. Jonathan McSayles 24 Hr: (513) 231-7719 Fax: (513) 231-7761

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT C
FEDERAL REGION III
DEPARTMENT OF DEFENSE
INCIDENT SPECIFIC RRT REPRESENTATIVES

UNITED STATES NAVY

First U.S. Army Headquarters
Attn: AFKA-OP-MP
Ft. George G. Meade, MD 20755-7000

ENTIRE REGION III

LT. COLONEL Don Prewitt, PRI
Major Margurite Greene, ALT
Work: (301) 677-7983
24 Hr: (301) 677-4805

UNITED STATES NAVY

Naval Base
Code N3, Bldg. N26
Norfolk, VA 23511-6002

VIRGINIA

CDR Michael Haskins, PRI
Work: (804) 444-3649
24 Hr: (804) 444-7097
Fax: (804) 444-1163
E Mail: NAVY3

Commander-Naval Base
Director, Operations & Plans
Department
Code N34, Bldg. N26
Norfolk, VA 23511-6002

Mr. Steve L. Gibson, ALT
Work: (804) 444-1818
24 Hr: (804) 444-7097
Fax: (804) 444-1163
E Mail: NAVY3

DEPARTMENT OF DEFENSE

SUPSALV
SEAOOC
Naval Sea Systems Command
2531 Jefferson Davis Highway
Arlington, VA 22242-5160

ENTIRE REGION III

Paul Hankins
Work: (703) 607-2758
Home: (202) 363-0754
Fax: (703) 607-2757

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT D
ANCILLARY RRT MEMBERS
UNITED STATES COAST GUARD

NRT DESIGNATED REGIONAL REPRESENTATIVE

United States Coast Guard
Comdt. (G-MEP)
2100 South 2nd Street-S.W.
Washington, DC 20593-0001

LCDR Rhae Giacoma
Work: (202) 267-2616
E Mail: NRTCG

ATLANTIC STRIKE TEAM
EPA REGIONS I, II, III, IV

Commanding Officer
Atlantic Strike Team
P.O. Box 68, Bldg. 5918
Fort Dix, NJ 08640-0068

CDR Frank L. Whipple, PRI
Work: (609) 724-0008
24 Hr: (800) 424-8802
Fax: (609) 724-0232

UNITED STATES COAST GUARD DISTRICT 5
EPA REGION III
(DELAWARE, DISTRICT OF COLUMBIA, MARYLAND, PENNSYLVANIA-EASTERN PORTION, AND VIRGINIA)

MSO BALTIMORE

Marine Safety Office
Customhouse
40 South Gay Street
Baltimore, MD 21202-4022

CAPT Gregory Cope, OSC
Work: (410) 962-5121/5100
24 Hr: (410) 962-5105
Fax: (410) 962-0930
E Mail: MSOBWI

MSO/GROUP PHILADELPHIA

Marine Safety Office
1 Washington Avenue
Philadelphia, PA 19147-4395

CAPT Charles Guldenschuh, OSC
CDR Peter Randall, ALT
24 Hr: (215) 271-4803
Fax: (215) 271-4833
E Mail: MSOPHL

***NOTE: Contains personnel telephone numbers. Not for release to the public**

UNITED STATES COAST GUARD DISTRICT 5
EPA REGION III-CONTINUED

MSO HAMPTON ROADS

Marine Safety Office
Hampton Roads
Norfolk Federal Building
200 Granby Street
Norfolk, VA 23510-1888

CAPT Gary Thornton, OSC
Work: (804) 441-3302
24 Hr: (804) 441-3307
Fax: (804) 441-3262
E Mail: MSOORF

UNITED STATES COAST GUARD DISTRICT 5
EPA REGION IV

MSO WILMINGTON

Marine Safety Office
272 North Front Street
Suite 500
Wilmington, NC 28401-3907

CAPT C. Eisenbeis, OSC
CDR Richard Muth
LTJG Jeff Babb
Work: (919) 343-4882
24 Hr: (919) 343-4895
E Mail: MSOILM

UNITED STATES COAST GUARD DISTRICT 2
EPA REGION III
(PENNSYLVANIA-SOUTHWESTERN PORTION, WEST VIRGINIA)

MSO HUNTINGTON

Marine Safety Office
1415 6th Ave. P.O. Box 2412
Huntington, WV 25701-2420

CAPT Joseph Kuchin, OSC
Work/24 Hr: (304) 529-5524
Fax: (304) 522-5457
E Mail: MSOHUN

MSO PITTSBURGH

Marine Safety Office
Suite 700
700 Kossman Building
Forbes Ave. & Stanwix St.
Pittsburgh, PA 15222-1371

CDR Michael W. Brown, OSC
Work/24 Hr: (412) 644-5808
Fax: (412) 644-3479
E Mail: MSOPIT

***NOTE: Contains personnel telephone numbers. Not for release to the public**

UNITED STATES COAST GUARD DISTRICT 9
EPA REGION III
(PENNSYLVANIA-GREAT LAKES AREA)

MSO BUFFALO

Marine Safety Office
Federal Building-Room 1111
11 West Huron Street
Buffalo, NY 14202-2395

CDR Mark Vanhaverbeke, OSC
Work: (716) 846-4168
24 Hr: (716) 846-4154
Fax: (716) 846-4171
E Mail: MSOBUF

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT E
STATE TRUSTEES

Following is a list of the designated State officials who will act as State trustees for natural resources:

Delaware:	Secretary, Department of Natural Resources and Environmental Control 89 Kings Highway, P.O. Box 1401 Dover, DE 19903 (302) 739-4403
District of Columbia:	Larry King Acting Director, Dept. of Consumer & Regulatory Affairs 614 H Street, N.W. Washington, DC 20001 (202) 727-7170
Maryland:	Robert Perciasepe, Secretary Department of the Environment 2500 Broening Highway Baltimore, Maryland 21224 (410) 974-3041 Dr. Torrey C. Brown, Secretary Department of Natural Resources Tawes State Office Building Annapolis, Maryland 21401 (410) 974-3041
Penna:	Arthur A. Davis, Secretary Department of Environmental Resources P.O. Box 2063 Harrisburg, Pennsylvania 17120 (717) 787-2814
Virginia:	Elizabeth H. Haskell Secretary of Natural Resources P.O. Box 1475 Richmond, Virginia 23212 (804) 786-0044
West Virginia:	David C. Callaghan, Director Division of Environmental Protection 10 McJunkin Road Nitro, West Virginia 25143-2506 (304) 759-0515

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT F
EPA REGION III PREDESIGNATED ON-SCENE COORDINATORS

Following is a list of EPA Region III Predesignated Federal On-Scene Coordinators, all of whom can be reached by contacting the Regional Response Center at 215-597-9898 (24-hour).

Jack Downie
Marjorie Easton
George English
Doug Fox
Rich Fetzer
Steve Jarvels
Kevin Koob
Walter Lee
Dennis Matlock
Jack Owens
Marty Powell
Bill Steuteville
Terry Stilman
Mike Towle
Vince Zenone

***NOTE: Contains personnel telephone numbers. Not for release to the public**

EXHIBIT G

The following individuals have been designated authority to access the Oil Spill Liability Trust Fund under Section 1012 (d)(i) of the Oil Pollution Act of 1990.

DELAWARE- Governor Thomas R. Carper

Designated: Mr. John H. Mohrman (302) 739-5072-24hrs
(302) 739-3694-office
(302) 739-5060-fax
Environmental Program Manager II
Environmental Response Branch
Delaware Department of Natural Resource & Environmental Control
89 Kings Highway
P.O. Box 1401
Dover, DE 19903

MARYLAND- Governor William Donald Schaefer

All correspondence concerning State Access should be addressed to:

Designated: Mr. Robert Perciasepe, Secretary (410) 631-3084
Maryland Department of the Environment
2500 Broening Highway
Baltimore, MD 21224

Alternate: Mr. John K Chlada (410) 631-3305
Emergency Management Coordinator
Maryland Department of the Environment
2500 Broening Highway
Baltimore, MD 21224

Alternate: Mr. Robert A. DeMarco, Administrator (410) 631-3437
Emergency Response Program
Maryland Department of the Environment
2103 Annapolis Road
Baltimore, MD 21230

PENNSYLVANIA- Governor Robert P. Casey

Designated: Mr. Charles W. High (717) 787-5027-Office
(717) 948-3531-Home
Director Environmental Emergency Response
Department of Environmental Resources
P.O. Box 2063
Harrisburg, PA 17105-2063

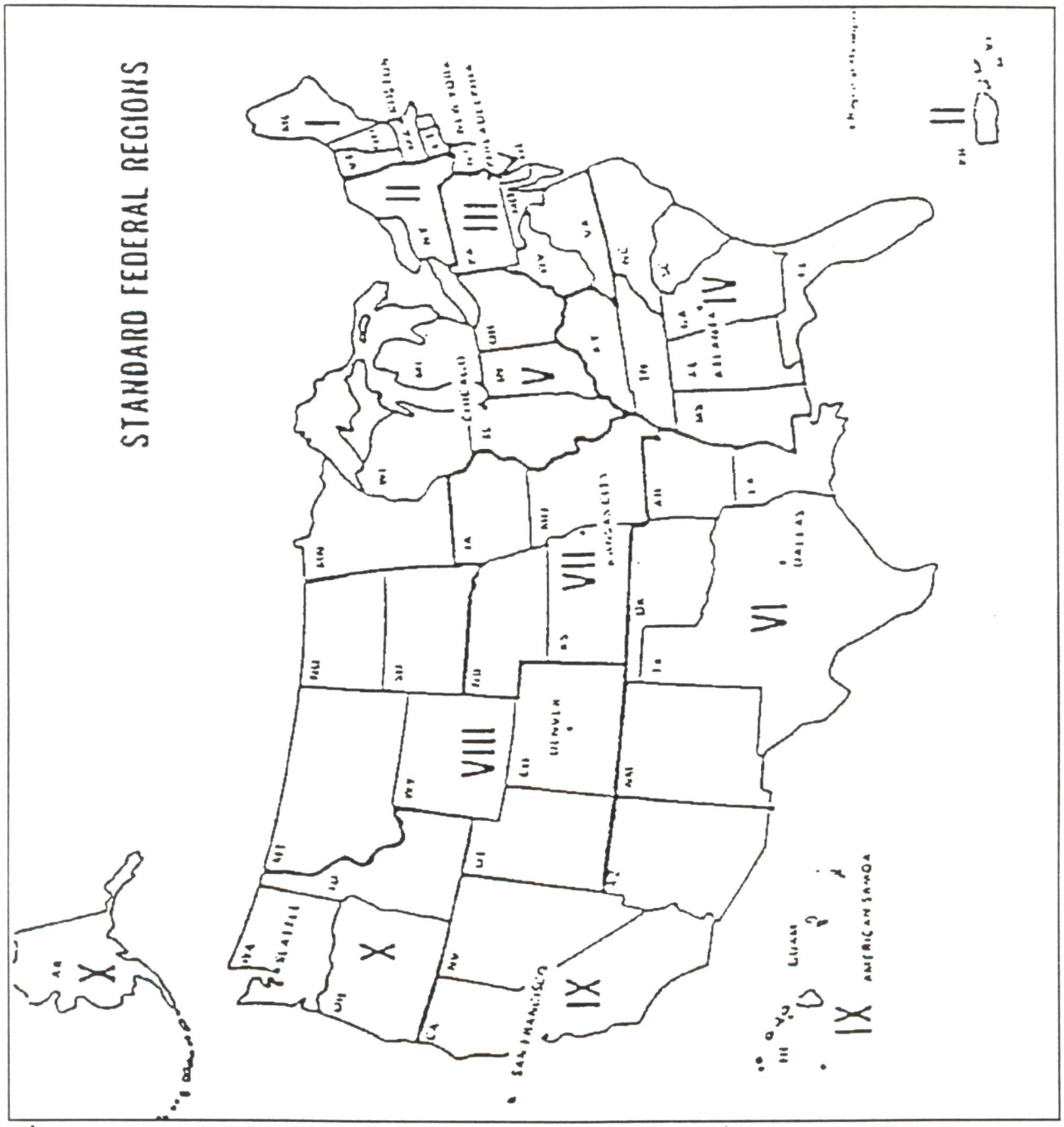


Figure 1 - EPA, HHS, FEMA, DOE, DOL, DOC Regions

B) Inland/Coastal Boundary Agreement in Maryland and Virginia

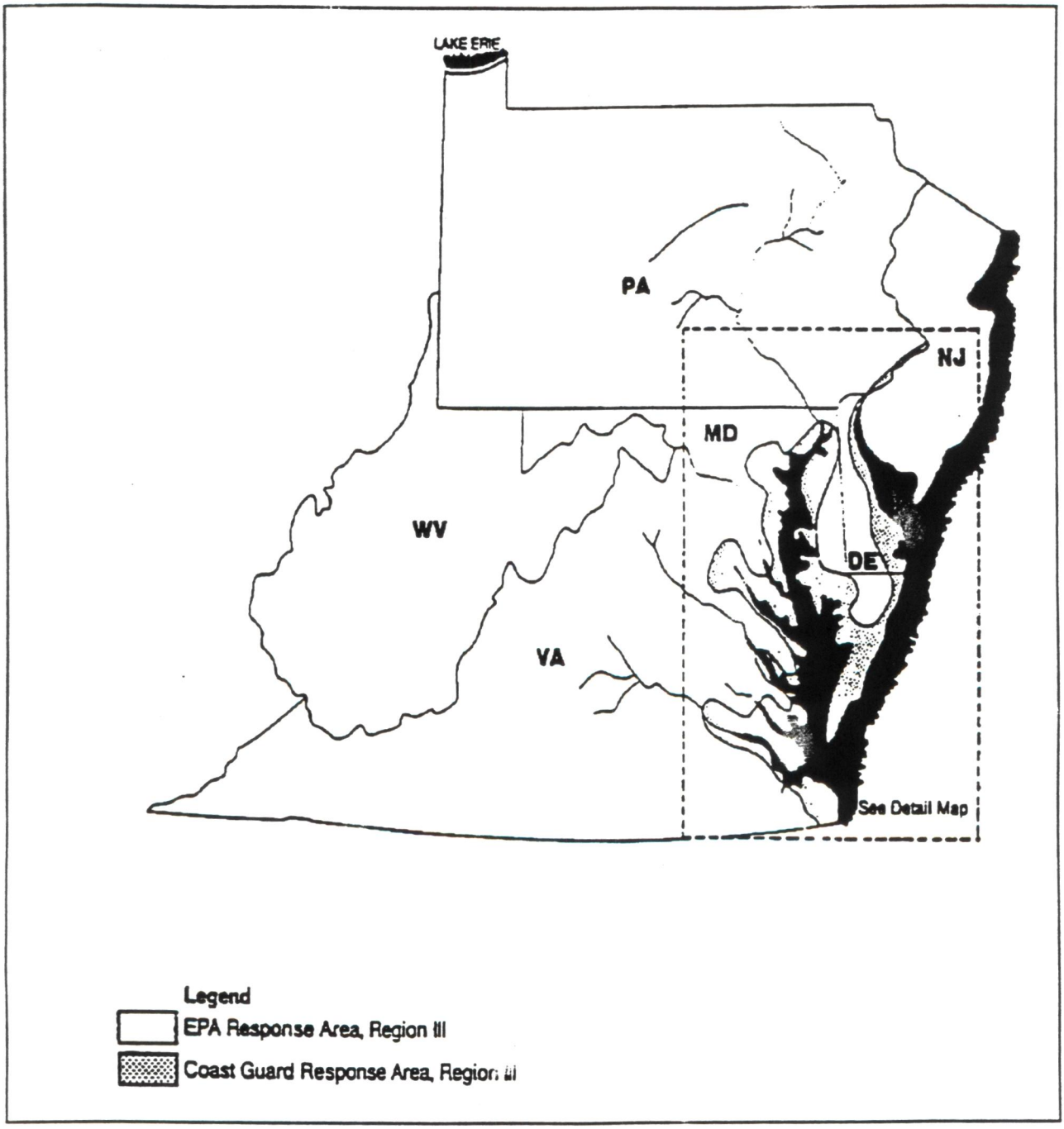
For pollution response purposes in Maryland and Virginia, the boundary between EPA and the USCG starts at the west bank of the Dismal Swamp Canal at the VA/NC border, north along the west bank of the Dismal Swamp Canal to VA State Hwy 13; hence west along State Hwy 13 to State Hwy 10; hence west along State Hwy 10 to State Hwy 156; hence north along State Hwy 156 over Ben Harrison Bridge to State Hwy 5; hence east on State Hwy 5 to State Hwy 132; hence east on State Hwy 132 to U.S. Interstate 64; hence west on U.S. Interstate 64 to State Hwy 30; hence north on State Hwy 30 to State Hwy 33; hence east on State Hwy 33 to State Hwy 14; hence east on State Hwy 14 to State Hwy 17; hence south on State Hwy 17 to State Hwy 3; hence north on State Hwy 3 to State Hwy 33; hence west on State Hwy 33 to State Hwy 17; hence north on State Hwy 17 to State Hwy 360; hence east on State Hwy 360 to State Hwy 3; hence south on State Hwy 3 to State Hwy 200; hence north on State Hwy 200 to State Hwy 360; hence west on State Hwy 360 to State Hwy 202; hence north on State Hwy 202 to State Hwy 3; hence west on State Hwy 3 to State Hwy 205; hence north along State Hwy 205 to State Hwy 218; hence north along Hwy 218 to State Hwy 301; hence east along State Hwy 301 to the west bank of the Potomac River; hence north along the west bank of the Potomac River to U.S. Interstate 495 (Cabin John Bridge); hence east along U.S. Interstate 495 to the east bank of the Potomac River; hence south along the east bank of the Potomac River to the Arlington Memorial Bridge; hence east on Arlington Memorial Bridge to Independence Avenue; hence east on Independence Avenue to 15th Street SE; hence north on 15th Street SE to Bladensburg Road; hence north on Bladensburg Road to New York Avenue; hence east on New York Avenue to State Hwy 50 continuing east on Hwy 50 to U.S. Interstate 295; hence south on U.S. Interstate 295 to the Suitland Parkway; hence east along theSuitland Parkway to MD State Hwy 5; hence south along State Hwy 5 to State Hwy 231; hence east along State Hwy 231 to State Hwy 2; hence north along State Hwy 2 to State Hwy 178; hence north along State Hwy 178 to State Hwy 3; hence north along State Hwy 3 to U.S. Interstate 695; hence west along U.S. Interstate 695 around the city limits of Baltimore to U.S. Interstate 95; hence east on Interstate 95 to the west bank of the Susquehanna River; hence north along the west bank of the Susquehanna River to the Conowingo Dam; hence east along the Conowingo Dam to the east bank of the Susquehanna River; hence south along the east bank of the Susquehanna River to U.S. Interstate 95; hence east along U.S. Interstate 95 to the MD/DE border; hence south along the MD/DE border to the north bank of the Chesapeake & Delaware Canal; hence east along the north bank of the Chesapeake & Delaware Canal to Reedy Pt.; hence due south from Reedy Pt. to the south bank of the Chesapeake & Delaware canal; hence west along the south bank of the Chesapeake & Delaware canal to MD State Hwy 213; hence south along State Hwy 213 to State Hwy 50; hence south along State Hwy 50 to State Hwy

E) Inland/Coastal Boundary Agreements in Western Pennsylvania, Ohio and West Virginia:

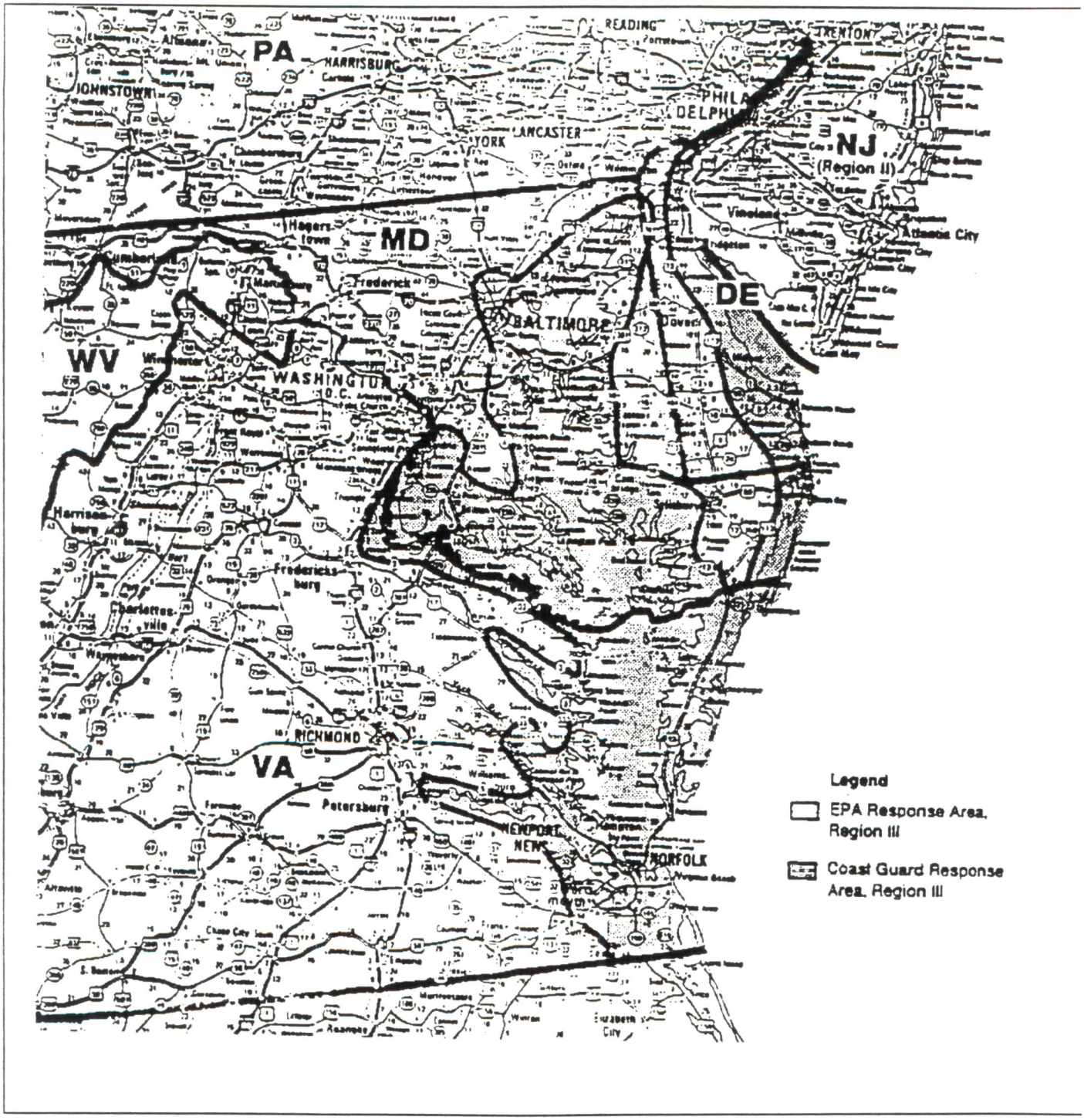
The entirety of the Second Coast Guard District, including the inland river system within the Second District, will have the United States Environmental Protection Agency (USEPA) as the predesignated On Scene Coordinator. (The previous Coast Guard District had identified specified ports and harbors as portions of that Coastal Zone. That agreement is now cancelled.)

The U.S. Coast Guard will, however, assist the predesignated USEPA OSC on scene for pollution incidents where there is actual discharge or release, or a substantial threat or release, of pollution into or on the navigable waters of the United States consistent with their agency responsibilities and authorities.

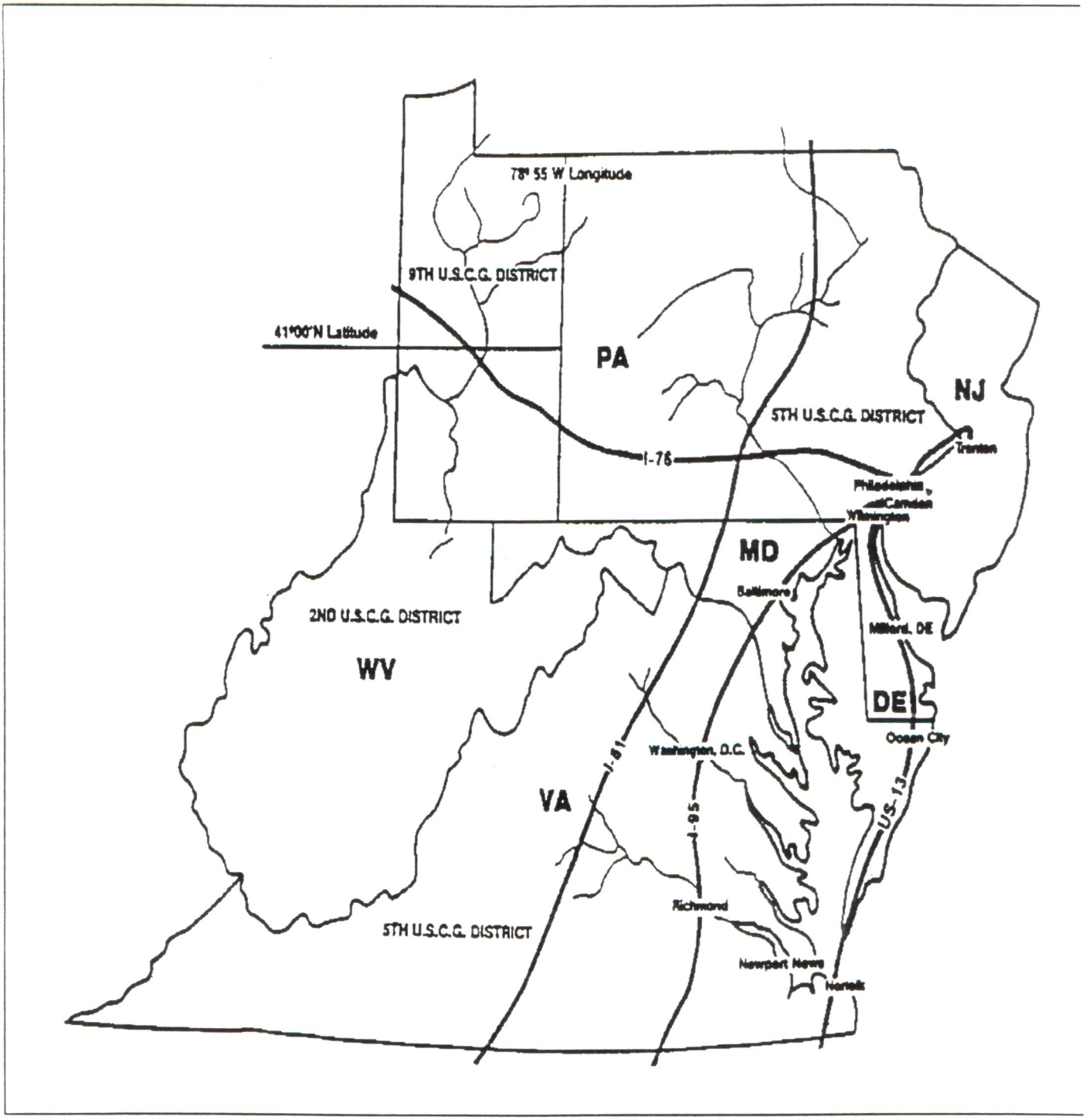
Specifically, the USCG COTP will provide the OSC when the incident involves a commercial vessel, a vessel transfer operation, or a marine transportation related facility.



STANDARD FEDERAL REGION III
INLAND/COASTAL ZONE BOUNDARIES
FIGURE 2



STANDARD FEDERAL REGION III
INLAND/COASTAL ZONE BOUNDARIES - DETAILED
FIGURE 3



U.S. COAST GUARD DISTRICT BOUNDARIES - REGIONAL
FIGURE 5

F) OVERALL SECOND COAST GUARD DISTRICT BOUNDARIES

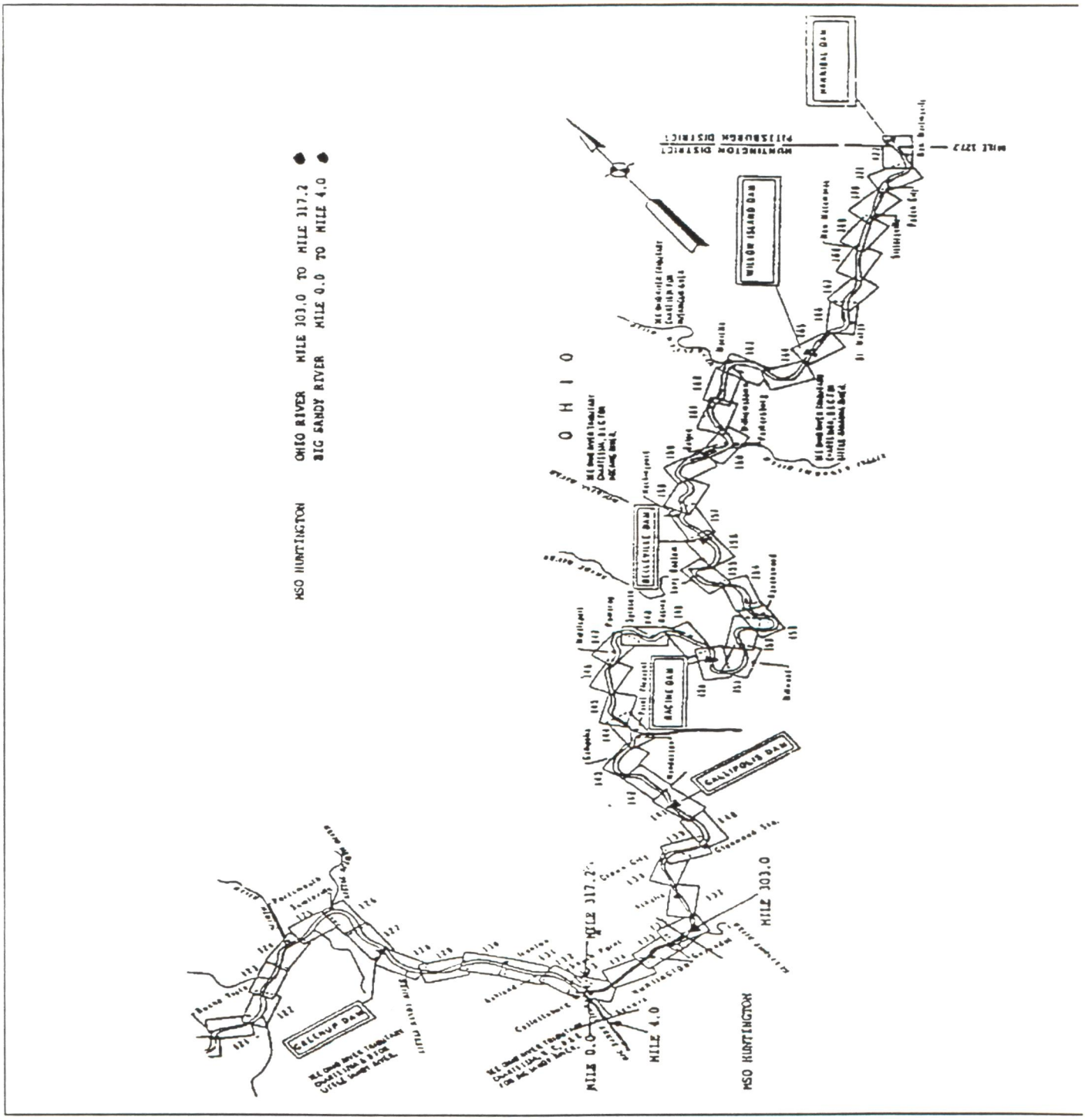
33CFR, Section 3.10-1. The Second Coast Guard District is comprised of: Arkansas, West Virginia, Kentucky, Tennessee, Oklahoma, Kansas, Nebraska, North Dakota, South Dakota, Wyoming, Colorado, Iowa, and Missouri; that part of Pennsylvania south of the 41° North latitude and west of the 79° West longitude; those parts of Ohio and Indiana south of 41° North latitude; Illinois, except that part north of 41° North latitude and east of 90° West longitude; that part of Wisconsin south of 46°20' North latitude and west of 90° West longitude; that part of Minnesota south of 46°20' North latitude; that part of Alabama north of 34° North latitude; that part of Mississippi north of the Southern boundaries of the counties of Washington, Sunflower, Leflore, Grenada, Calhoun, Chickasaw, Lee, Prentiss, and Tishomingo counties except that portion of the Tennessee Tombigbee Waterway south of Bays Springs Lock and Dam.

1. SPECIFIC MARINE SAFETY OFFICES IN REGION III

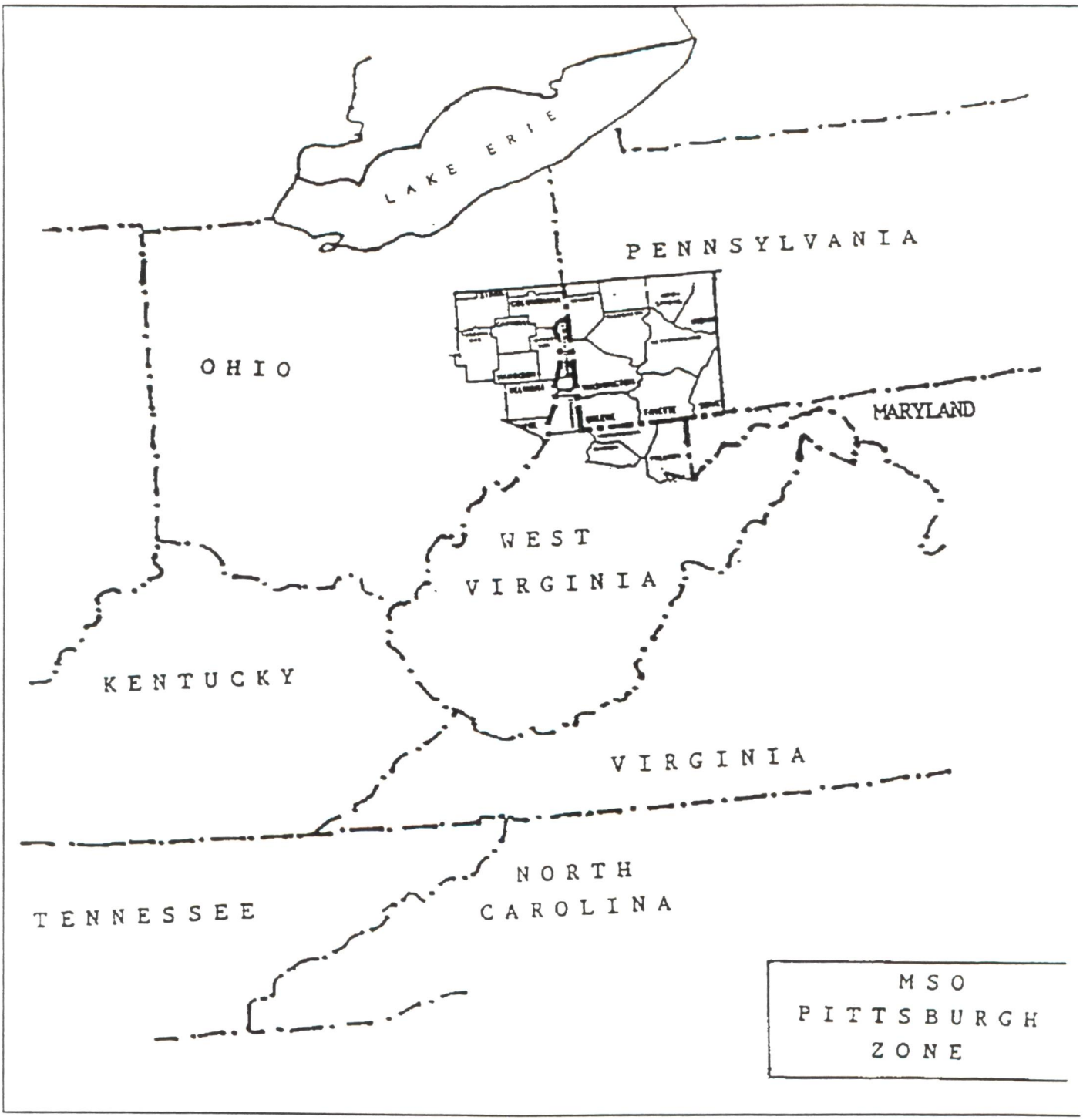
a. MSO Huntington, West Virginia

The Huntington Marine Inspection Zone and the Huntington Captain of the Port Zone are comprised of: All of West Virginia except for Preston, Monongalia, Marion, Marshall, Ohio, Brooke, and Hancock Counties; in Ohio: Wayne, Holmes, Know, Cushocton, Licking, Muskingum, Guernsey, Noble, Fairfield, Perry, Morgan, Pickaway, Ross, Hocking, Vinton, Athens, Washington, Pike, Jackson, Gallia, Meigs, Scioto, and Lawrence Counties, those parts of Ashland and Medina Counties south of the 41°North latitude, and that part of Monroe County south and West of a line drawn from the point of intersection of Marshall and Wetzel Counties and the Ohio River to the Point of intersection of Belmont, Noble, and Monroe Counties; and in Kentucky: Letcher, Perry, Owsley, Breathitt, Knott, Pike, Floyd, Mongoffin, Wolfe, Menifee, Morgan, Johnson, Martin, Lawrence, Elliot, Boyd, Carter, and Greenup Counties, and that part of Lewis County north and east of a line drawn from the point of intersection of Scoito and Adams Counties and the Ohio River to the point of intersection of Carter, Greenup, and Lewis Counties (figure 7).

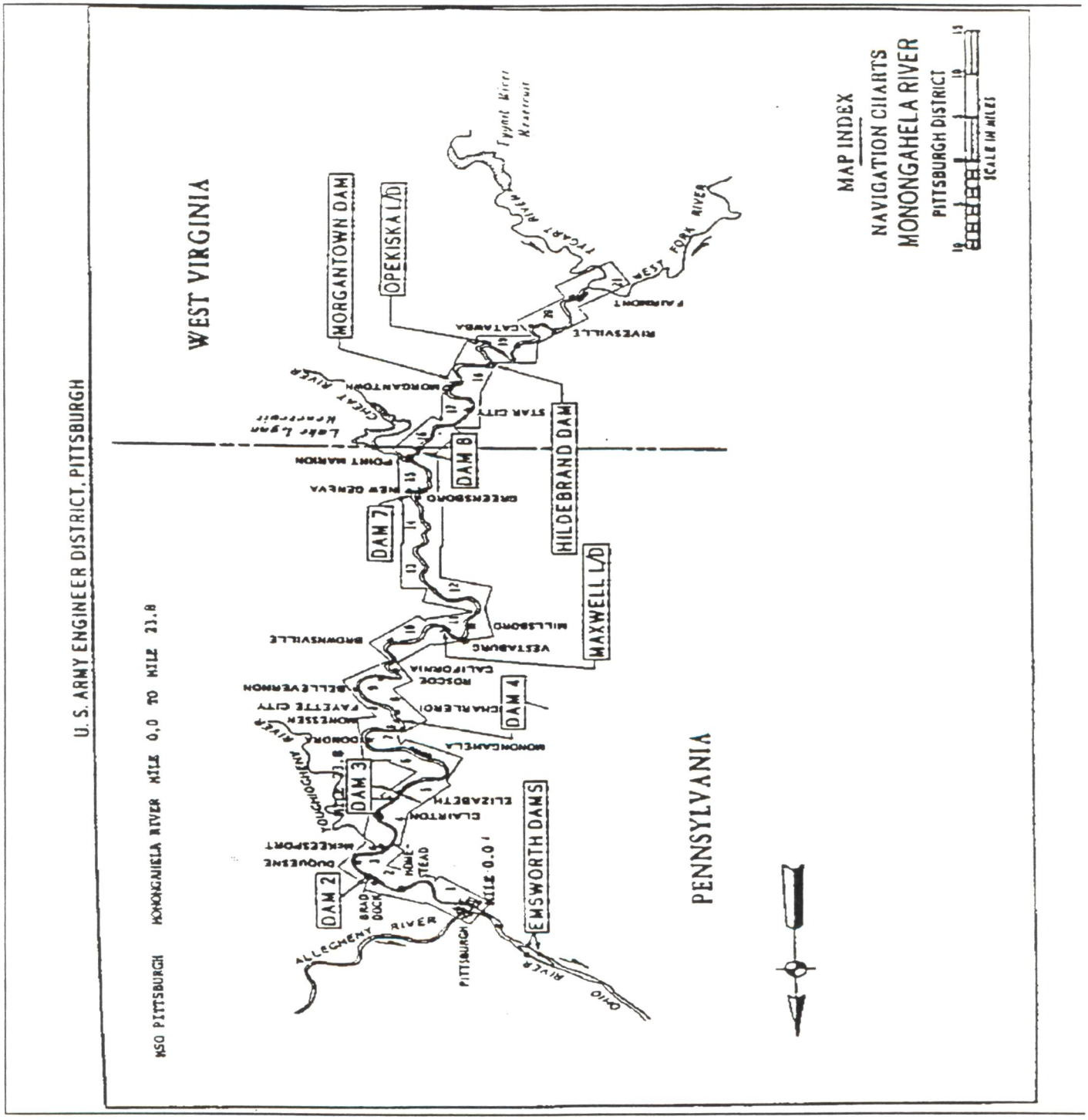
b. Marine Safety Office Huntington's river jurisdiction zone is as follows (Figure 8):
   (i) Ohio River - Mile 121.6 to 374.8
   (ii) Kanawha River.
   (iii) Big Sandy River.
   (iv) Muskinghum River.



MSO Huntington's River Jurisdiction Zone
Figure 8



MSO Pittsburgh ZONE
Figure 9



MSO Pittsburgh's Monongahela River Jurisdiction Zone
FIGURE 11

ANNEX IV. FEDERAL AGENGIES: RESPONSIBILITIES AND ASSISTANCE

The NCP indicates that certain Federal agencies (listed previously in Section IV.A.2. Subpart B) have duties, established by statute, Executive Order, or Presidential directive, which may be relevant to Federal response action following or in the prevention of a discharge of oil or a release of a hazardous substance, pollutant, or contaminant. The agencies' roles, responsibilities, resources, and types of assistance that may be provided to the OSC are described below.

A) The Department of Agriculture - USDA provides expertise in managing agriculture, forest, and wilderness areas and in selecting landfill disposal sites. The USDA Soil Conservation Service can be helpful in predicting effects of pollutants on soil and their movements over and through soil. The U.S. Forest Service has the capability and equipment to make temporary roads for access to remote areas.

B) The Department of Commerce - DOC through NOAA, provides support to the NRT, RRT, and the OSC with respect to living marine resources for which it has management authority, including marine mammals and endangered species; meteorology, hydrology, ice, and oceanographic data for ocean, coastal and certain inland waters; tide and current information; charts and maps; and satellite imagery. In response to requests from Coast Guard OSCs, the Scientific Support Coordinator (SSC) provides OSC assistance for spills and releases in coastal and off-shore areas. (See Section 300.34 for further SSC information.) NOAA policies within the RRT will be handled by the NOAA RRT representative. However, in certain circumstances, the SSC will advise the RRT. NOAA also serves on behalf of the Secretary of Commerce as a Federal trustee for natural resources under Federal jurisdiction that are damaged or destroyed as a result of a release of oil or hazardous materials in coastal and marine waters and certain upland areas. NOAA is responsible for assessing damages, presenting claims, and developing and implementing restoration or replacement plans. Other DOC resources and support that can be provided are described below. Methods of obtaining available assistance are either to contact the appropriate office or the RRT member who will coordinate action.

b. **Northwest facilities** - At the Northwest and Alaska Fisheries Center in Seattle, WA, a full range of hydrocarbon analytical chemistry facilities, including state-of-the-art gas chromatography-mass spectroscopic (GC-MS) technology, is available. Chemists and toxicologists at this facility can consult on properties and toxic potential of various hydrocarbon contaminants.

4) National Environmental Satellite, Data and Information Services

a. **National Environmental Satellite Services (NESS)** Satellite data products are available to support the OSC through NOAA's NESS in Suitland, MD. The NOAA polar orbiting satellites currently provide observations of the northeast coastal region at resolutions of 1/2 to 2 nautical miles twice daily. The NOAA geostationary satellite provides comparable resolution at one-hour intervals.

b. **Environmental Data and Information Services (EDIS)** - Climatological data on marine weather, oceanic conditions, and water column characteristics are available through EDIS's National Climatic Center in Asheville, NC, and the National Oceanographic Data Center in Washington, DC. Trained personnel are available in these organizations to meet specific analytical requirements of the OSC in physical oceanographic and environmental areas.

5) Office of Oceanic and Atmospheric Research - Broad-range oceanographic capabilities are based at Atlantic Oceanographic and Meteorological Laboratories, Miami, FL. Limited long-range aircraft surveillance capabilities are available through NOAA's R & D Research Flight Center, also based in Miami.

C) Department of Defense (DOD) - DOD provides representatives from the U. S. Army, U. S. Army Corps of Engineers (COE), and U. S. Navy to the RRT. Resources and assistance available from these agencies are outlined below. The appropriate RRT member should be contacted for desired support.

1) The U. S. Army's various military facilities have vehicles, equipment, and, in some cases, aircraft, which can be made available in the event of critical spill incidents. In addition, construction related equipment, such as barges at Fort Eustis, may be locally available.

E) The Department of Health and Human Services (HHS)

1) Following the enactment of CERCLA, the Agency for Toxic Substances and Disease Registry (ATSDR) was created to coordinate DHHS activities as defined in the Act. DHHS is responsible for providing direct on-scene or indirect assistance for chemical spills and emergencies in which there is a potential or actual threat to the public's health. Requests for assistance may be made directly to the DHHS Regional Response Team (RRT) member in Philadelphia, PA., or in their absence, to the 24 hour telephone number at CDC (404) 488-4100.

2) The Agency for Toxic Substances and Disease Registry (ATSDR) has assigned Public Health Advisors to the EPA Region III office in Philadelphia, PA. Their responsibilities include health-related field guidance and laboratory support, health and safety of workers, accessing toxicology data bases for health and medical data, biological sampling, testing and recommendations for environmental testing. During an emergency response, the OSC may call upon the ATSDR representative to provide consultation and advice on whether potential or real threats to human health may exist. This information is available directly to the OSC at the scene of the response.

3) When necessary, Public Health Advisors from the ATSDR will coordinate or perform the following activities:

a. visit the spill scene to determine threats to human health and to recommend environmental sampling or monitoring procedures to define the extent of exposure,

b. review available background information about the pollution incident and estimate the potential for human exposure to hazardous substances on-site, and to hazardous substances which may have migrated off-site,

c. determine the potential toxic hazard of substances identified at the site,

d. provide advice as to the necessity of relocating nearby and, off-site residents, or taking other preventive measures,

e. outline potential pathways to human populations based upon soil contamination, wind direction, water contamination, biomagnification and/or food chain involvement, and

f. review plans for the safety and health of workers on-site, and provide advice about operations to assure worker safety and health and compliance with appropriate OSHA regulations.

b. The most effective method of bird protection is to prevent or discourage waterfowl from entering contaminated areas. This often may be accomplished by using various waterfowl repelling measures. FWS has personnel and equipment that may be utilized for such response actions. At the first indication of waterfowl involvement in oil spill incidents, the OSC should alert the DOI representative for activation of appropriate response actions.

c. **Endangered Species.** Technical assistance and guidance on endangered and threatened wildlife and plants are available from the FWS. All requests for such assistance should be directed to DOI RRT representative.

2) The Minerals Management Service (MMS) has expertise in geology, geophysics, and petroleum engineering. It can provide expertise concerning oil drilling, producing, handling, and pipeline transportation, and it has access to and supervision over continuously staffed facilities that can be used for command, control, and surveillance of spills occurring from operations conducted under the Outer Continental Shelf Lands Act. The MMS can direct a lessee to clean up pollution with their equipment (Clean Atlantic Associates) or via direct contracts. This authority is spelled out in OCS Order No. 7 and in 30 CFR 250.43. The MMS has the authority to suspend any activity within a 500 meter radius of any pollution source for abatement purposes as stated by the Memorandum of Understanding of August 16, 1971, between DOI and DOT.

3) The National Park Service (NPS) can provide expertise on historical, archaeological, architectural, and recreational resources and sites on the National Register of Historic Places. The NPS can also provide information on units of the national park system, including national parks, monuments, seashores, battlefields, and preserves; and, national historic sites, rivers, recreation areas, and parkways. The NPS may be able to provide vehicles and boats locally for spill response in the vicinity of units of the national park system.

4) The U. S. Geological Survey (USGS) can provide expertise on geologic, geohydrologic, and geochemical resources, as well as information on ground and surface waters. The USGS maintains stream flow gauges in every state, can provide historical stream flow information, assist in predicting the time/travel/trajectory of spills, and can collect and analyze surface and ground water samples.

5) The Bureau of Mines can provide expertise on the analysis and identification of inorganic hazardous substances, and of acid mine drainage.

MID-ATLANTIC REGION

DEPARTMENT OF THE INTERIOR SITES

PENNSYLVANIA

REFUGES/HATCHERIES

1. ALLEGHENY NATIONAL FISH HATCHERY
2. LAMAR NATIONAL WILDLIFE REFUGE
3. ERIE NATIONAL WILDLIFE REFUGE
4. TINICUM NATIONAL ENVIRONMENTAL CENTER

PARKS

5. ALLEGHENY PORTAGE RAILROAD NATIONAL HISTORIC SITE
6. JOHNSTOWN FLOOD NATIONAL MEMORIAL
7. FRIENDSHIP HILL NATIONAL HISTORIC SITE
8. FORT NECESSITY NATIONAL BATTLEFIELD
9. GETTYSBURG NATIONAL MILITARY PARK
   EISENHOWER NATIONAL HISTORIC SITE
10. HOPEWELL FURNACE NATIONAL HISTORIC SITE
11. VALLEY FORGE NATIONAL HISTORICAL PARK
12. INDEPENDENCE NATIONAL HISTORICAL PARK
13 DELAWARE WATER GAP NATIONAL RECREATION AREA
14. UPPER DELAWARE SCENIC AND RECREATIONAL RIVER
15. STEAMTOWN NATIONAL HISTORIC SITE

DELAWARE

REFUGES

16. BOMBAY HOOK NATIONAL WILDLIFE REFUGE
17. PRIME HOOK NATIONAL WILDLIFE REFUGE

MARYLAND AND WASHINGTON, D.C.

REFUGES

18. SUSQUEHANNA NATIONAL WILDLIFE REFUGE
19. EASTERN NECK NATIONAL WILDLIFE REFUGE
20. BLACKWATER NATIONAL WILDLIFE REFUGE
21. GLEN L. MARTIN NATIONAL WILDLIFE REFUGE

51. WYTHEVILLE NATIONAL FISH HATCHERY
52. PAINT BANK NATIONAL FISH HATCHERY

PARKS

53. BOOKER T. WASHINGTON NATIONAL MONUMENT
54. APPOMATTOX COURT HOUSE NATIONAL HISTORICAL PARK
55. COLONIAL NATIONAL HISTORICAL PARK
56. PETERSBURG NATIONAL BATTLEFIELD
57. RICHMOND NATIONAL BATTLEFIELD PARK
58. MAGGIE L. WALKER NATIONAL HISTORIC SITE
59. GEORGE WASHINGTON BIRTHPLACE NATIONAL MONUMENT
60. FREDERICKSBURG AND SPOTSYLVANIA BATTLEFIELD MEMORIAL NATIONAL PARK
61. PRINCE WILLIAM FOREST PARK
62. GEORGE WASHINGTON MEMORIAL PARKWAY
63. GLEN ECHO PARK
64. GREAT FALLS PARK
65. WOLF TRAP FARM PARK
66. MANASSAS NATIONAL BATTLEFIELD PARK
67. SHENANDOAH NATIONAL PARK

WEST VIRGINIA

REFUGES/HATCHERIES

68. WHITE SULFUR SPRINGS NATIONAL FISH HATCHERY
69. BOWDEN NATIONAL FISH HATCHERY
70. LEETOWN NATIONAL FISH HATCHERY
71. CANAAN VALLEY NATIONAL WILDLIFE REFUGE

PARKS

72. HARPERS FERRY NATIONAL HISTORICAL PARK
73. NEW RIVER GORGE NATIONAL RIVER

INTERSTATE

PARKS

AT. APPALACHIAN TRAIL (LIMITED DOI CONTROL)

K) Environmental Protection Agency

1) The EPA provides predesignated OSCs for all incidents in the inland zone and chairs the RRT when activated for a release or potential release in the inland zone. EPA also provides a Federal representative to the RRT when activated for incidents in the coastal zone. For the purpose of planned RRT meetings, an EPA member will serve as co-chairperson with the Coast Guard. Within the inland zone, EPA will insure that the NCP is effectively and efficiently implemented with optimum coordination among Federal agencies and will recommend changes in the Plan as deemed necessary. When the RRT is activated for incidents in the coastal zone, EPA will provide technical expertise and resources available within the Agency to the OSC relative to environmental protection and mitigation during periods of activation. Such resources include, but are not limited to, EPIC overflights, ERT, EERU, TAT, ERCS and FIT. Many of these resources are described in Section 300.34, Special Forces and Teams, of this Plan.

2) Oil and Hazardous Materials Technical Assistance Data System (OHMTADS) is an EPA Headquarters computer data base accessible through any remote terminal. OHMTADS data base provides a wide variety of physical, chemical, biological, toxicological, and commercial data on over 1400 materials with emphasis placed on their harmful effects on water quality. This system supplements the CHRIS system and is another valuable source of information.

3) Environmental Response Team (ERT) - ERT has been established by EPA to provide expertise in biology, chemistry, hydrology, geology and engineering. The Team can provide to the OSC advice and special equipment, including mobile laboratory equipment and a mobile incinerator, for hazardous substances releases. A more complete inventory of support expertise is contained in Section 300.34.

L) Federal Emergency Management Agency - FEMA provides technical assistance to state and local governments during "Superfund" hazardous materials accidents which could require the evacuation or planned temporary relocation of individuals or the permanent relocation of households, businesses, or community facilities. Emergency response training, workshops and seminars are available through FEMA's National Emergency Training Center, located in Emmitsburg, Maryland, including topic areas of emergency management, fire service, law enforcement, emergency medical services and public works. FEMA is also a supply source for flood maps which may be used for local contingency planning. FEMA's Disaster Assistance Programs Division may offer various forms of public and individual assistance to supplement state and local response efforts in the wake of an emergency or declaration of a major disaster by the President. FEMA's National and Regional Emergency Response Teams provide coordination of Federal response and technical assistance to state and local governments in extraordinary situations of unique national significance.

M) **General Services Administration** - GSA provide logistic and telecommunication support to federal agencies. During emergency situations, GSA quickly responds to aid state and local governments. The type of support provided might include leasing office space, setting up telecommunications and transportation services, and advisory assistance.

Annex V. Commonwealth/State and Local Participation

A) The Commonwealth of Virginia

1) The **Virginia State Water Control Board (VSWCB)** is the enforcement agency for the water pollution laws in the Commonwealth of Virginia and coordinates response to oil spills. Agency personnel are available 24 hours a day for investigation of pollution incidents and assessment of environmental damages. The VSWCB can provide a state On-Scene Coordinator, laboratory services and water quality survey assistance. Requests for disposal sites and incinerators for waste oil should be coordinated through the state OSC.

2) The **Virginia Department of Emergency Services (DES)** coordinates disaster response actions; guidance and assistance. If a threat to human safety exists in pollution cases, DES obtains and coordinates assistance requested by local governments. This department represents the Commonwealth for all RRT activities. The DES is the lead agency for response to hazardous materials incidents.

3) The **Virginia Department of Waste Management** promulgates state regulations on hazardous waste transportation and disposal. Personnel are trained to provide technical assistance concerning response, cleanup and disposal for hazardous substances releases.

4) The **Virginia Institute of Marine Science (VIMS)**, the Virginia Marine Resources Commission (VMRC), and the State Commission of Game and Inland Fisheries (CGIF) may provide assistance in cases involving damage to aquatic resources. Requests for the assistance of these groups should be channeled through the DES.

B) The State of Maryland

1) The **Maryland Department of the Environment (MDE)** is the lead agency in the state for enforcement of state oil pollution laws and response to oil pollution incidents. The MDE is equipped and staffed to respond to any oil pollution incident in state waters. The MDE will respond to any incidents in Maryland, where there is a need for emergency containment and control. The Coast Guard and Maryland have a Memorandum of Understanding for response equipment which may be used by an OSC. The MDE will represent Maryland for all incident specific activations of the RRT involving oil.

ANNEX VI. Non-Government Participation

A) Chemical Transportation Emergency Center (CHEMTREC) - Provides technical expertise, coordination of chemical manufacturers, emergency response information on chemical spills. 1-800-424-9300 is the 24-hour emergency number; for planning purposes: call (202) 887-1255 during working hours.

B) Bureau of Explosives - Association of American Railroads, Washington, DC can provide technical advice during train accidents. The Bureau of Explosives may provide assistance in the areas of accident assessment, classification of materials, environmental impacts, methods of cleanup and mechanical evaluations of trains. May be contacted through CHEMTREC (800) 424-9300 or at (202)835-9500 (24-hour number).

C) Old Dominion University, Oceanography Department, Norfolk, VA 23508, telephone (804)489-6477. Old Dominion University has one 65-foot oceanographic vessel that gives them the capability for large-area surveillance and water sampling. The University also has some laboratory facilities.

D) Chesapeake Bay Foundation - The Church, Prince George and East Streets, Box 1709, Annapolis, MD 21404, telephone (301) 268-8816. The Foundation is staffed with biologists who specialize in estaurine ecology. They can provide assistance in evaluating and monitoring damage to natural resources due to a spill as well as help in relieving the damage.

E) American Petroleum Institute, 2100 L Street, NW, Washington, DC 20037, telephone (202)457-7064. This is an organization consisting of representatives of the petroleum industry. Technical and operational expertise is available.

F) National Association of Agricultural Chemists - 24-hour emergency phone number is (513)961-4300. This organization can provide assistance during incidents involving pesticide spills. The trade name and any available information on the amount and location of the spill should be given when assistance is requested.

G) Chemical Manufacturers' Association (CMA) is an association of chemical manufacturers and is located in Washington, DC. CMA's Community Awareness and Emergency Response (CAER) program provides guidance to chemical plant manufacturers for interaction with the local community in the development of local hazardous materials response plans. CHEMTREC, paragraph VI.A) (above), is provided by CMA.

to insure that spokesmen for the various agencies assisting the OSC are available to comment on their particular portions of the operations and that each agency's contributions are accurately portrayed in news releases.

B) Public Information Assist Team

The Public Information Assist Team (PIAT) is available to assist any Coast Guard or EPA OSC as well as any Coast Guard Public Affairs Office.

ANNEX VIII - NOTIFICATIONS, COMMUNICATIONS AND REPORTS

A) Communications Procedures

1. Normal communications circuits of each primary agency will be used to effectuate this Plan. The regional telephone numbers of all concerned agencies will be disseminated to RRT members semi-annually and will be maintained at each RRC.

2. When an agency other than the predesignated OSC is the first Federal official on-scene, it is recognized that the results of their initial investigation and reports of the extent and circumstances of a spill are tentative and will normally be verified as the case progresses. It must be emphasized that all information as to the extent of the spill and the situation on-scene should be passed to the predesignated OSC as it is discovered. Do not wait until the investigation is well along or completed before passing on what has been learned.

3. When the predesignated OSC has assumed control, he will initiate formal message traffic to the RRC in accordance with current agency directives. The formal message traffic will be supplemented with informal telephone or radio reports during the initial and subsequent phases of the spill.

B) Inter-Agency Use of Communications Facilities - When the RRT is activated, the communications capabilities of the member agencies will be made available to each of the other member agencies to the maximum extent practicable. Care must be taken to avoid any interference with ongoing cleanup operations.

C) Communications Services Definitions

1. Telephone (voice) services available include:

a. AUTOVON (Automated Voice Network) - general purpose switched-voice network of Defense Communications systems which serves Continental U. S., Alaska, Europe, Pacific, and Panama.

b. FTS - GSA-operated government administrative telephone system.

c. SARTEL - Search and Rescue Command Coordination telephone network including leased Hotline telephone net extending from Halifax to New Orleans.

b. Environmental Protection Agency, Region III, Regional Response Center

TELEPHONE: The EPA Regional Office is not manned after working hours, but does maintain a person on call through a call forwarding service. A 24-hour commercial and FTS phone number is listed in Annex II. A portable telephone is available and can be reached by dialing (215) 568-0736.

TELFAX: (215) 597-7906 or (215) 597-3150. The terminal is monitored only during working hours or on occasion.

FAX: (215) 597-8138

c. DOI, Mid-Atlantic Region

TELEPHONE: Office and home telephone numbers for the RRT member and alternate are listed in Annex II, Section 1200, Regional Response Team.

CDRUSAED PHILADELPHIA PA//DEPT INTERIOR ROOM 502//

Transmissions are received 24-hours a day, but are monitored only during working hours.

TELECOPIER: Copies are received automatically at FTS 597-1085, but the printout is monitored only during working hours.

d. Federal Emergency Management Agency, Region III

TELEPHONE: After working hours, an agency representative at the special facility, will answer all calls.

TELETYPE: TWX address (710) 670-6720. Teletype transmissions are received 24-hours/day, but monitored only during working hours or on occasion.

ROUTING INDICATOR: RVE OREA

TELECOPIER: Copies will be automatically received 24-hours/day by dialing (215) 931-5513 (FTS 489-5513), but the printout is only monitored during working hours or on occasion.

h. Virginia State Water Control Board

TELEPHONE: State VCIN teletype (GAME) (Daytime use only)

TELETYPE: No terminal.

TELECOPIER: Service is available during normal working hours by calling (804)257-0067.

RADIO: State Game Commission radios available (VHS-FM)

i. Virginia Department of Emergency Services:

TELEPHONE: 652-5519 FTS (24 hours)
725-1620, Ext. 5519 AUTOVON (Day)
1-(800) 468-8892 (24 hours)
(804) 674-2400 (24 hours)

TELETYPE: AUTODIN: RUEOREX/State Emergency Services Director, Richmond, VA
VCIN: VEOC/VA Department of Emergency Services, Richmond, VA

TELECOPIER: (804) 674-2419 EOC (24 HRS) Auto Answer
(804) 674-2490 ADMIN (Weekdays 8am - 5pm)
(804) 674-2431 PLANS (Weekdays 8am - 5pm)

HOTLINE: NAWAS (Circuit GP-4285/067)
NAWAS (Circuit GP-2200)

RADIO: VHF-FM (Marine): BASE STATION: 12, 16, 21A, 22A, 81A, 83A
MOBILE: All Marine Channels

VHF-AM (Aircraft): BASE STATION: 123.100, 123.050

HF/SSB: Base Station: 2-30 MHz
Mobil Station: 2-30 MHz

VHF-FM (Land Mobile): VDES CH1 153.995/155.895
CTCSS: 91.5 Hz
VDES CH2 155.895/155.895
CTCSS: 91.5 Hz
EMS Statewide 155.205/155.205
CTCSS: Carrier Squelch

UHF-FM (Land Mobile): MED Channels 8, 9, 10 Guarded 24 Hrs
CTSS 192.8 Hz

SPECIAL: 800 MHz Mobile Cellular Telephone Services available

1. West Virginia

TELEPHONE: The numbers listed in Annex II are answered at work or at home as indicated.

TELETYPE: No commercial Teletype Terminal.

TELECOPIER: No dedicated service is available. Contact person identified in Annex II for status as necessary.

RADIO: Crystallized transceivers available on Police frequencies.

D) Incident Reporting Systems

1. The initial reporting of a pollution incident should be by the most rapid means available to the NRC and predesignated OSC. A recommended oil pollution report check-off list is displayed as Exhibit 1 (PAGE VIII - 14).

2. A Pollution Report Message (POLREP) will be submitted by the OSC to the RRC in accordance with internal agency instructions. POLREPs for incidents classified as minor by the NCP need not be sent to the NRC or any other Federal agency unless specific circumstances warrant. The appropriate state(s) should be advised by POLREP of all incidents in the Coastal Zone. The Coast Guard OSCs, the NRC and EPA should be informational addresses on all medium and major incident POLREPs occurring within the Coastal Zone.

3. The RRC will notify the NRC and concerned RRT members of major or potential major incidents by telephone as soon as details are known. On report of a major or potential major spill, the RRC will provide daily POLREPS to the RRT and the NRT and will send additional POLREPS as significant developments occur. Potential spills will be reported in the same manner as actual spills of equivalent size.

US DEPARTMENT OF LABOR
OSHA TECHNICAL SUPPORT
ROOM 2100
3536 MARKET ST
PHILADELPHIA PA 19104 TEL 215 596 1201
US DEPARTMENT OF AGRICULTURE
FOREST SERVICE, USDA
370 REED RD
BROOMALL PA 19008 TEL 215 461 3146
add appropriate non-Federal RRT members
INFO CCGDFIVE PORTSMOUTH VA//MEP// (2)
COGARD MSO_____(3)___
ACCT CG-W2GERC
BT
UNCLAS//N16465//
REGION III INCIDENT SPECIFIC RRT POLREP Number, size, type of pollution, specific substance, source, location, MSO case no.
_____(3)_____

1. SITUATION (CCGD0____(4)___REGION III RRT ACTIVATION no. and year calendar year (eg, 01-85)

(1) TWO ST LOUIS, MO; FIVE PORTSMOUTH, VA; OR NINE CLEVELAND, OH AS APPROPRIATE

(2) CCGDFIVE PORTSMOUTH VA//MEP// to be added as (INFORMATION ADDRESSEE) by all other originators in order to simplify the preparation of the semi-annual RRT report to the NRT.

(3) MSO acting as OSC should be inserted in these locations. Any OSC/MSO that may be impacted by an incident should also be included as INFO ADDEE(s).

(4) TWO, FIVE, or NINE as appropriate.

F) NOAA Electronic Mail

1. NOAA hosts an electronic mail network using its computers in Seattle. This network is accessible through the GTE Telenet. The system permits the use of 300, 1200, or 2400 baud rates for communications. Users with dialup modems may access the system toll free from almost anywhere in the country. Administrative use of the system is managed by the NOAA and the NOAA SSC. Operational use of the system may be requested by an RRC for incident specific activations of the RRT.

2. Electronic Mail Access Procedures using the Standard C3 Terminal

USER NAME (type in your user name)

PASSWORD (type in assigned password)

Command line - type asy

carriage return

change baud to 1200

hit GO

Turn On MODEM

Type in capitals - ATDT9,(local number for access)

carriage return twice

Telenet 206 18A (appears on screen)

Terminal (will appear on screen)

carriage return

@ (when @ appears on screen, type C 20665)

carriage return

Priment 19.3.1 (appears on screen)

type LOGIN CGD5

carriage return

PASSWORD? (will appear on screen) type in your assigned

password

4. Accounts - Passwords and local access phone numbers are controlled by the system manager. Contact the NOAA SSC, PRIME system manager (206) 526-6344, or the appropriate RRC for difficulties or updates in phone numbers or passwords. The following RRT members have active electronic mail accounts:

USER	ACCOUNT
District of Columbia	R3DC
Delaware - Dept. of Public Safety	R3DE
Delaware - Natural Resources and Env. Control	R3DE2
NOAA - Coastal Resources Coordinator	CRC3
Department of Interior	R3DOI
Department of Justice	R3DOJ
Region III - US EPA	R3EPA
Region III - FEMA	R3FEMA
Region III - FHWA (Haz Mat Coordinator)	R3FHWA
U.S. Fish and Wildlife	R3FWS
Maryland - Hazardous and Solid Waste	R3MD
Maryland - Emergency Response	R3MD2
Pennsylvania - Dept. of Env. Protection	R3PA
Virginia - Dept. of Emergency Services	R3VA
Virginia - State Water Control Board	R3VWCB
West Virginia - Div. of Env. Protection	R3WV
Army Corps of Engineers	COE3
D.C. - Fire Dept Haz Mat Team	FDDC
U.S. Navy (Norfolk)	NAVY3
USCG MSO Philadeplphia, PA	MSOPHL
USCG MSO Baltimore, MD	MSOBWI
USCG MSO Norfolk, VA Hampton Roads	MSOORF
USCG MSO Buffalo, NY	MSOBUF
USCG MSO Pittsburg, PA	MSOPIT
USCG MSO Huntington, WV	MSOHUN
USCG MSO Wilmington, NC	MSOILM
EPA OSC Region III	R3OSC
NOAA SSC Gary Ott (Yorktown, VA)	GARYO
NOAA SSC Edwin Levine (New York)	NYSSC
USCG Atlantic Area Strike Team	CGLAST
USCG Public Information Assist Team	CGPIAT
US EPA Environmental Response Team	EPAERT
USCG, Second District	CGD2
USCG, Fifth District	CGD5
USCG, Ninth District	CGD9
DOE, Brookhaven National Lab	DOE3
National Response Team	NRTCG

G) Coast Guard RRC Notification Checklists

1. Exhibits 1 and 2 to Annex VIII will be used by Coast Guard RRCs in providing notification to the RRT membership. Members routinely needing additional information not contained on the checklist should advise either Standing RRT Co-chairman in order to have the list expanded.

EXHIBIT 1 TO ANNEX VIII

OIL SPILL CHECKLIST FOR COAST GUARD RRC NOTIFICATION OF RRT MEMBERS

1. SPILL PARTICULARS

____a. Vessel/Facility Particulars

Name: _____

Type: _____

Size: _____

Nationality (vessels only): _____

Pollutant: _____

Estimated amount: _____

Time of incident: _____

Potential Spillage Amount: _____

Weather/Sea Conditions: _____

Tides/Currents: _____

Locations: _____

Chart No: _____

____ b. Spill Size Classification: major - medium - minor

____ c. Spill is in the coastal/inland zone

____ d. Who is the pre-designated OSC?

____ e. Is responsible party taking appropriate action?

EXHIBIT 2 TO ANNEX VIII

HAZARDOUS SUBSTANCE CHECKLIST FOR COAST GUARD RRC NOTIFICATION OF RRT MEMBERS

1. SPILL PARTICULARS (DOC Controller)

____a. Vessel/Facility Particulars
Name: _____
Type: _____
Size: _____
Nationality (Vessels only): _____
Pollutant: _____
Estimated Amount: _____
Potential Spillage Amount: _____
Weather/Sea Conditions: _____
Tides/Currents: _____
Location: _____
Chart No.: _____

____b. Size of Spill: major - medium - minor

____c. Is the spill in the coastal/inland zone.

____d. Does spill require immediate action to mitigate danger to public health or the environment.

____e. Who is the predesignated OSC?

____f. Is the responsible party taking appropriate action?

____g. Is the spilled substance a defined hazardous substance under CERCLA? (See Section 300.64-1)

d. National Pollution Discharge Elimination System(NPDES) permits, Section 402

i. This section of the act provides a permit for the discharging of pollutants not to exceed given amounts noted in the permit into the navigable waters. These permits are issued by the state under the authority of the EPA. The state may administer the permit program after approval by EPA pursuant to Section 402(b)(1) of the Act.

ii. These permits do not exempt the facility from Section 311 of the Act. If they should discharge substances or oil in amounts that constitute a quantity that may be harmful, they may be subject to the civil penalty noted above. If the discharge involves oil, a harmful quantity is determined by observing a sheen, emulsion, or sludge on or under the water.

B) Comprehensive Environmental Response Compensation and Liability Act - The objective of CERCLA is to give the Federal government the capability and authority to respond to releases and threatened releases of hazardous substances, and to make those responsible liable for such releases.

1. Legal Provisions of CERCLA

a. Failure to notify, Section 103(b) - Any person in charge of a facility or vessel from which a hazardous substance is released who fails to notify immediately the appropriate agency of the United States Government as soon as he has knowledge of such release is liable to criminal penalties of $10,000 or one (1) year imprisonment.

b. Response Authority, Section 104(a) - Whenever a hazardous material is released or there is a substantial threat of such a release into the environment the President is authorized to act to remove or arrange for the removal of and provide for remedial action relating to such hazardous material or take any other response measure consistent with the National Contingency Plan, necessary to protect the public health, welfare or the environment.

ii. Directly or indirectly undertake the whole or any part of any salvage action

iii. Remove and, if necessary, destroy the ship and cargo which is the source of danger

iv. Other measures as appropriate

b. The RRT shall be immediately activated whenever intervention action is considered. The OSC/RRT shall be prepared to evaluate the extent and nature of the threat to Region III's Coastline and advise the District Commander of a recommended course of action.

c. Measures taken under the convention/law should be reasonable and proportionate to the danger. Consideration should be given to:

i. the extent and probability of imminent damage if the measures are not taken,

ii. the likelihood of effectiveness of the measures, and

iii. the extent of possible damage caused by the measures.

d. No action can be taken against any foreign warship or public vessel of a foreign nation not engaged in commerce.

e. There is a criminal fine of not more than $10,000 and/or up to one year imprisonment for willful violation of any provision of the law, willful refusal to comply with a lawful order issued, and willful obstruction of a person acting under the purview of the law.

f. The CERCLA Trust Fund is available for actions taken pursuant to the IHSA.

g. The Revolving Pollution Fund under 33 USC 1321(k) is also available for actions and activities under this law. The only "oils" covered under the provisions of this law are crude oil, diesel oil, or lube oil.

h. For further detailed policy guidance for Coast Guard intervention actions refer to COMDTINST 16451.5 dtd 29 December 1983.

ANNEX X INTERAGENCY SUPPORT ARRANGEMENTS/AGREEMENTS - Various memorandums of understanding (MOUs) and interagency agreements (IAGs) between RRT member agencies are listed in this Appendix. RRT members should be familiar with these agreements and submit any other applicable MOU or IAGs for inclusion with this plan.

Exhibits

1. IAG, USCG-USN; Cooperation in oil spill cleanup operations and salvage operations, September 15, 1980.
2. IAG, USCG-USF&W; Participation in pollution incidents, July 24, 1979.
3. MOU, USCG-EPA; Mitigating damage to public health or welfare caused by a discharge of a hazardous substance under Section 311 of the Clean Water Act, October 3, 1979.
4. MOU, USCG-NIOSH-OSHA-EPA; Guidance for worker protection during hazardous waste site investigations and cleanup and hazardous substance emergencies, December 18, 1980.
5. MOU, USCG-EPA; A mechanism for funding vendor costs incurred by the U. S. Coast Guard emergency response to releases or threats of releases of hazardous substances, January 4, 1982.
6. IAG, DOT-EPA; Redelegation of certain pollution response functions under CERCLA or SUPERFUND, October 9, 1981.
7. MOU, DOI-DOT; Respective responsibilities under the National Oil and Hazardous Substances Pollution Contingency Plan, August 16, 1971.
8. MOU, DOI-DOT; Regulation of activities on the Outer Continental Shelf, August 29, 1989.
9. MOU, USCG-OSHA; Occupational health and safety on the Outer Continental Shelf, February 11, 1980.
10. IAG, USCG-COFE; Ocean Dumping, September 7, 1976.
11. MOU, USCG-EPA; Assessment of civil penalties, August 17, 1979.
12. Instrument of Redelegation, EPA-DOT; CERCLA functions and responsibilities, October 9, 1981.
13. IAG, USCG - Maryland; 311(K) Fund Reimbursement, November, 3, 1978.
14. MOU, USCG-MWRA; Rapid response notification, July 6, 1978.
15. MOU, USCG-VA State Water Control Board; rapid response notification, July 15, 1978.
16. MOU, USEPA-USCG; Federal On Scene Coodinator responsibilites in the inland zone within the Second District.

EXHIBIT 1 TO ANNEX X

IAG, USCC-USN: COOPERATION IN OIL SPILL CLEAN-UP OPERATIONS AND SALVAGE OPERATIONS

1. The U. S. Navy and U. S. Coast Guard each have facilities and expertise not common to the other. Through this IAG the U. S. Navy will provide oil spill clean-up and/or salvage equipment and services to support the Coast Guard in non-Navy oil spills and the Coast Guard will provide equipment and services to support the U. S. Navy in salvage operations and in response to oil spills from U. S. Navy facilities or vessels.
2. On-Scene Coordinators shall become thoroughly knowledgeable with this IAG and shall request U. S. Navy assistance in accordance with its provisions. Likewise, U.S.C.G. OSCs shall stand ready to assist the Navy as specified by the IAG.
3. REPRINT OF IAG, USCG-USN. The following is a reprint of this IAG:

QUOTE

INTERAGENCY AGREEMENT (IAG) BETWEEN THE UNITED STATES NAVY AND THE UNITED STATES COAST GUARD FOR COOPERATION IN OIL SPILL CLEAN-UP OPERATIONS AND SALVAGE OPERATIONS

I. PURPOSE: To specify for U. S. Coast Guard and U. S. Navy application

A. Conditions and procedures under which the U. S. Coast Guard can request and the U. S. Navy will provide oil spill clean-up and/or salvage equipment and services to support the U.S. Coast Guard in non-Navy oil spills and other operations requiring salvage expertise.
B. Conditions and procedures under which the U. S. Navy can request and the U. S. Coast Guard will provide equipment and services to support the U. S. Navy in salvage operations and in response to oil spills which are caused by facilities or vessels under Navy jurisdiction.
C. Reimbursement procedures and policies.

II. BACKGROUND

The National Oil and Hazardous Substances Pollution Contingency Plan, promulgated under the authority of the Federal Water Pollution Control Act, (FWPCA) (33 USC 1251, et. seq.) confers on the Coast Guard (or the Environmental Protection Agency in designated areas) responsibility for designating Federal On-Scene Coordinators (OSCs) to coordinate Federal agency resources in cleaning up any oil or hazardous substance discharged in U. S. navigable waters, the continguous zone or waters beyond the continguous zone up to approximately 200 miles. In addition to having the responsibility and expertise to respond promptly in cases of discharges from Navy operated or supervised ships and facilities, the Navy is also the governmental agency possessing expertise in ship salvage and salvage-related operations. The OSC may access this expertise

for the cleanup and control of any oil spill. The Coast Guard may also access the Navy's salvage expertise to assist during other operations conducted by the Coast Guard. Alternatively, the Navy may access the Coast Guard's expertise in oil spill control and other assets for salvage operations.

III. RESOURCES

Under the terms of this Agreement, the following resources may be provided:

A. When requested by the U. S. Coast Guard pursuant to Section V herein, the U. S. Navy will furnish to the U.S. Coast Guard the following resources consistent with availability and operational commitments as determined by the Navy:
   (1) Salvage Equipment and specialized oil spill control and clean-up equipment.
   (2) Salvage, diving and oil spill control consultation, evaluation, planning and operational services.
   (3) Naval Craft, vessels and aircraft.

B. When requested by the U. S. Navy pursuant to Section VI herein the U. S. Coast Guard will furnish to the U. S. Navy the following resources consistent with availability and operational commitments as determined by the Coast Guard.
   (1) Oil spill consultation, evaluations, planning and operational services.
   (2) Specialized oil spill control and clean-up equipment.
   (3) Coast Guard craft, vessels and aircraft.

IV. FEDERAL ORGANIZATION AND RESPONSIBILITIES

U. S. Navy response to the U. S. Coast Guard Federal On-Scene Coordinator (OSC) request for services and equipment in non-Navy oil spills will be provided in accordance with the National Contingency Plan (Part 1510, Chapter V, Title 40 CFR) and the terms of the IAG.

The Coast Guard OSC will coordinate and direct Federal oil spill control and cleanup efforts in the event of an incident in his area of responsibility. In the event that commercial resources and/or expertise are not available to carry out the required cleanup, the OSC will arrange for the use of Federal and/or State resources. Unless prearrangements have been made, the OSC will seek the assistance of the Regional Response Team in accessing the needed advice and/or resources.

U. S. Navy Salvage operations, conducted in support of other Coast Guard activities, will be coordinated by the Coast Guard On-Scene Commander or Coast Guard Officer-in-Charge of the operation, subject to the operational and technical control of the Navy Salvage Officer.

V. COAST GUARD REQUESTS FOR NAVY ASSISTANCE

A. When local or regional interagency contingency plans contain adequate provision for identification, deployment of, and reimbursement for locally available Navy pollution control assets, OSC requests for such assets will be made through the Navy or DOD member of the RRT. The Navy (or DOD) member will have prearranged with the Navy Area Coordinator and the

assistance will contain the information set forth in paragraph V.A. of this Agreement.

E. For purposes of this Agreement items are to be considered under the administrative control of the OSC from the time they are delivered for his use, whether such delivery is made at the scene of the incident or to a representative of the OSC at a location other than at the scene, through the time the item is redelivered to the Navy or its representative.

F. All Coast Guard requests for salvage assistance in other Coast Guard operations will be relayed by the appropriate Coast Guard Headquarters authority to the Navy Department Duty Captain. The requests shall include information similar to that called for in V.A. of this Agreement.

VI. NAVY REQUESTS FOR COAST GUARD ASSISTANCE

A. Coast Guard resources will be provided, subject to their availability, to assist Naval Activities in responding to pollution discharges caused by facilities or vessels under Navy jurisdiction. Requests for such assistance shall be relayed by the Navy representative to the NRT or to the National Response Center. Reimbursement will be made in accordance with the guidelines established in Section VIII of this Agreement.

B. Coast Guard resources will be provided, subject to their availability, to assist the Navy during salvage operations. Requests for such assistance shall be relayed by the cognizant Navy Commander to the Coast Guard Commander Atlantic Area (Aom) for resources located on the Atlantic and Gulf Coasts, and to Commander Pacific Area (Pom) for resources located on the Pacific Coast. Reimbursement will be made in accordance with the guidelines established in Section VIII of this agreement.

C. For purposes of this Agreement items are to be considered under the administrative control of the Navy from the time they are delivered to the location and/or representative specified by the Navy, through the time the item is redelivered to the Coast Guard or its representative.

VII. LOCAL ARRANGEMENTS FOR ASSISTANCE

Coast Guard OSCs and local Naval commands, having oil spill cleanup capabilities, are encouraged to enter into agreements for the utilization of those capabilities to respond immediately to discharges of oil occurring within, or in threatening proximity of, the waters of a U.S. Naval base or facility regardless of whether the Navy is responsible for the discharge. Whenever such agreements are reached, the Coast Guard will reimburse the Navy for Navy costs incurred in undertaking such actions as per Section VIII of this Agreement, unless it is subsequently determined that the Navy was responsible for discharge.

VIII. REIMBURSEMENT PROCEDURES AND POLICIES

A. The Federal On-Scene Coordinator is responsible for insuring that proper cost documentation records are maintained.

EXHIBIT 2 TO ANNEX X

IAG, USCG-US F&W S; PARTICIPATION IN POLLUTION INCIDENTS

1. REPRINT OF IAG, USCG-USF&W. The following is a reprint of this IAG:

QUOTE

INTERAGENCY AGREEMENT BETWEEN THE U. S. FISH AND WILDLIFE SERVICE AND THE U. S. COAST GUARD FOR PARTICIPATION IN POLLUTION INCIDENTS

I. PURPOSE

The purpose of this Interagency Agreement (IAG) is to specify the conditions and procedures under which the U. S. Fish and Wildlife Service will provide U. S. Coast Guard Federal On-Scene Coordinators with appropriate technical expertise as well as services in support of the Federal Government's efforts to control and clean up oil and hazardous chemical discharges. This IAG is implemented to enhance cooperation, efficiency and effectiveness of response activities.

II. SERVICES TO BE PROVIDED

Under the terms of this agreement:

A. The Fish and Wildlife Service will provide or furnish Coast Guard with technical expertise with respect to populations and habitats of fish and wildlife, including migratory birds, marine mammals and endangered and threatened plants and animals; specialized bird-hazing and cleanup equipment; and personnel to coordinate efforts to mitigate the threat to and rehabilitate birds affected by discharges of oil and hazardous chemicals, as a force integrated into the predesignated On-Scene Coordinator's (OSC's) local response team.

B. The Fish and Wildlife Service also will provide storage at its facilities for Coast Guard spill response equipment under the predesignated OSC's jurisdiction to the extent practicable to allow for prestaging of response equipment near vulnerable environmentally sensitive areas.

C. The Coast Guard will provide storage at their facilities for Fish and Wildlife Service response equipment to the extent practicable to allow for prestaging of Fish and Wildlife Service response equipment.

D. Responsibility for maintaining equipment prestaged at the other party's facility rests solely with the agency owning the equipment. Host agencies will, however, assist in making arrangements to transport equipment stored at their facilities when requested by the other agency. The cost of transporting equipment will be borne by the owner agency, unless agreed to otherwise.

III. SOURCES OF AND PROCEDURES FOR OBTAINING U. S. FISH AND WILDLIFE SERVICE SUPPORT

A. Fish and Wildlife Service personnel and equipment will be furnished as indicated in appropriate OSC local response plans and regional contingency plans. These plans shall specify the Fish and Wildlife Service personnel who are available to function on each OSC's local response team.

B. Procedures for obtaining Fish and Wildlife Service support shall be specified in appropriate predesignated OSC's local response and regional contingency plans.

4. Replacement or repair costs for nonexpendable equipment which is damaged while under the administrative control of the OSC. For purposes of this Agreement items are under the OSC's administrative control form the time they are delivered for his/her use, whether the delivery is made at the scene of the incident or to an agent of the OSC at another location, until the time when the item is returned to the custody of the agency providing the equipment or his/her duly appointed agent.
5. Transportation costs incurred in delivering items to and from the scene.
6. Incremental operating and contract costs incurred in providing assistance to OSCs.

D. Normal salary costs of Government employees in positions that are not normally intended to provide services in support of response operations are reimburseable.

E. The fiscal agent of the Coast Guard will be the Comptroller of the cognizant Coast Guard District.

UNQUOTE

SECTION-II
COORDINATION

In accordance with the predesignated geographical areas of responsibility, EPA and the USCG agree to undertake appropriate mitigation actions of discharges of hazardous substances within each agency's defined area of responsibility.

The cost of such mitigation actions shall be considered a cost of removal incurred under subsection (c) of the Clean Water Act and shall be reimbursable through the 311(k) revolving fund.

Mitigation efforts include, but are not limited to: activities such as containment measures; measures required to warn and protect the public of acute danger; activities necessary to provide and monitor the quality of temporary drinking water sources; monitoring for spread of the pollutant; biomonitoring to determine the extent of the contamination; physical measures to identify and contain substances contaminated by the discharge; providing navigational cautions while response to the problem is underway; efforts to raise sunken vessels which are the source of the discharge; implementation of emergency treatment facilities; and any efforts necessary to locate the source of the discharge and identify properties of the pollutants discharged. The long term solution to many spills may be the construction of major capitol structures, including advanced treatment systems or extension dikes. While such major construction may well mitigate the danger to public health or welfare, they are not appropriate mitigation actions under Section 311(b)(6)(c).

UNQUOTE

NIOSH will accomplish the objectives of this effort with the support, cooperation, and assistance of OSHA, USCG, and USEPA under a procedure to be incorporated in the work plan.

V. Implementation

This understanding establishes an Interagency Work Group consisting of at least one representative from each office identified in section 3. The work group will develop a work plan to implement the objectives listed above; individual tasks and any necessary resource requirements will be described in subagreements under this MOU. The final product(s) of designated tasks will be subject to the review of NIOSH, OSHA, USCG, and USEPA.

VI Period of Agreement

This Memorandum shall continue in effect until the completion of the stated objectives, unless modified or amended by the assent of all parties or terminated by any party upon a 30-day advance written notice to the other parties.

Nothing in this agreement is intended to diminish or otherwise effect the statutory authority of the agencies involved.

UNQUOTE

Funding for out-of-pocket expenses and other non-vendor costs will be the subject of a separate agreement between the EPA and the USCG.

The Coast Guard will advise all of its District Commanders, predesignated On-Scene Coordinators (OSCs), and Regional Response Team members of the terms of this Memorandum. The USCG will provide to EPA a current listing of District personnel who will serve as appropriate contacts for EPA on matters relating to contracting and accounting for response activity.

CONTRACTING AND ACCOUNTING

The USCG and the EPA agree that the EPA will perform all accounting for vendor costs.

The USCG and the EPA agree that the contracting system used by the USCG for responses to oil and hazardous substance discharges under the authority of Section 311 of the Clean Water Act, shall be used for USCG responses to all releases or threats of releases of hazardous substances, pollutants, or contaminants as defined in CERCLA/SARA.

Any contracts of immediate removal actions in response to releases, threats of releases of hazardous substances, or pollutants or contaminants entered into by the Coast Guard where the USCG OSC is acting in the capacity of first responding Federal official, pursuant to the National Contingency Plan, shall remain in effect only during the period that the USCG is the OSC.

Any contract for immediate removal actions in response to releases, or threats of releases, of hazardous substances or pollutants or contaminants, entered into by the Coast Guard pursuant to the authority delegated under Executive Order 12316, and retained by the USCG in Section (c) of the Instrument of

Redelegation, executed 2 October 1981 by the Secretary of Transportation and consented to on 9 October 1981 by the Administrator of the Enviromental Protection Agency, shall remain in effect only during the period that the USCG is acting under this authority

The USCG and the EPA agree on the following procedures for coordinating the EPA accounting system and the USCG contracting system.

1. Obtain account number

   For each incident where CERCLA funds are obligated, the USCG OSC must obtain a ten-digit account number from EPA Headquarters which identifies a specific site/spill incident. The number is obtained by calling:

   Chief, Response Operations Branch
   Emergency Response Division
   Office of Emergency and Remedial Response
   Environmental Protection Agency
   401 M Street, S.W.
   Washington, DC 20460
   (202) 260-4583/day or (800) 424-8802/non duty hours

   The USCG OSC will provide an estimate of the response costs concomitant with the request for an account number. The ten-digit account number will not be issued unless CERCLA funds are available for the response action.

4. Process Contractor Invoices

4.1 Contractor Responsibilities

The contractor will:

- Send the original invoice to the EPA paying office. The address for the paying office is:

  Financial Management Officer
  Accounting Operations Office (MD-32)
Environmental Protection Agency
  Research Triangle Park
  Durham, NC 27711

- Submit a duplicate copy of the invoice to the USCG OSC.
- Assure that the USCG contract number and the EPA accounting codes (appropriation number, object class, and dollar amount) are clearly and legibly presented on the invoice and its copy. Contractors submitting invoices for work performed under a contract are to number each invoice sequentially beginning with one (1) and make a notation on the last invoice under the contract with the phrase "FINAL INVOICE".

4.2 USCG OSC Responsibilities

- The USCG OSC must certify each correct and proper invoice. A correct and proper invoice is one in which the services performed are acceptable and are consistent with the services billed and the accounting data properly transcribed.
  The certification statement to be used by OSCs of both agencies for all CERCLA cases.

  "I,_____(OSC NAME)_____, certify to the best of my knowledge and belief that the services have been performed and are accepted, and that applicable Pollution Incident Reporting System (PIRS) and EPA Spill Prevention Control and Countermeasure (SPCC) information has been correctly and completely submitted."

  _____
  (OSC's Signature)

  _____
  (date)

- The OSC will forward by certified mail the accepted and certified invoice, within 72 hours of receipt of the invoice from the contractor, to the EPA paying office (address shown above).

FINANCIAL MANAGEMENT

The USCG and EPA agree that the USCG may obligate up to $50,000 per release without prior approval from EPA. Approval to obligate amounts in excess of the $50,000 ceiling must be obtained from:

Chief, Response Operations Branch
Emergency Response Division
Office of Emergency and Remedial Response
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460
(202) 245-3057

The USCG will modify, as necessary, any existing contracts to reflect each ceiling increase. Certified copies of the contract modification must be submitted to the EPA paying office.

The USCG and EPA recognize that CERCLA/SARA requires that response actions cease when $2 million is obligated or 12 months have elapsed from the date of initial response, except as authorized under Section 104(e)(1) of SARA, thereof.

REPORTING REQUIREMENTS: POLREPS

The USCG and the EPA agree that the EPA, acting in the capacity as manager of the Hazardous Substance Response Trust Fund, requires up-to-date information on CERCLA response actions and the related obligations of CERCLA funds for these actions. Pollution Reports (POLREPS) are submitted by USCG OSCs to USCG District Commanders. POLREPS provide factual operational data relating to a release and a current accounting of project costs. The USCG OSC will submit a duplicate copy of all POLREPs to the Director, Emergency Response Division, EPA, (TWX # 710-8229269) for the purpose of communicating CERCLA response and fund obligation data to EPA. The initial POLREP will be sent within 24 hours of initiating a response action, if information is available. Once the initial report is completed, progress POLREPS should be sent on a routine basis.

PERIOD OF AGREEMENT

This Memorandum shall continue in effect until modified or amended by the assent of both parties or terminated by either party upon a thirty (30) days advance written notice to the other party.

Nothing in this agreement is intended to diminish or otherwise affect the statutory authority of the agencies involved.

UNQUOTE

EXHIBIT 7 TO ANNEX X

MOU, DOT-DOI; RESPECTIVE RESPONSIBILITIES UNDER THE NATIONAL OIL AND HAZARDOUS SUBSTANCES CONTINGENCY PLAN

1. REPRINT OF MOU The following is a reprint of this MOU which was dated August 16, 1971

QUOTE

In order to assure the most efficient use of resources under the National Oil and Hazardous Substances Pollution Contingency Plan, the Secretaries of the Departments of the Interior and Transportation agree that the following provisions shall be observed by the agencies of the two Departments in the exercise of their authority and the discharge of their responsibilities under the Contingency Plan.

1. The U. S. Geological Survey has the expertise and capability for coordination and direction in respect to measures to abate the source of pollution when the source is an oil, gas, or sulfur well.

2. The U. S. Coast Guard has the expertise and capability for coordination and direction in respect to measures to contain and remove pollutants.

3. With respect to spills originating from operations conducted under the Outer Continental Shelf Lands Act of 1953, the U. S. Coast Guard shall furnish or provide for the On-Scene Coordinator (OSC) with authority and responsibilities as provided by the National Contingency Plan subject to the following qualifications:

a. The authorized representative of the U. S. Geological Survey on the scene shall have the exclusive authority with respect to coordination and direction of measures to abate the source of pollution.

b. The authorized representative of the U. S. Geological Survey on the scene shall make the determination, which shall be binding upon the On-Scene Coordinator, that pollution control activities within a 500 meter radius of the source of pollution should be suspended to facilitate measures to abate the source of pollution.

c. The authorized representative of the U. S. Geological Survey on the Scene shall make the determinations necessary under Section 250.43 of Title 30 of the Code of Federal Regulations, which shall be binding upon the On-Scene Coordinator.

d. In regard to those matters arising under Section 1334 et seq. of Title 43 of the U. S. Code and the regulations and Outer Continental Shelf Orders issued thereunder, the On-Scene Coordinator shall communicate with the lessee through the authorized representative of the U. S. Geological Survey on scene.

EXHIBIT 8 TO ANNEX X

MOU, DOI-DOT; REGULATION OF ACTIVITIES AND FACILITIES ON THE OUTER CONTINENTAL SHELF

1. REPRINT OF THE MOU - The following is a reprint of this MOU which was dated 29 August, 1989

QUOTE

I. Purpose:

The purpose of this Memorandum of Understanding (MOU) is to promote the safety of personnel, activities, and facilities on the Outer Continental Shelf (OCS) of the United States associated with the exploration, development, production, and processing of mineral resources, to promote conservation of those resources and protection of the environment, to minimize duplication of effort, and to promote consistent, coordinated and less burdensome regulation of these facilities. This MOU does not apply to deepwater ports as licensed by the secretary of Transportation under the Deepwater Port Act of 1974.

II. Definitions:

For purposes of this MOU, the following definitions apply:

Act - The Outer Continental Shelf Lands Act of 1953 (43 U.S.C. 1331 et seq.), as amended by the Outer Continental Shelf Lands Act Amendments of 1978 (Pub. L. 95-372).

Deepwater Port - A facility licensed by the Secretary of Transportation under the Deepwater Port Act of 1974.

Vessel - Every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the water. This term does not include atmospheric or pressure vessels used for the containment of liquids or gases.

OCS - The submerged lands which are subject to the Act.

OCS Activity - Any offshore activity associated with exploration for, development of, production of, or processing of mineral resources of the OCS.

B. Statutory authorities of the MMS Include the following:

1. Providing for the prevention of waste and the conservation of the natural resources of the OCS, and the protection of correlative rights.

2. Requiring suspension or temporary prohibition of any operation or activity on a lease if there is a threat of serious or irreparable harm or damage to life, property, mineral deposits or to the marine, coastal, or human environment.

3. Reviewing alleged or observed violations of safety regulations issued under the Act.

4. Reviewing and approving exploration plans, development and production plans, and applications for permits to drill as necessary for prompt and efficient exploration, development, and production of a lease area.

5. Reviewing and approving applications for remedial work on completed wells.

6. Approving pipeline rights-of-way and right-of-use and easements.

7. Providing for the inspection of drilling and production operations to ensure compliance with applicable requirements.

8. Ensuring compliance with the national ambient air quality standards pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.), to the extent that activities authorized under the Act significantly effect the air quality of any State.

9. Administering applicable pollution laws contained in Title 43 of the U.S.C. as implemented by Title 30 of the Code of Federal Regulations (CFR) Part 250.

10. Exercising the Secretary of the Interior's responsibilities for the assessment, compromise, and collection of civil penalties under section 24(b) of the Act.

4. Requiring the use of the best available and safest technologies on OCS drilling and production operations as set forth in section 21(b) of the Act.

IV. Responsibilities

To accomplish the purposes of this MOU, both Agencies agree to observe the following guidelines with respect to overseeing OCS facility design and construction, systems and equipment, and operations.

A. Facility design and construction requirements, including plan approval:

1. The MMs exercises technical review and approval responsibility for design, fabrication and installation of all OCS production facilities, as described in 30 CFR 250.132, 250.133, and 250.140. The USCG issuance of a COI or LOC does not preclude additional requirements being imposed by the MMS. However, the MMS will coordinate the review and approval as necessary with the USCG so that MMS requirements do not compromise USCG certification or compliance requirements.

   The MMS verifies the following for all OCS facilities:

   a. Site-specific considerations, such as oceanographic, meteorological, geological, geotectonic, and geophysical conditions including bottom conditions and the capability of the seabed and the mooring system to support or hold the position of the facility to be installed and operated.

      The MMS establishes requirements and verifies the following for OCS production facilities:

   b. Structural integrity involving design, fabrication, and installation;

   c. Location of drilling, production, well control, and safety systems and equipment; and

   d. Modification and repair related to structural integrity.

B. Systems and Equipment:

Systems approved by one Agency which are interconnected to systems approved by the other Agency must be applicable to both Agencies.

1. The MMS establishes requirements and verifies compliance with those requirements for systems and equipment for drilling, completion, production, well control, and workover, on all OCS facilities. Additionally, the MMS establishes requirements to ensure that site-specific conditions (including seafloor, oceanographic, and other environmental conditions) are considered in the design and testing of mooring and positioning systems and in establishment of well shut-in and drilling suspension procedures for all OCS facilities.

   Systems and equipment for which the MMS establishes requirements, as necessary, on all OCS facilities include the following:

   a. Blowout preventer and other well-control equipment;

   b. Drilling and production safety systems;

   c. Emergency Shutdown System (ESD) to initiate facility shutdown, activated manually or by gas sensors, fire detectors (heat, smoke, or flame), or fire loop in wellhead, production, and living quarters areas;

   d. Subsurface and surface well-control equipment;

   e. Wellhead, flowline, pipeline, and well test equipment including safety valves and pressure sensors;

   f. Dehydration equipment and gas compressor units used in production operations;

   g. Hydrogen sulfide control equipment, gas detection systems, and personnel protection;

   h. Production and production-associated piping systems including incoming and departing pipelines;

   i. Pumps used to transfer liquids within the production process systems and into pipelines;

2. The USCG establishes systems and equipment requirements, as appropriate, for lifesaving equipment on all OCS facilities. The USCG establishes requirements for systems and equipment related to the issuance of COI's and LOC's where required by USCG regulations. The USCG also establishes requirements for personnel safety systems and equipment to mitigate occupational safety or health hazards. The USCG will not, however, establish requirements for drilling, production, or workover equipment that would conflict with MMS requirements.

   Systems and equipment for which the USCG establishes requirements, as necessary, on all OCS facilities include the following:

   a. Lifesaving systems and equipment;

   b. General alarms;

   c. Personnel protection equipment, excluding equipment for protection from hydrogen sulfide;

   d. Fire detection, control and extinguishing systems and equipment, including structural fire protection, not already addressed by paragraph IV. B. 1.c. and m.;

   e. Living quarters;

   f. Communications;

   g. Navigation lights, obstruction lights, and sound signals; and

   h. Systems and equipment associated with commercial diving operations covered by 46 CFR Subchapter V.

   Other systems and equipment for which the USCG establishes requirements, as necessary, on OCS Drilling facilities, vessels engaged in OCS activities, those other facilities that are required to receive a USCG COI or LOC, and OCS terminals include the following:

   i. Cranes, booms, or other material handling equipment;

   j. Electrical system design and equipment including designation of classified areas;

j. Firefighting, as specified in IV.B.1.m.; and

k. Transfer of materials and personnel on or off the facility by crane or other means.

2. The USCG administers requirements including those for training, drills, inspections, and emergency procedures on all OCS facilities for the following.

a. Emergency egress from a facility including use of lifesaving and other general emergency equipment;

b. Handling, transfer, and stowage of explosives, radioactive, flammable (other than produced hydrocarbons), and other hazardous materials;

c. Transfer of petroleum and other products from or to a vessel (as vessel is defined in section II. of this MOU);

d. Vehicle and vessel operations;

e. Occupational safety and health of personnel;

f. Diving operations; and

g. Pollution response and compensation.

Other requirements which the USCG administers on OCS drilling facilities, vessels engaged in OCS activities, and on those other facilities that are required to receive a USCG COI or LOC include the following:

h. Firefighting, as specified in IV.B.2.d.;

i. Helicopter operations;

j. Structural inspection and repair;

k. Safe welding and burning procedures on structural members;

l. Stability and buoyancy considerations; and

m. Transfer of materials and personnel on or off the facility by crane or other means.

1. Collisions - The USCG will normally be the lead Agency.

2. Blow Outs, Fires, and Explosions - The MMS will normally be the lead Agency for incidents of fires or explosion involving drilling or production operations. The USCG participation will be requested in all investigations of fires or explosions that involve death or injuries or that occur on OCS drilling facilities, vessels, equipment, or operations for which the USCG is responsible under paragraphs IV.B.2. or C.2. of this MOU.

3. Death and Injures - The USCG will normally be the lead Agency for all incidents involving death or injuries. The MMS participation will be requested in investigations of all deaths and injuries associated with oil or gas drilling or production operations or equipment, including hydrogen sulfide exposure.

4. Pollution - The MMS will normally be the lead Agency for incidents involving pollution from all OCS facilities. The USCG participation will be requested in all investigations of pollution.

5. Facilities, Material, and Equipment

   a. The USCG will normally be the lead Agency for incidents involving damage to OCS drilling facilities and vessels engaged in OCS activities, or damage to propulsion,auxiliary, or emergency systems and equipment covered under IV.B.2. of this MOU.

   b. The MMS will normally be the lead Agency for incidents involving damage to OCS production facilities. The USCG participation will be requested in incidents involving those OCS production facilities which require a USCG COI or LOC.

B. Conduct of Investigations:

1. Where the lead Agency identified by the ranking order in VI.A.1. through 5. determines not to investigate, that Agency shall notify the other agency of its intent.

VIII. Exchange of Services and Personnel:

To the extent its own operations and resources permit, each Agency will provide the other Agency with such assistance, technical advice and support, including transportation, as may be requested. Such exchange of services and use of personnel shall be on a nonreimbursable basis and may be extended to areas beyond the OCS where one Agency's expertise will benefit the other Agency in application and enforcement of its safety regulations.

IX. Cooperation in Standards and Regulation Development:

A. Both Agencies will exchange data and study results, participate in research and development projects of mutual interest, and exchange early drafts of rulemaking notices to avoid duplicative or conflicting requirements.

B. Both Agencies will review current standards regulations, and directives, and will propose revisions to them as necessary in keeping with the provisions of this MOU.

C. Both Agencies will review reporting and data collection requirements imposed on operators of OCS facilities and, whenever feasible, eliminate or minimize duplicate reporting and data collection requirements.

X. Implementation:

A. Each Agency will review its internal procedures and, where appropriate, will revise them to accommodate the provisions of this MOU. Each Agency will also designate one senior official who will be responsible for continuing coordination and implementation of the provisions of this MOU.

B. On the effective date of the agreement, the USCG/U.S. Geological Survey MOU concerning regulation of activities and facilities on the OCS of the United States, dated December 18, 1980, is cancelled.

XI. Savings Provision:

Nothing in this MOU shall be deemed to alter, amend, or affect in any way the statutory authority of the MMS or the USCG.

EXHIBIT 9 TO ANNEX X

MOU, USCG-OSHA; OCCUPATIONAL HEALTH AND SAFETY ON THE OUTER CONTINENTAL SHELF

1. REPRINT OF MOU, USCG-OSHA. The following is a reprint of this MOU, which was published in the Federal Register, Vol. 45, No. 29 on 11 February 1980.

QUOTE

Memorandum of Understanding Concerning Occupational Safety and Health on Artificial Islands, Installations and Other Devices on the Outer Continental Shelf of the United States.

I. Purpose

The purpose of this Memorandum of Understanding is to establish procedures to increase consultation and coordination between the United States Coast Guard (USCG) and Occupational Safety and Health Administration (OSHA) with respect to matters affecting the occupational safety and health of personnel working on the Outer Continental Shelf of the United States.

II. Definition

For purposes of the Memorandum, the following definition applies:

Working Conditions on the Outer Continental Shelf of the United States.

Working conditions related to activities, including diving, taking place on or from, on the waters adjacent to, or otherwise associated with artificial islands, installations, or other devices permanently or temporarily attached to the seabed and exploring for, developing or producing resources from the Outer Continental Shelf of the United States, or any device (other than ship or vessel) used for the purpose of transporting such resources (43 U.S.C. 1333(a)(1)).

III. Agency Responsibilities

A. U.S. Coast Guard

The USCG has authority to promulgate and enforce Safety and Health Regulations for working conditions on the OCS of the United States. In carrying out this responsibility on the OCS the Coast Guard will cooperate with the Occupational Safety and Health Administration to maximize the safety and health protection of employees, avoid duplication of effort, and avoid undue burdens on the maritime industry. The USCG, consistent with its statutory authority;

1. Promulgates regulations and may modify any regulation, interim or final, applying to hazardous working conditions related to activities on the Outer Continental Shelf, and promulgates such other regulations as may be necessary to promote the safety of life and property on the OCS;

2. Promulgates regulations to provide for scheduled onsite inspections, at least once a year, of each facility on the Outer Continental Shelf which is subject to any environmental, safety or health regulation promulgated by the Coast Guard pursuant to the OCS Act, and also provides for

1. Information and data availability. For the purposes of identifying work hazards, determining accident or illness causes, developing corrective measures, and assessing the impacts of new or revised regulations or standards, the two agencies will exchange data and study results to the extent permitted by law.

2. Standards research and development projects. The two agencies will jointly participate in standards research and development projects of mutual interest and benefit.

3. Review of existing regulations and standards. The two agencies will jointly review existing USCG and OSHA regulations and standards to help identify hazards that require priority attention in Coast Guard regulations development projects;

4. Exchange of technical expertise. Each agency will provide the other with technical support, where feasible, to assist in the review of particular hazards or the development of regulations.

5. Early notice of rulemaking activities. The Coast Guard will provide for OSHA's review and consultation copies of drafts of advance notices of proposed rulemaking, notices of proposed rulemaking, and final rules, which relate to working conditions on the OCS. Likewise, OSHA will provide for the Coast Guard's review and consultation copies of drafts of advance notices of proposed rulemaking, notices of proposed rulemaking, and final rules, which have application to any working condition on the OCS. Publication of any rule, however, is not contingent upon receipt of comments.

B. Enforcement of Regulations and Standards

While OSHA has statutory responsibilities with respect to workplaces on the OCS, the following provisions have been drafted to emphasize the Coast Guard's increasing role for safety and health on the OCS, as provided under the OCS Lands Act Amendments of 1978 (Pub. L.95-372). Through this Act, Congress expressed the expectation that the Coast Guard would be the principal Federal agency in matters of occupational safety and health on the OCS.

1. Routine enforcement activities:

   a. The Coast Guard will continue to enforce existing regulations issued under its authority which affect working conditions on the OCS.

   b. The Coast Guard will also enforce any new occupational safety and health regulations promulgated under its authority affecting working conditions on the OCS.

   c. OSHA remains responsible for enforcing requirements adopted under the OSHA Act which apply to working conditions on the OCS for which the Coast Guard or other Federal agencies have not exercised their statutory authority to prescribe or enforce standards affecting

VII. Effective Date

This Memorandum is effective upon signature by the parties. it may be amended at anytime by mutual written agreement of the agencies and may be terminated by either agency upon thirty days written notice.

VIII. Savings Provision

Nothing in this Memorandum shall be deemed to alter, amend, or affect in any way the statutory authority of the Coast Guard or OSHA.

UNQUOTE

ARTICLE IV - RESPONSIBILITIES

The COE and the USCG will work in close cooperation with respect to surveillance and enforcement activities over contractors engaged in the disposal of dredged material in ocean waters associated with Federal Navigation Projects; however, the COE recognizes that it has the primary surveillance and enforcement responsibility over these activities.

The COE will direct the surveillance effort over COE contract dumpers engaged in ocean disposal activities.

The COE will conduct surveillance over COE contract dumpers engaged in ocean disposal activities and may augment this effort with available USCG resources.

The USCG will continue its surveillance efforts over COE contract barges engaged in ocean dumping in New York and San Francisco areas.

To facilitate optimum scheduling, the COE will notify the USCG in a timely manner of the COE's desires for specific surveillance missions. Requests will identify the geographical area, time of surveillance, and other specifics as may be needed to conduct an effective surveillance operation.

The USCG will, operations permitting, respond to requests from the COE for surveillance missions to oversee specific COE contract dumping activity.

The USCG will notify the COE of the results of any specifically requested surveillance missions.

While engaged in its various mission activities, the USCG will continue to be on the alert for suspicious ocean dumping operations.

ARTICLE V - BUDGETARY RESPONSIBILITIES

Each agency will fund all costs it incurs under this Agreement. Additionally, agreements that involve fund reimbursement in connection with specific activities may be entered into before the activity is undertaken.

ARTICLE VI - AMENDMENTS

The Agreement may be amended from time to time as may be mutually agreeable to the parties thereto.

ARTICLE VII - TERMINATION

The agreement may be terminated by either party upon 60 days advance written notice thereof to the other party.

UNQUOTE

incident. The OSC will submit the report to the District Commander when he is a USCG OSC, and to the Regional Administrator, when he is an EPA OSC.

When the District Commander reviews the USCG OSC's report and determines that one or more of the criteria set forth in section III. below is applicable to that case, the entire record of that case will be referred to the EPA Regional Administrator for review. In addition the District Commander will refer the entire record of:

a. Any other case involving a discharge of a designated hazardous substance from a point source subject to a section 402 permit application, which prior to or after the commencement of penalty action, the USCG determines is excluded from the application of section 311(b)(6) CWA; and

b. Any other case which, the District Commander considers appropriate for possible application of section 311(b)(6)(B) CWA.

When the Regional Administrator receives a case, either from an EPA OSC or upon referral from the District Commander, he will determine:

a. Whether the case is excluded from the application of section 311(b)(6)CWA, and, if not,

b. Whether a civil penalty action under section 311(b)(6)(B) CWA will be initiated.

The Regional Administrator will make these determinations within 90 days of his receipt of referral documents and will notify the District Commander promptly of the determinations in cases which have been referred. If the Regional Administrator determines that an action under section 311(b)(6)(B) CWA will be initiated, the case will be prepared in the EPA Regional Office and forwarded to the Department of Justice (DOJ) in accordance with established EPA case referral procedures.

If the Regional Administrator determines that the discharge is not excluded from the application of section 311(b)(6) CWA and that paragraph (B) action is inappropriate, or if EPA Headquarters declines to refer a Regional case, EPA will return the case to the USCG for appropriate action under paragraph (A).

Upon request, each Agency will make available to the other any or all cases, files, and records, including OSC reports and official determinations, regarding decisions concerning exclusions or the imposition of section 311(b)(6)(A) or (B) penalties. Where there is a disagreement as to the disposition of a particular case, the District Commander and the Regional Administrator will consult to resolve the matter. If necessary, the matter will be submitted to the respective Agency Headquarters for final resolution.

Section III - Criteria

The USCG and the EPA agree that if one or more of the following criteria exists, the District Commander will refer the case to the Regional Administrator in accordance with section II of this memorandum:

a. Any indication of misconduct or lack of reasonable care

EXHIBIT 12 TO ANNEX X
INSTRUMENT OF REDELEGATION

In accordance with Section 8(f) of Executive Order 12316 of August 14, 1981, the Secretary of the Department in which the Coast Guard is operating hereby redelegates to the Administrator, Environmental Protection Agency, subject to the Administrator's consent, all functions specified in Sections 2(d), 2(f), 2(g), 3(a), and 4(b) of that Executive Order with the exception of the following:

a. Functions related to responses to releases or threats of releases from vessels;
b. Functions related to immediate removal action concerning releases or threats of releases at facilities other than active or inactive "hazardous waste management facilities" (as defined in 40 CFR 122.3); and
c. Functions related to immediate removal action concerning releases or threats of releases at active or inactive "hazardous waste management facilities" when the Coast Guard On-Scene Coordinator determines that such action must be taken pending the arrival on scene of an Environmental Protection Agency On-Scene Coordinator. Unless otherwise agreed upon by EPA and Coast Guard, this authority will not be exercised unless the EPA OSC is scheduled to arrive on scene within 48 hours of notification of the release or threat.

For purposes of this instrument: the term "immediate removal action" includes any removal action which, in the view of the Coast Guard On-Scene Coordinator, must be taken immediately to prevent or mitigate immediate and significant harm to human life or health, to the environment, or to real or personal off site property. Situations in which such action may be taken include, but are not limited to, fire, explosions, and other sudden releases; human, animal, or food chain exposure to acutely toxic substances; and the contamination of a drinking water supply.

All functions described in this instrument, whether redelegated or retained, include the authority to contract for, obligate monies for, and otherwise arrange for and coordinate the responses included within such functions.

_____

Andrew L. Lewis, Jr. Date
Secretary of Transportation

I hereby consent to the redelegation
as set forth in this instrument

_____

Anne M. Gorsuch Date
Administrator

AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF MARYLAND CONCERNING REIMBURSEMENT FROM THE FEDERAL POLLUTION FUND

WHEREAS, the State of Maryland, through its Department of Natural Resources Water Resources Administration and the U. S. Coast Guard through its Fifth Coast Guard District have a mutual interest in protecting the environment from the damaging effects of pollution discharged into the navigable waters of the United States and the adjoining shorelines within their mutual jurisdictions; and

WHEREAS, the U. S. Coast Guard is authorized by the Federal Water Pollution Control Act as amended in 1972 (L.L. 92-500), hereinafter called the "Act" and the National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. 1510), hereinafter called the "National Contingency Plan", to reimburse state agencies from the Federal Pollution Fund under certain circumstances in which the appropriate Federal On-Scene- Coordinator determines that such action is necessary; and

WHEREAS, the State of Maryland, through its Department of Natural Resources Water Resources Administration and other political subdivisions and state instrumentalities, is authorized by state statute and local ordinances to pursue vigorous action to abate, contain, and recover pollutants discharged into its waters; and

WHEREAS, The Department of Natural Resources Water Resources Administration is the agency of the State of Maryland authorized pursuant to 40 C.F.R. 1510.23 (a) to supervise the cleanup of pollution by state and local agencies and to be the sole agency to submit requests for reimbursement for all state agencies, political subdivisions and instrumentalities; and

WHEREAS, the Department of Natural Resources Water Resources Administration and the Fifth Coast Guard District desire to establish uniform procedures for the authorization, documentation, certification and reimbursement from the Federal Pollution Fund of Phase III (Containment) and Phase IV (Cleanup, Removal and Disposal) expenses incurred by the Department of Natural Resources Administration or other state agencies, instrumentalities, and political subdivisions under its supervision and control, and which are authorized to be paid by the Act, the National Contingency Plan and appropriate implementing regulations;

NOW THEREFORE, the Department of Natural Resources Water Resources Administration (hereinafter referred to as "Water Resources Administration"), Fifth Coast Guard District (hereinafter referred to as "Coast Guard") agree as follows:

(1) The Federal On-Scene-Coordinator, designated in accordance with the National Contingency Plan (hereinafter called the "OSC") is the person solely responsible for coordinating federal pollution control efforts and the only person who may authorize activities which are reimbursable from the Pollution Fund.

(2) This agreement is not intended to limit to those situations

(6) All labor and equipment offered by the designated representative of Water Resources Administration and authorized by the OSC shall be performed using the employees and equipment of Water Resources Administration, other state agencies, instrumentalities and political subdivisions. Except as specifically authorized in accordance with paragraph (8), no work is authorized to be performed hereunder by private contractors. All authorized work shall be supervised by the designated representative of Water Resources Administration. Work authorized hereunder, whether rendered by Water Resource Administration, other state agencies, instrumentalities, or political subdivisions, shall be paid for by state or local appropriations and shall be considered, for the purpose of this agreement, as work rendered by Water Resources Administration. If the service of private contractors is deemed necessary by the designated representative of Water Resources Administration, he may notify the OSC of the need. It is expected that the OSC, if he concurs, normally will independently obtain the service of concerns under contract to the United States, or obtain necessary contracts through his Contracting Officer.

(7) Water Resources Administration shall be reimbursed for the following costs incurred hereunder and paid for by state or local appropriations upon the submission of a report, supported by accounting data, itemizing the actual costs incurred via the OSC to Commander, Fifth Coast Guard District:

(a) Cost found to be reasonable by the Coast Guard incurred by government industrial type facilities, including charges for overhead in accordance with the agency's industrial accounting system.

(b) Actual costs for which an agency is required or authorized by law to obtain full reimbursement.

(c) Costs found to be reasonable by Coast Guard incurred as a result of removal activity that are not ordinarily funded by an agency's regular appropriations and that are not incurred during normal operations. These costs include, but are not limited to, the following:

(i) Travel (transportation and per diem) specifically requested of the agency by the On-Scene-Coordinator.

(ii) Overtime for civilian personnel specifically requested of the agency by the On-Scene-Coordinator.

(iii) Incremental operating costs for vessels, aircraft, vehicles, and equipment incurred in connection with the removal activity.

(iv) Supplies, materials, and equipment procured for the specific removal activity and fully expended during removal activity.

(v) Lease or rental of equipment for the specific removal activity.

(a) OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

(b) COVENANT AGAINST CONTINGENT FEES

Water Resources Administration warrants that no person or selling agency has been employed or retained to solicit or secure this agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bonafide employees or bonafide established commercial or selling agencies maintained by Water Resources Administration for the purpose of securing business. For breach of violation of this warranty the Government shall have the right to annul this agreement with liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

(c) RELATIONSHIP OF PARTIES

The parties of this contract act in an independent capacity in the performance of their respective functions under this contract and neither party is to be considered the officer, agent or employee of the other.

(13) This agreement shall go into force immediately after signing by both parties to the agreement.

(14) The agreement will remain in effect until specifically canceled by one or both of the parties or until superseded by statutory or regulatory changes.

United States of America
Department of Transportation
Fifth Coast Guard District

Date: _____

By T. N. Miller
Title: Property Officer

State of Maryland
Water Resources Administration

Date: _____

By _____
Title:

Approved as to legal form and sufficiency

this 3rd day of November, 1978.

_____
Assistant Attorney General

EXHIBIT 15 TO ANNEX X

MEMORANDUM OF UNDERSTANDING

This agreement is undertaken in the interest of providing rapid response to spill of oils and hazardous polluting substances in the coastal waters of the Commonwealth of Virginia, and to enable the co-signing agencies to carry out their statutory responsibilities.

The agency receiving a report of such a discharge will promptly notify the other agency and attempt to coordinate response efforts. Interagency notification will not be necessary if it is apparent that the cooperating agency has been notified by the spiller.

The notification point of contact for the Coast Guard will be the Marine Safety Office, Hampton Roads, Virginia, except for the Potomac water shed. The Coast Guard notification point for the Potomac water shed will be the Marine Safety Office, Baltimore, Maryland. The notification point of contact for the Commonwealth of Virginia will be the State Water Control Board, Richmond, Virginia, at the Pollution Response Program (PRRP) Office.

The routine notifications by the Coast Guard will be telephonic from the Marine Safety Office in Hampton Roads or Baltimore. They will include the Water Control Board as an information addressee on all official messages.

Regional Response notification will be telephonic from the Regional Response Center, Portsmouth, Virginia. The Water Control Board will be an information addressee on all Regional Polreps.

J. A. HOWELL Captain, U.S. Coast Guard Chairman, Coastal Region III RRT	R. V. DAVIS Executive Secretary Virginia State Water Control Board
(Date)	(Date)

EXHIBIT 16 TO ANNEX X

MOU, USEPA-USCG; FEDERAL ON SCENE COORDINATOR RESPONSIBILITIES IN THE INLAND ZONE WITHIN THE SECOND DISTRICT

PURPOSE: The purpose of this document is to delineate the role and responsibilities of U.S. Coast Guard personnel relative to pollution response activities on the Inland River System. Specifically, this document:

1. Eliminates previously designated "specified ports and harbors" on the Inland Rivers within the Second Coast Guard District, thereby redesignating the entirety of the Second Coast Guard District as Inland Zone wherein the U.S. Environmental Protection Agency is the predesignated Federal On Scene Coordinator agency.

2. Confirms the Second Coast Guard District's commitment to meeting the spirit as well as the letter of the National Contingency Plan and assisting the U.S. Environmental Protection Agency predesignated Federal On Scene Coordinators to the fullest extent possible in all pollution response activities.

3. Identifies operational criteria under which the U.S. Coast Guard will assist the U.S. Environmental Protection Agency with its On Scene Coordinator (OSC) responsibilities by acting as the lead agency and providing personnel to fill the OSC role for actual or threatened pollution incidents involving commercial vessels or marine transportation-related facilities.

BACKGROUND: Under a previous agreement, the U.S. Environmental Protection Agency, Region III, and the Second Coast Guard District had identified certain geographic areas on the Inland River System for which the U.S. Coast Guard would, under certain circumstances, provide a "predesignated" Federal On Scene Coordinator. In general, in the specified port and harbor areas, the U.S. Coast Guard Captain of the Port was predesignated as the OSC for oil and hazardous substance discharges resulting from vessel casualties or vessel-related transfer operations. The U.S. Environmental Protection Agency retained the OSC responsibilities for all other pollution incidents within the specified ports and harbors and for all incidents outside those limited geographic areas.

The Oil Pollution Act of 1990 amended the Federal Water Pollution Control Act and imposed new pollution response preparedness and removal requirements on industry and government, including the predesignated Federal On Scene Coordinator. The requirements of the Oil Pollution Act prompted a complete review of agency

responsibilities pursuant to the Act itself and the National Contingency Plan. That review indicated that the division of agency On Scene Coordinator responsibilities along a combination of geographic and functional lines did not provide the best mechanism for planning and coordination of current National Response System activities.

This document redefines agency responsibilities along wholly functional lines that are consistent with traditional agency authorities. It also provides for effective integration of preparedness and removal activities in a manner consistent with the requirements of the National Contingency Plan.

AGREEMENT:

The entirety of the Second Coast Guard District, including the Inland River System within the Second District, is included in the definition of Inland Zone wherein the U.S. Environmental Protection Agency (USEPA) is the predesignated Federal On Scene Coordinator Agency. The previous agreement designating specified ports and harbors as portions of the Coastal Zone is canceled.

The U.S. Coast Guard (USCG), through the cognizant Captain of the Port (COTP), will assist the predesignated USEPA On Scene Coordinator (OSC) to the fullest extent possible consistent with agency responsibilities and authorities. Specifically, for all pollution incidents where there is an actual discharge or release, or a substantial threat of such a discharge or release, of a pollutant into or on the navigable waters of the United States or the adjacent riverbank, the U.S. Coast Guard will respond as follows:

1. If the incident involves a commercial vessel, a vessel transfer operation, or a marine transportation related facility, the USCG COTP will provide the OSC and carry out all of the OSC responsibilities, including the decision to direct any necessary removal activity or access the Oil Spill Liability Trust Fund. In such cases, the predesignated USEPA OSC will be advised of any response notification and periodic pollution reports.

2. If the incident involves a source or threat other than a commercial vessel, vessel transfer operation, or marine transportation-related facility, or if the incident involves an unknown source of pollution:

   a. The USCG COTP will carry out the USCG's agency responsibilities under the NCP, the Regional Contingency Plan, and, when developed, the Area Contingency Plans, and will assist the USEPA OSC to the fullest extent possible.

b. Upon request by the predesignated USEPA OSC, the USCG COTP will act on behalf of the USEPA in any actions where the USCG personnel are both qualified and physically capable of responding. The type and extent of the USCG's actions in each case will be determined by consultation between the USEPA COTP and USCG COTP.

c. If specifically requested by the predesignated USEPA OSC, the USCG COTP may assume the functional OSC role and carry out all of the OSC responsibilities for a particular incident. The final decision on acceptance of the functional OSC role will rest with the COTP on an incident specific basis.

d. If the USCG is the first agency notified of such an incident, the USCG will notify the predesignated USEPA OSC and assist in assessing the situation and the need for a Federal response.

e. If a USCG representative is the first Federal official arriving on scene at such an incident, the USCG will notify the predesignated USEPA OSC and carry out the duties detailed in the NCP pending arrival of the predesignated OSC.

3. This agreement will be incorporated into the agency responsibilities section of the Regional Contingency Plan.

TERM OF AGREEMENT: This agreement will be subject to review and amendment coincident with each periodic review of the Regional Contingency Plan and at any other time at the request of either of the parties. It will remain in effect until modified or terminated by subsequent agreement.

Mr. Stanley L. Laskowski
Acting Regional Administrator
U.S. Environmental Protection
Agency, Region III
841 Chestnut Building
Philadelphia, PA 19107

N.T. Saunders
Rear Admiral, USCG
Commander
Second Coast Guard District
1222 Spruce Street
St. Louis, MO 63103-2832

_____ _____

Date: _____ Date: _____

ANNEX XI

REGION III

DISPERSANT EMPLOYMENT EVALUATION PLAN

(DEEP)

For Marine and Estuarine Environments

NOTE: On August 1, 1990 - A proposal to incorporate the DEEP into the RCP was presented by the Workgroup and unanimously accepted by the RRT.

prepared for

Region III RRT

by

Region III RRT Dispersants Workgroup

May 1991
[previous revision October 1990]

TABLE OF CONTENTS (continued)

2. POLICY ON DISPERSANTS

A. RRT Policy

It is the policy of the Region III RRT that it is **preferable** to attempt to remove spilled oil from the environment rather than distribute it throughout the water column. Therefore, the potential use of dispersants in this region will be restricted as follows:

1. **Offshore Marine Situations** - dispersants may be considered as a response tool in offshore marine situations where **significant diffusion** is predicted to occur before the dispersed oil reaches areas of less than 40 feet of water. In these situations, the dispersant will not be the only response tool, but strategically employed in those areas where physical containment could not occur in time to protect a sensitive area of concern.

2. **Nearshore and Estuarine Situations** - in nearshore and estuarine situations, the use of dispersants will be reserved for those situations of **extreme risk**,[1] such as: a) where physical containment could not be effected and dispersants would reduce an imminent threat to an important species or distinct population of fish, wildlife or other biota; or b) to reduce catastrophic economic impacts.

Where any of the above conditions exist, the OSC will consult the concurrence network as described in **Section 4** of this document. In all cases of dispersant use, a consistent, logical program of monitoring dispersant effectiveness and effects is required. Monitoring requirements are discussed in **Section 9** of this document.

[1] Where hazards to human life exist, the regulations in subpart J of the NCP apply and the **OSC may authorize dispersant use without regional concurrence network approval.**

3. OPTIMAL SITUATIONS FOR DISPERSANT USE

This information is intended to identify those situations where, if mechanical removal were infeasible and the conditions listed below were present, dispersant use probably would be one of the appropriate methods of environmental protection.

Assumptions:

- dispersants are not effective on all types of oil, and even those which are amenable when spilled become more resistant to dispersant treatment in about **24 hours**

- the logistics of mounting a major dispersant operation are very complicated and require constant supervision and evaluation

- dispersants can be effective in mitigating environmental damage by reducing heavy oiling of shorelines and certain living resources

- dispersants do not remove the oil but **redistribute** it into the water column as fine droplets which can be readily diluted

- dispersants are **not the preferred countermeasure** strategy because they redistribute, not remove, oil from the environment; and because the long-term effects of the dispersant and dispersed oil on marine organisms are unclear and difficult to predict

- in common with all techniques, dispersants are not likely to be 100% effective in preventing shoreline impacts, but may be strategically employed to protect specific areas

- dispersants are one of many countermeasures strategies available to OSCs and they need to be considered along with other strategies, e.g., booms, skimmers, and shoreline cleanup, to optimally mitigate environmental damage

4. DISPERSANT USE DECISION GUIDANCE

A. Minimum Requirements Checklist to Support a Decision to Use Dispersants

This checklist is designed to assist decision makers when a proposal to use dispersants is made. Unless **all** of these requirements are satisfied, a decision to apply dispersants could be questioned. As indicated by the numerous references below, this checklist must be used in conjunction with other advice and guidance in the DEEP.

____ The spilled oil is compositionally and environmentally suited to dispersal, i.e. neither too viscous nor too volatile, water temperature is above the pour point, oil not too weathered. (See **Section 7** for guidance)

____ The mixing action of the water body is sufficient to diffuse the dispersed oil. (Consult SSC)

____ An on-scene field test, which has been approved by the OSC with RRT concurrence, verified that the oil can be dispersed by the available dispersant. This can be accomplished through an actual trial application, which has been approved by the OSC with RRT concurrence, or by using a test kit. (See **Section 7** for guidance)

____ Efforts to physically contain or remove the spilled oil will not sufficiently protect the primary resources of concern. (Use trajectory information and **Section 5**)

____ The primary resources for protection would be more adversely affected by undispersed oil rather than a mixture of dispersed oil and undispersed oil. (See **Sections 5 and 6** for guidance)

____ The appropriate dispersant and application equipment can be mobilized efficiently so that the oil could be treated within approximately 24 hours of its exposure to weathering. (See **Section 7** for guidance)

____ A monitoring plan will be implemented to collect information on dispersant effectiveness and effects. (See **Section 9** for guidance)

____ The RCP concurrence procedure has been followed and the required approvals from responsible State and Federal authorities have been received. **In Region III, concurrence is required from the affected State(s), DOI, DOC, and EPA.**

NOTE: A STREAMLINED DISPERSANTS CHECKLIST (previously ANNEX XI of the Region III Regional Contingency Plan) is presented in the DEEP as APPENDIX 1 (5 pages) at the end of this document.

5. Sources of Sensitive Environmental Resource Maps and Related Information

The information in this section is designed to help decision makers determine which sensitive environmental resources would be involved in the tradeoffs associated with a decision on dispersant use. Users of the maps are cautioned to consult with resource specialists during incident response to verify the presence or absence of animal species potentially threatened.

A. General Information

TITLE	YEAR	AUTHORS	PURPOSE	AREA COVERED	SCALE
Virginia Tidal Wetlands Inventory	1975-1981	Virginia Inst. of Marine Science	Marsh Inventory	27 counties	1:24,000
National Wetlands Inventory	1987	U.S. Fish and Wildlife Service	Marsh Inventory	United States	1:24,000
Environmental Sensitivity Index Maps	1982/1980	A. Rooney, R Middleton, A. Fritz, M. Vance	Oil Spill Response	VA, MD, NC	1:24,000
Ches. Bay Environmentally Sensitive Areas	1988/1985	SEA, VIMS, James Dobbin Associates	Oil Spill Response	VA, MD	1:400,000
DE Bay Environmentally Sensitive Areas	1989	NOAA	Oil Spill Response	DE Bay	1:137,000
Atlantic Coastal Ecological Inventory	1980	A.P. Becassio et al., Biol. Ser. Div. U.S.F.W.S.	Base Line Study	Maine-Florida	1:250,000
Environmental Atlas of the Potomac Estuary	1979/1978	Martin Marietta for MD DNR	Ecological Inventory	Potomac River	1:250,000
Maryland Critical Areas Maps	in progress	Maryland Dept. of Natural Resources	Legally mandated	1000' from Bay	
Maryland Natural Heritage Program	1986	Maryland Dept. of Natural Resources	Ecological Inventory	sites in MD	
Chesapeake Bay in Maryland	1973	A. J. Lippson	Ecological Inventory	Bay in MD	Not given
Oil Pipeline Study	1980	A. Rooney-Char, R. Ayres, VIMS	Ecological Inventory	VA Bay & Sea	1:400,000
An Atlas of DE's Wetlands & Est.	1976	University of DE, Tech Rep. #2	General Inventory	Delaware Bay	1:24,000
Class. & Mapping of Shore Zone Features	1974	F. Ahnert et al., CRC pub. #7	Geological Inventory	Bay in MD	1:24,000
Delaware Bay Report Series, Vols. 3 & 4	1973	Polis et al., Strom et al.	General Inventory	Delaware Bay	
Fishes in Shr. Zone DE River Estuary	1970s (?)	D. de Sylva et al.		Delaware River	
Biological Evaluation of the DE River Estuary	1959	C. N. Schuster, Jr.	Ecological Inventory	Delaware River	1:80,000

6. REGIONAL LIST OF SENSITIVE FISH AND WILDLIFE SPECIES/HABITATS

These lists are based on the recognized resources of concern in our region and our current knowledge of dispersant effects and effectiveness. It is assumed that dispersants would reduce the quantity of surface oil but not eliminate it entirely. The judgments on reducing adverse impacts are general because of the many incident specific factors that cannot be evaluated in advance. Discussions among the natural resource specialists will be necessary to reach a determination on which resources will be at risk during a given dispersant use decision.

Considerations for Use of Dispersants in RRT Region III and major resources of regional concern are presented in the following tables:

TABLE 6A - Ocean System (1 page)
TABLE 6B - Estuarine System (2 pages)

TABLE 6B-1

Considerations for Use of Dispersants in RRT Region III

Major Resources of Regional Concern

System: ESTUARINE

Resource[1]	Primary Seasons of Concern	Vulnerability[2] to Non-Dispersed oil	Could Dispersants[3] Reduce Impacts
Beaches[4]	Sp-Su	High	Yes
Intertidal Flats[4]	Sp-Su-F-W	High	Yes
Salt Marshes[4]	Sp-Su-F-W	High	Yes
Tidal Freshwater[4] Marshes	Sp-Su-F-W	High	Yes
Tidal Wooded[4] Wetlands	Sp-Su-F-W	Med	Yes
Shorebirds	Sp-Su-F	High	Yes
Wading Birds	Sp-Su-F	High	Yes
Waterfowl	F-W-Sp	High	Yes
Ospreys/Eagles/ Peregrines	Sp-Su-F-W	Med	Maybe
Anadromous Fish			
Spawning Areas	Sp	High	Maybe
Nursery Areas	Sp-Su	Med	Maybe
Adults	Sp-Su-F	Med	Maybe
Estuarine Fish			
Spawning Areas	Sp-Su	High	Maybe
Nursery Areas	Sp-Su-F-W	Med	Maybe
Adults	Sp-Su-F-W	Med	Maybe
Submerged Aquatic Vegetation	Sp-Su-F-W	Med	* No

[1] Consult resource maps and the SSC, Federal and State natural resource specialists for exact locations and seasons.

[2] Vulnerability based on portion of the water column commonly used or feeding, nesting, or movement strategies.

[3] Reduction of impacts assumes an application that would disperse oil before it reaches shoreline areas. "Maybe" indicates that local conditions should be evaluated and resource specialists consulted to determine efficacy of dispersants.

[4] Do not apply dispersants directly to these areas if they are already oiled.

* Unless oil is sinking

7. DISPERSABILITIES OF PETROLEUM PRODUCTS COMMONLY ENCOUNTERED IN REGION III

One crucial factor in every dispersant use decision process is the dispersability of the petroleum product spilled. If the chemical and physical characteristics of the product make dispersant use ineffective or unnecessary, the decision process is quickly concluded. However, there is a large number of petroleum products, primarily crude oils, that can be dispersable under certain environmental conditions. The task of the response community is to rapidly determine if the spilled product is dispersable under the specific environmental conditions actually present at the spill location.

The information provided in this section is designated to speed the response community's evaluation of whether or not the spilled product is dispersable. It is NOT designed to provide a yes or no answer on whether or not a dispersant should be applied. This dispersability information must be **combined** with results of a **field test** and **site specific environmental condition information** before concluding that the spilled product is truly dispersable. The field test may be accomplished by using a field test kit or through a trial application on the spill itself (which has been approved by the OSC with RRT concurrence). Test kits may be commercially manufactured types or "homemade" versions as long as accepted testing procedures are carefully followed.

The dispersability factor definitions were taken from the American Petroleum Institute publication "U.S. Crude and Products Import - 1985" as were the dispersability factors for the finished products. The list of crude oils was developed by the DELBAY Cooperative and is considered representative of the many crude oils transported and stored in our region. If the spilled product in question is not listed, the product's API Gravity and pour point can be used to determine the product's dispersability using **Table 7 - 7**. (See page 24.)

NOTE: The following six tables of Dispersability Factors are arrranged in the order of NEED to be acted upon the fastest i.e., 3L, 3H, 2H, 2L, 4, 1.

Table 7-7 is a summary table of the previous 6 tables.

TABLE 7 - 3

Dispersability Factor - 2H
API Gravity 35° - 45°, Pour over 41° F

Light weight materials that are **relatively non-persistent** and probably **difficult to disperse** if water temperature is below the pour point of the material.

Crudes (pour point, °F)

Amna (75)
Arjunda (80)
Buattifel (80)
Gippsland (60)
Lucinda (65)
Minas (90)
Palanca (50)
Pennington (40)
Qua Iboe (50)
Sarir (79)
Zuetina (55)

Finished Products

None listed at this time.

NOTE: The American Petroleum Institute has adopted a standard method of expressing the gravity, or unit weight, of petroleum products. This is an arbitrary method that had its beginnings in the chemical industry long before it was applied to liquid hydrocarbons. API gravity is expressed in degrees (°).

TABLE 7 - 5

Dispersability Factor - 4
API Gravity less than 17°

These products are probably **difficult** or **impossible to disperse.**

Crudes

BCF - 17
Boscan
Merey

Finished Products

Asphalt
Heavy Residuals (e.g. No. 6[1] Fuel Oil, Bunker C, Lube Oil)
Paraffins/Waxes

(1) There are many types of "No. 6" oil with various pour points and other physical characteristics that determine dispersability. Be sure to verify the specific characteristics of the No. 6 in question before concluding it is or is not dispersable.

NOTE: The American Petroleum Institute has adopted a standard method of expressing the gravity, or unit weight, of petroleum products. This is an arbitrary method that had its beginnings in the chemical industry long before it was applied to liquid hydrocarbons. API gravity is expressed in degrees (°).

Table 7 - 7

DISPERSABILITY FACTORS

Dispersability Factor	Physical Characteristic	Description
1	API Gravity over 45°	Very light weight material. No need to disperse. Oil will dissipate rapidly.
2L	API Gravity 35° - 45° Pour under 41° F	Light weight material Relatively non-persistent Easily dispersed.
2H	API Gravity 35° - 45° Pour over 41° F	Light weight material. Relatively non-persistent. Probably difficult to disperse if water temperature is below pour point of material.
3L	API Gravity 17° - 34° Pour under 41° F	Medium weight material. Fairly persistent. Easily dispersed if treated promptly.
3H	API Gravity 17° - 34° Pour over 41° F	Medium weight material. Fairly persistent. Probably difficult to disperse if water temperature is below pour point of material.
4	API Gravity less than 17°	Probably difficult or impossible to disperse.

From: "U.S. Crude and Products Import - 1985"
American Petroleum Institute

9. CRITERIA FOR MONITORING DISPERSANT USE

Dispersant applications in Region III will be monitored as a general practice. The OSC is responsible for designating monitors. The Atlantic Strike Team will serve as monitors as available. There are two levels of criteria suggested: general and incident specific.

Dispersant use needs to be monitored for two reasons. First, the OSC needs to know how well an application worked to help decide whether to continue and if so, to refine future applications. Second, in the long-run, there is a great need for more field data on dispersants; each use constitutes an opportunity that should not be lost.

NOTE: The Region III MONITORING SUBGROUP of the DISPERSANTS WORKGROUP will be developing additional MONITORING REQUIREMENTS that will be incorporated into the DEEP as an APPENDIX when available.

GENERAL REQUIREMENTS

Records

1. Dispersant brand
2. Equipment and methods used in application
3. Dilution of dispersant prior to application, if any
4. Rate of application (gallons per acre, dispersant to oil ratio)
5. Times and area of application
6. Tracks of vessels or aircraft during application
7. Wind and wave conditions during application

Effectiveness

Visual and photographic documentation by qualified observers of:

1. Oil before and after dispersant application
2. Resurfacing of dispersed oil

Environmental Impacts

Visual and photographic surveys by qualified observers of:

1. The extent of shoreline impact by dispersed and undispersed oil
2. Mortality or abnormal behavior by fish, birds, or mammals

10. POLICY DEVELOPMENT AND JUSTIFICATION

The highly industrialized character of our region, and the frequent transport, transfer and storage of petroleum products into the ports of Philadelphia, Baltimore and Norfolk, make the occurrence of oil spills inevitable. The question, therefore, is not "what if" but rather "where, how much and what kind" of oil is spilled. In 1987, the RRT identified the issue of dispersants as one deserving special attention in our region. Shortly thereafter, the Dispersants Workgroup was established to study the body of knowledge on dispersants with the intention of developing the appropriate guidance that the RRT and OSCs need to make and support a decision to employ or not employ dispersants. The justification for either decision took on added importance following the court decision on the French government's response to the Amoco Cadiz oil spill. In that 1988 decision, the court ruled that the French decision to ban the use of dispersants in waters shallower than 50 meters (164 feet), was "Without scientific justification" and "seriously interfered with the success of the dispersant method." This kind of precedent reminded us that the **decision** on dispersant use **must be based** upon **sound reasoning** and the **best information available.**

The Dispersants Workgroup initiated its efforts by reviewing the various existing regional approaches to dispersant use issues and outlining a strategy for our particular position on dispersant use. In general terms, the Workgroup listed a number of tasks to better identify the effects and effectiveness of dispersants prior to preparing appropriate guidance materials to be adopted as part of the RCP. The Workgroup also decided to focus its attention on the possible use of dispersants in marine and estuarine environments only. The use of dispersants in freshwater should also be investigated as there are significant differences between their use in those environments compared to freshwater environments. For example, in freshwater there are added concerns for impacts to drinking water, normally there is less volume of water for mixing, and there is a much smaller body of data available for decision making.

The Dispersants Workgroup reviewed a great deal of information on sensitive environmental resources, petroleum products routinely handled in our region, historical oil spill data, dispersants types and toxicities, and application techniques. The result of these reviews was the preparation of the Dispersant Employment Evaluation Plan **(DEEP)** which is composed of a collection of advisory and reference materials to be incorporated into the RCP. These materials serve to educate responders about dispersant use considerations and **serve as guidelines** to technical specialists who would be consulted during an actual spill response. As part of the DEEP, the Workgroup decided to include a statement of regional policy that would put the question of dispersant use into the broader context of how our region chooses to respond to oil spills.

- toxicity is usually reported as lethal concentrations or doses and there is much less information on the sublethal effects of dispersants; and,

- there is insufficient toxicity information for the species of most concern in our region.

Furthermore, after reviewing the description of how dispersants physically function in the environment, the Workgroup is concerned about the diffusion and mixing action (so vital to dispersant performance and dilution) characteristics of Region III's estuarine environments such as the Chesapeake and Delaware Bays. These areas comprise a significant portion of sensitive resources where, historically, most of the region's oil spills have occurred.

The RCP states, in Subpart A, section 300.1, the necessity for actions by government agencies to minimize damages from oil discharges. Without the better information on impacts of dispersed oil, and considering the diffusion and mixing action questions, it would not be prudent to recommend widespread use of dispersants in our region. In addition, we need sufficient margin of protection for those special situations where restricted dispersant use is recommended.

The Dispersants Workgroup identified **several situations** where **dispersants might be used** while compromising our policy of preferring oil removal to distribution into the water column. In recommending **offshore use**, the rationale is that there would be sufficient water depth and mixing action to reduce dispersed oil levels below sublethal concentrations quickly before it reached nearshore, sensitive resources. To ensure a sufficient margin of protection, offshore use should only be recommended where significant diffusion would occur before the dispersed oil reaches areas of less than 40 feet of water. The 40 foot depth is selected because studies show that sublethal concentrations do occur at depths of 10 meters (33 feet) and researchers recommend at least 10 meters of depth when using dispersants over sensitive resources such as coral reefs and sea grasses. While recognizing that our region does not have coral reefs, we believe that the region's shellfish resources deserve similar protection.

One potential **nearshore, extreme risk** situation for dispersant use would be a situation where a sensitive plant or animal population could be irreversibly harmed by large quantities of surface oil. A possible example would be surface oil impacts on the horseshoe crab eggs and shorebirds dependent on them in Delaware Bay during the peak shorebird migration period. At this critical time, significant portions of the world's population of some shorebirds species may be exposed to the spilled oil, both through ingestion of oiled crab eggs and physical contact with the oil. If physical containment or mechanical removal was not possible or sufficiently effective, careful dispersant use might reduce the magnitude of the adverse impacts.

APPENDIX 1

(Formerly Annex XI of the Regional Contingency Plan)

STREAMLINED DISPERSANTS CHECKLIST

I. COMPILATION OF DATA

A) Spill Data OSC

1. Circumstances (fire, grounding, collision, etc.)
2. Time/Date of incident:
3. Location of spill:
4. Type of oil product:
5. Volume of product released:
6. Total potential of release:
7. Type of release (instantaneous, continuous, intermittent, etc.):

B) Characteristics of the spilled oil OSC

1. Specific gravity:
2. Viscosity:

C) * Weather and water conditions/forecasts SCC

1. Air temperature, wind speed, direction:
2. Tide and current information:
3. Sea conditions:
4. Water temperature and salinity:
5. Water depth and depth of the mixed layer:

D) Oil trajectory information SCC NRC

1. 48-hour surface oil trajectory forecast:
   a. surface area of slick
   b. expected areas of landfill

2. Type of transportation and dispersing equipment:

	Company one	Company two	Company three
a. name			
b. location			
c. equipment available			

F) Information about available dispersant and dispersing equipment USCG EPA

1. Name of the proposed dispersant on EPA acceptance lists:

2. Location of the area to be treated:

3. Estimated time interval between dispersant application and contact with sensitive environment/resources.

4. Estimated distance between application of dispersants and sensitive environment/ resources.

G) Comparison of the effectiveness of conventional cleanup methods vs. the use of dispersants OSC

1. Containment at the source:

2. Shoreline protection strategies:

3. Shoreline cleanup strategies:

4. Time necessary to execute response:

III. RRT EVALUATION OF THE CONSEQUENCES OF A DISPERSANT APPLICATION DECISION.

A) Will applications of dispersant remove a significant amount of the slick from surface water?

B) Can the extent of location of shoreline impacts be altered in a positive manner?

C) Can the damage to endangered or threatened species, marine mammals, and waterfowl be lessened?

D) Will the damage to habitats and resources resulting from chemical dispersion be less than those resulting without chemical dispersion?

E) If recreational, economic and aesthetic considerations are a higher priority than natural resource considerations, what is the most effective means of their protection?

APPENDIX 2-B

B. Application Equipment

1. Aircraft

The following three companies have a known dispersant spraying capability. Note that only one company is in the immediate area (Cordoba). Their involvement, interest, and capability grows out of the efforts of the New York Cooperative, Clean Harbors, to provide an aerial spraying capability. The other two companies each operate a fleet of large fixed wing aircraft and have extensive dispersant spraying experience. They are prepared to respond throughout the U.S. and abroad.

Company	Location	Phone
Cordoba Helicopter	Highstown, NJ	(609) 448-0031
Bigert Aviation	Chandler, AZ	(602) 821-2400

One ADDS PACK and one 2,500 gallon system installed in a DC-4 aircraft.

Company	Location	Phone
Conair Aviation	Abbotsford, BC	(609) 853-1171

Ten DC-6 fitted for 3,000 U.S. gallon system, capable of delivering up to 20 gallons/acre. Fifteen 360 U.S. gallon systems for Bell 205 Helicopters and six 180 U.S. gallon systems for Bell 206 Helicopters. **NOTE: Per phone conversation on 1/29/91 with Rod Boles of Conair, the two Fokker F-27 (not F-17) systems fitted for 7,000 U.S. gallons, were sold to France.**

The only boat mounted spraying systems identified on the East Cost, north of Florida were those owned by the Delaware Bay and River Cooperative (one complete self contained system) and the Clean Harbors Cooperative in New York (one complete self contained system).

Similar system are held by other industry cooperatives at more distant locations. Clean Harbors and the Delaware Bay and River Cooperative have mutual assist agreements which allow for quick access to each others equipment.

Company	Location	Phone
Delaware Bay & River Co-op	Lewes, DE	(302) 645-7861
Clean Harbors Co-op	Perth Amboy, NJ	(201) 738-2438

Appendix 3

COMMONWEALTH OF VIRGINIA

POSITION ON

THE USE OF DISPERSANTS

ON AN OIL DISCHARGE

October 1992

I. INTRODUCTION AND PURPOSE

A. Concern by various State agencies on the use of dispersants to treat oil discharges led to the formation of a Virginia Oil Spill Dispersant Committee. The Virginia Oil Spill Dispersant Committee was made up of representatives of the following agencies/institutions:

Virginia Marine Resources Commission

Department of Game and Inland Fisheries

Department of Emergency Services

Virginia Institute of Marine Science of the College of William and Mary

Department of Conservation and Recreation

Department of Waste Management

Department of Air Pollution Control

Council on the Environment

State Department of Health

State Water Control Board

B. The purpose of the Virginia Oil Spill Dispersant Committee was to develop a State position on the use of dispersants in response to a discharge of oil. The State position that was agreed to by the Virginia Oil Spill Dispersant Committee members is presented in the following sections.

II. POSITION ON DISPERSANTS

It is the position of the Commonwealth that the physical or mechanical removal of discharged oil from state waters should be the primary method of control. However, it is also recognized that in some instances the physical containment, cleanup, removal and disposal of oil may be infeasible, and the effective use of dispersants must be considered to mitigate serious environmental pollution or to prevent loss of human life. Therefore, this position sets criteria under which dispersants may be used in state waters. Thus, the potential use of dispersants will be limited as indicated in the Sections III, IV, and V. The criteria set forth in these Sections assume risk to human life is not a factor. Dispersants may be used on all oil discharges when their use will save human life.

III. WATERS WHERE IT IS UNACCEPTABLE TO USE DISPERSANTS

A. Dispersants will not be approved for use in any of the following areas:

1. Any tributary of the Chesapeake Bay, or

2. Any area of the mainsteam Chesapeake Bay with a depth less than 8 meters, or 26 feet, or

3. Any area within 5 kilometers, or 2.7 nautical miles of the shoreline, or

4. Any area deemed to be a critical habitat or sanctuary.

B. The rationale for restricting the use of dispersants in these areas is based on the possibility that oil-dispersant mixtures could be more toxic to estuarine and marine organisms than either oil or dispersant separately. Boundaries where dispersants will not be approved for use were selected on the following premises:

1. The volume of water available for dispersion of the oil-dispersant mixture to less than sublethal concentrations is basically limited by depth.

2. The major portion of the living resources in the Chesapeake Bay is located in shallow inshore areas and tributaries.

3. Tributaries have a limited exchange of water with the Bay for removal of the oil-dispersant mixture from living resources.

4. The living resources occupying, or seasonally using, certain areas of the Chesapeake Bay are deemed by the Commonwealth to be too sensitive for risking exposure to oil-dispersant mixtures.

C. In areas where it is unacceptable to use dispersants, the Commonwealth will consider requests for pre-discharge authorization to use dispersants on a site specific basis when data are presented that for specific oil-dispersant combinations different criteria should be applied. The information that must be provided in the pre-discharge site specific authorization request shall include, but is not limited to, the following:

1. An analysis of why pre-discharge site specific authorization to use dispersants is desired.

2. Composition of oil, physical properties, and toxicity.

3. Composition of dispersant, physical properties, and toxicity.

4. Physical properties of the oil-dispersant mixture.

5. Physical characteristics of dispersant use site.

6. Toxicity of oil-dispersant mixtures on Chesapeake Bay species (mysids, amphipods, larval fish, oysters).

7. Realistic scenarios describing how much oil may be discharged and where. Methods of dispersant application and procedures for containment, cleanup, removal and disposal.

8. Weather and tidal current conditions that are needed to insure proper dispersion.

9. A monitoring plan.

IV. WATERS WHERE IT IS ACCEPTABLE TO USE DISPERSANTS

A. Dispersants may be used in the following areas:

1. Any area east (oceanward) of a line between Cape Charles Lighthouse located on Smith Island on the Eastern Shore and Cape Henry light in Virginia Beach, or

2. Any ocean waters with a depth greater than 8 meters, or 26 feet.

3. Any ocean waters outside 5 kilometers, or 2.7 nautical miles of the shoreline.

B. The use of dispersants in these areas is acceptable subject to the following conditions being met:

1. The authority to use dispersants is vested solely in the individual who is pre-designated Federal On-Scene Coordinator. This authority may not be delegated.

2. Only dispersants which are listed in the National Contingency Plan Product Schedule shall be used.

3. The State Water Control Board shall be immediately notified and provided the following information:

a. Type of dispersant to be used.

b. Area affected.

c. Application rate and method of application.

d. Reason why mechanical or physical removal of the oil is not feasible.

e. The projected area of impact of the oil if the oil is not dispersed.

f. On-scene weather.

4. A monitoring plan approved by the State Water Control Board shall be implemented to collect information on the dispersant use effectiveness and the effects on living and economic resources.

V. WATERS WHERE DISPERSANT USE WILL BE DETERMINED ON A CASE-BY-CASE BASIS FOLLOWING AN OIL DISCHARGE

The decision on the use of dispersants in all state waters other than those defined in Section III and Section IV will be made on a case-by-case basis following an oil discharge. An operator desiring to use dispersants following an oil discharge shall evaluate the appropriateness of mechanical or physical removal versus the use of dispersants. The use of dispersants will be authorized only after all methods of physical or mechanical removal have been found to be infeasible, or, the dispersant use will greatly mitigate the adverse environmental impact of the discharged oil. The decision to allow the use of dispersants will be made using the procedures presented in the following paragraphs.

A. Any operator requesting to use dispersants in response to a discharge of oil shall first provide all the following information to support the request to the State Water Control Board:

1. The discharged oil's composition and suitability to dispersal.

2. The mixing action of the water body is sufficient to diffuse the dispersed oil.

3. Efforts to physically or mechanically contain or remove the discharged oil will not sufficiently protect the resources of concern.

4. The appropriate dispersant and application equipment can be mobilized efficiently so that the oil could be treated within approximately 24 hours of its exposure to weathering.

5. A monitoring plan approved by the State Water Control Board will be implemented to collect information on the dispersant use effectiveness and the effects on living and economic resources.

B. The decision to use dispersants on a case-by-case basis will be made in accordance with the attached decision tree.

C. If the decision tree indicates that the impact associated with the use of chemical dispersants will be less than those resulting without chemical dispersants, then the following concurrence network will be activated.

1. The State Water Control Board shall contact the following agencies for concurrence on the use of dispersants:

   Department of Emergency Services

   Department of Game and Inland Fisheries

   State Department of Health

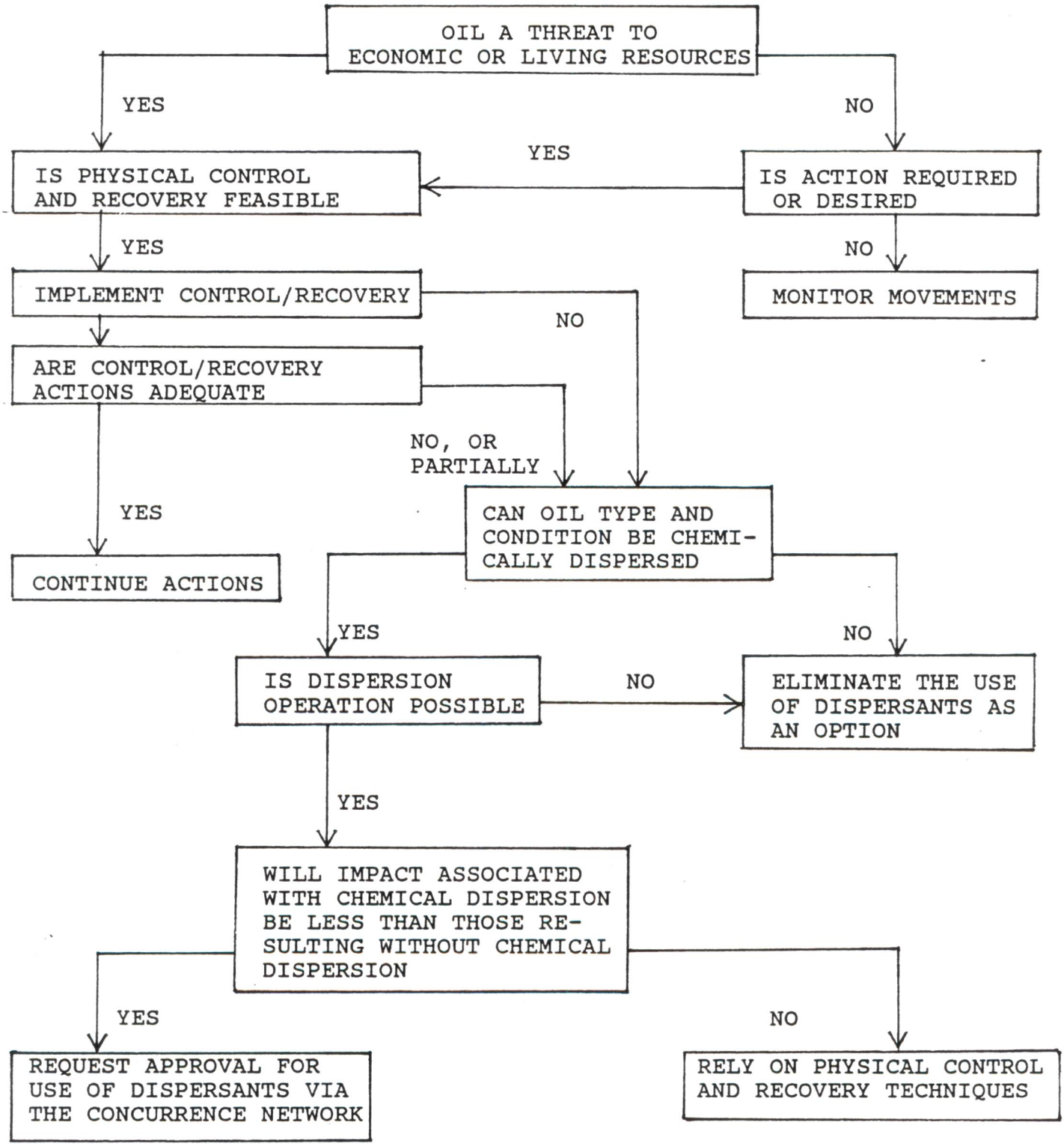
   Virginia Marine Resources Commission

   Virginia Institute of Marine Sciences of the College of William and Mary, Old Dominion University and other state institutions may be contacted for assistance.

2. The State Water Control Board shall make a recommendation to the Secretary of Natural Resources on the use of dispersants.

3. The State Water Control Board shall notify the operator requesting to use the dispersants of the Commonwealth's position.

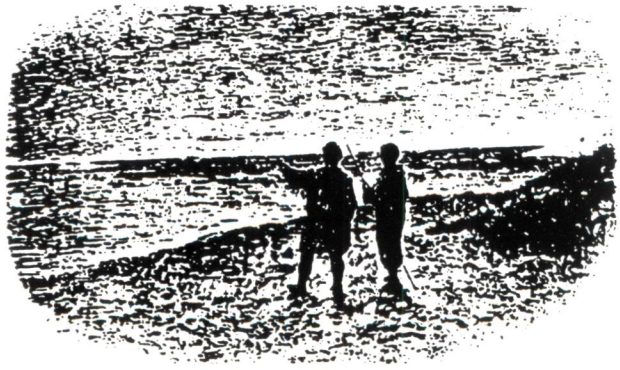
CASE-BY-CASE DECISION TO USE DISPERSANTS
FOLLOWING AN OIL DISCHARGE



ANNEX XII NATIONAL CONTINGENCY PLAN

FEDERAL REGION III

SHORELINE COUNTERMEASURES MANUAL



ANNEX XIII

REGIONAL CONTINGENCY PLAN

APPROVED BY

REGIONAL RESPONSE TEAM

FEDERAL REGION III

July 1992

SHORELINE COUNTERMEASURES MANUAL

REGIONAL RESPONSE TEAM
FEDERAL REGION III

Commander (m), Fifth Coast Guard District
431 Crawford Street
Portsmouth, Virginia 23705

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U.S. Environmental Protection Agency, Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Contents

Contents, *cont.*

1 Decision Process Organization

A Shoreline Evaluation Process

The shoreline evaluation process requires a commitment of trained personnel to assess, evaluate, and communicate the impacts of oil on the shoreline, as well as to recommend countermeasures to mitigate adverse impacts. At most spills, a repetitive, detailed, and systematic survey of the extent and degree of shoreline contamination is needed for:

1. Assessment of the need for shoreline cleanup
2. Selection of the most appropriate cleanup method
3. Determination of priorities for shoreline cleanup
4. Documentation of the spatial oil distribution over time
5. Internally consistent historical record of shoreline oil distribution for use by other scientific surveys of intertidal and subtidal impacts

The organizational structure described in the following pages details a three-phase model for the On-Scene Coordinator (OSC) to use in establishing the shoreline evaluation process during an incident. During a small spill event, one team of individuals may be able to conduct all three phases of support.

On the other end of the spectrum, during a larger spill event, three or more separate teams would be required to conduct all three phases of support to the OSC. The products of the shoreline evaluation process for a larger spill would include the collection of the individual shoreline sketches noting the extent of oiling, the development of a database either in text matrix or graphics displaying the oil distribution on the shoreline, a record of the decision process from the initial assessment of oiling, and the monitoring to final evaluation of the countermeasures used.

2 Shoreline Product Review Group (SPRG)

Objectives

Assure product quality of the Shoreline Assessment Group. Assure quality of the spill database.

During larger or complex spill events, the OSC may elect to establish a special quality assurance/quality control (QA/QC) team. The responsibility of this group is to insure that information from the Shoreline Assessment Group is accurate and consistently gathered. They will assure items of significance which may have been overlooked by the Shoreline Assessment Group are added to the assessment process from other data sources (i.e., in-house reports, maps, databases) such as culturally or archaeologically significant areas.

Significantly, the time-sensitive elements of the response may also be added to recommendations to the OSC by this team. For example, are there natural resources which are particularly sensitive to oiling at the time, or season, the spill is occurring? Is there a window of opportunity to conduct countermeasure operations to protect a turtle nesting season (get the oil up before they arrive) or terminate countermeasure activities to protect bird nesting areas (keep the responders away from nesting areas with live chicks)?

Members

The SPRG should contain representatives from the OSC, State, land managers, and database managers, as appropriate. The State representative shall collect and forward special concerns submitted by local authorities. The National Oceanic and Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC) team can assist in the design of the database to collect detailed shoreline segment oil distribution data.

Products

During more complex spill events, a database will be used to collect and summarize the Shoreline Evaluation Survey forms prepared by the field teams. The use of maps and other graphics to display the oil's distribution on the shoreline is critical in assisting the decision process. This display may be as simple as using colored markers on existing maps or charts. There should not be a requirement for a computer-generated display of the oil's distribution on the

improve the efficacy of the cleanup. The form of the feedback may be as simple as a copy of the approved countermeasure or a work order. The copying of the graphics/charts, in which the oil distribution is displayed, would be another desirable form of feedback. Recommendations and authorized countermeasures should be copied to each team member.

B Termination of Countermeasure Activity

Objective

To reach agreement on the completion of each shoreline segment countermeasure activity.

Product

Completion of active shoreline countermeasures under the jurisdiction of the Federal Government is a decision of the OSC. Support of the OSC requires recommendations on shoreline countermeasures, and also recommendations on when to terminate response. The process of evaluating the results of countermeasures and the recommendation to terminate response activities requires a give and take of members with many different responsibilities and roles. A goal of the Technical Assessment Group is to determine if the continued use of a particular countermeasure will result in more damage to the environment than would occur as a result of terminating any active response measures.

- This report of the recommendations and countermeasures approved for use should be copied to each team member and collected for inclusion in the final OSC report as required.

2 Shoreline Types and Sensitive Resources

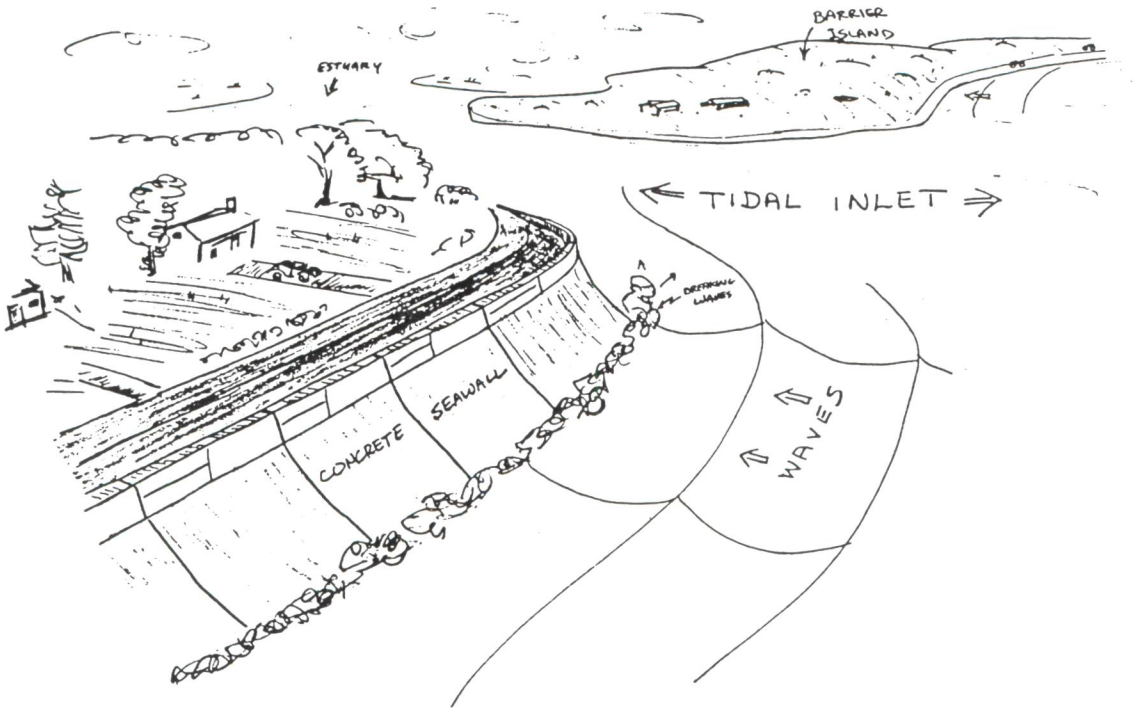
The type of shoreline, degree of exposure to waves and currents, and associated biological sensitivity are the main criteria for selecting appropriate treatment techniques. Prediction of the behavior and persistence of oil on intertidal habitats is based on an understanding of the coastal environment, not just the substrate type and grain size. The vulnerability of a particular intertidal habitat is an integration of the:

1. Shoreline type (substrate, grain size, tidal elevation, origin)
2. Exposure to wave and tidal energy
3. Biological productivity and sensitivity
4. Extent of cleanup

All of these factors are used to determine the relative sensitivity of shorelines. Key to the sensitivity ranking is an understanding of the relationships between: physical processes, substrate, shoreline type, product type, sediment transport, and product fate and effect. Thus, the intensity of energy expended upon a shoreline by wave action, tidal currents, and river currents directly affects the persistence of stranded oil. The need for shoreline cleanup activities is determined, in part, by the lack or slowness of natural processes in removal of oil stranded on the shoreline.

These concepts were used in the development of the Environmental Sensitivity Index (ESI), which ranks shoreline environments as to their relative sensitivity to oil spills, potential biological injury, and ease of cleanup. ESI maps have been prepared for most areas of the coastline of the U.S. Generally speaking, areas exposed to high levels of physical energy, such as wave action and tidal currents, and low biological activity rank low on the scale, while sheltered areas with associated high biological activity have the highest ranking. The shoreline types used in this manual are the rankings, on a scale of 1 to 10, used on the ESI maps prepared for Maryland (Rooney-Char et al., 1983a), Virginia (Rooney-Char et al., 1983b), and North Carolina (Rooney-Char et al., 1983c). Each of these atlases has a

1 Seawalls and Piers



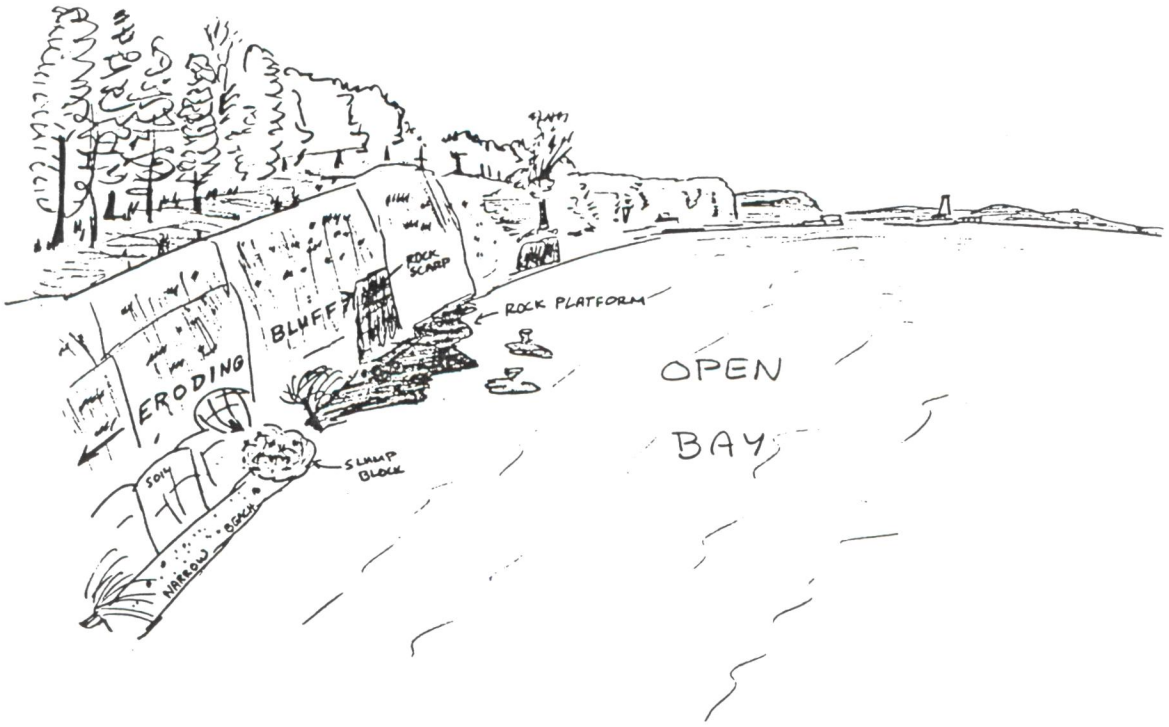
Description

- Seawalls and piers are particularly common in developed areas to provide protection to residential and industrial developments.
- They are ommon along inlets, urbanized areas, and developed beach-front sites.
- They are composed of concrete and stone, wooden or metal bulkheads, and wooden pilings.
- Organisms, such as barnacles, shellfish, and algae may be common on pilings.
- Biota on concrete structures along the upper intertidal or supratidal zones is sparse.

Predicted Oil Impact

- Oil would percolate between joints of the structures.
- Oil would coat the intertidal areas of solid structures.
- Biota would be damaged or killed under heavy accumulations.

2 Eroding Bluffs



Description

- Eroding bluffs are very uncommon in the area.
- They are found in scattered locations within Chesapeake Bay and along eroding river banks.
- They are composed of mixed grain sizes, from silt to gravel, although sand is the dominant grain size.
- Biological activity is characterized as low.

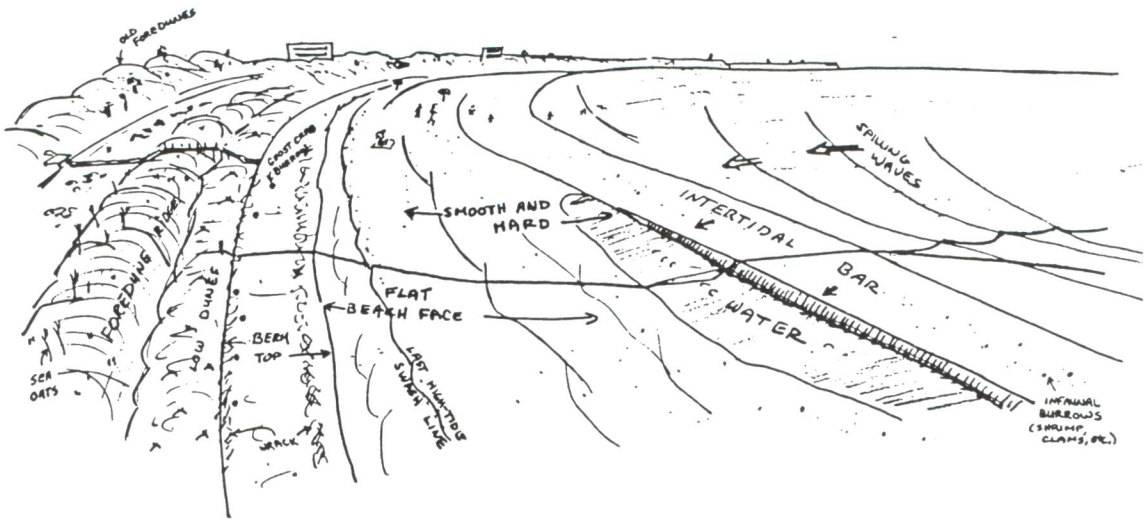
Predicted Oil Impact

- Oil would form a band along the high-tide line.
- Oil can penetrate and persist in the intertidal sediments, if sandy.
- Oil persistence is limited to days or weeks due to wave activity.

Recommended Response Activity

- In most areas, cleanup is not necessary due to the short residence time of the oil.

3 Fine Sand Beaches



Description

- These beaches are generally flat, wide, and hard-packed.
- They are ommonly backed by dunes or seawalls along exposed outer coasts.
- Along sheltered bays, they are narrower and often fronted by tidal flats.
- Upper beach fauna are scarce.

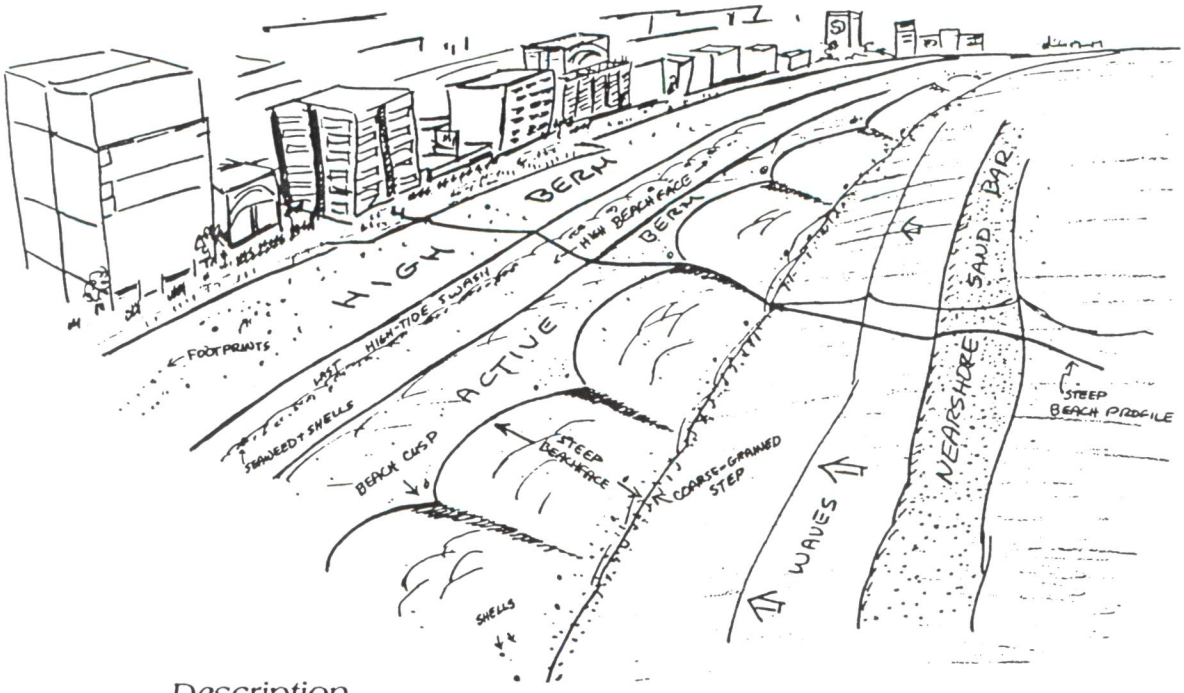
Predicted Oil Impact

- Light oil accumulations will be deposited as oily swashes or bands along the upper intertidal zones.
- Heavy oil accumulations will cover the entire beach surface, although oil will be lifted off the lower beach with the rising tide.
- Maximum penetration of oil into fine-grained sand will be 10 cm.
- Burial of oiled layers by clean sand within the first few weeks will be less than 30 cm along the upper beachface.
- Organisms living in the beach sands may be killed either by smothering or by lethal concentrations in the interstitial water.
- Shorebirds may be killed if oiled, though they may shift to clean sites.

Recommended Response Activity

- They are among the easiest beach types to clean.

4a Coarse Sand Beaches (Including Gravel)



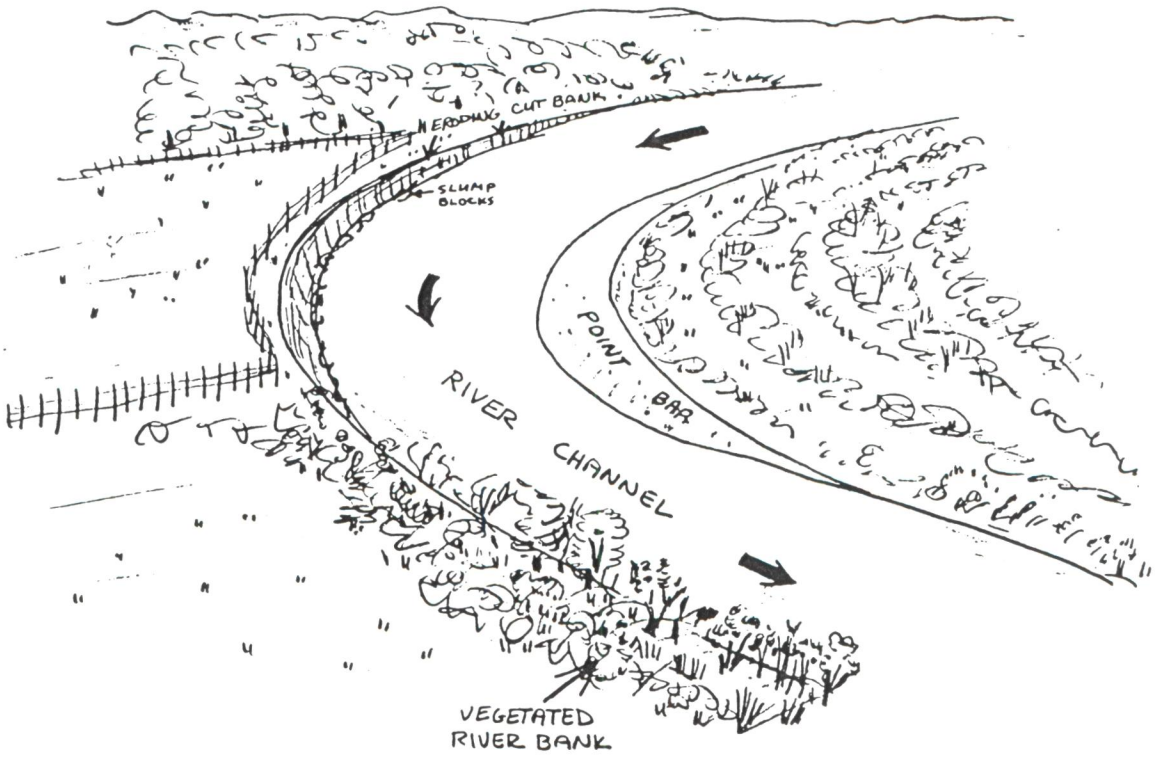
Description

- These beaches are moderate-to-steep, of variable width, and have soft sediments.
- Thet are commonly backed by dunes or seawalls along exposed outer coasts.
- They generally contain low species density and diversity.

Predicted Oil Impact

- Light oil will be deposited primarily as a band along the high-tide line.
- Under very heavy accumulations oil may spread across the entire beachface, though the oil will be lifted off the lower beach with the rising tide.
- Penetration of oil into coarse-grained sand can reach 25 cm.
- Burial of layers by clean sand can be rapid, and up to 60 cm or more.
- Burial over one meter possible if the oil is deposited at the start of an accretionary period.
- Biological impacts include temporary declines in infaunal populations which can also affect feeding shorebirds.

4b Vegetated River Bank



Description

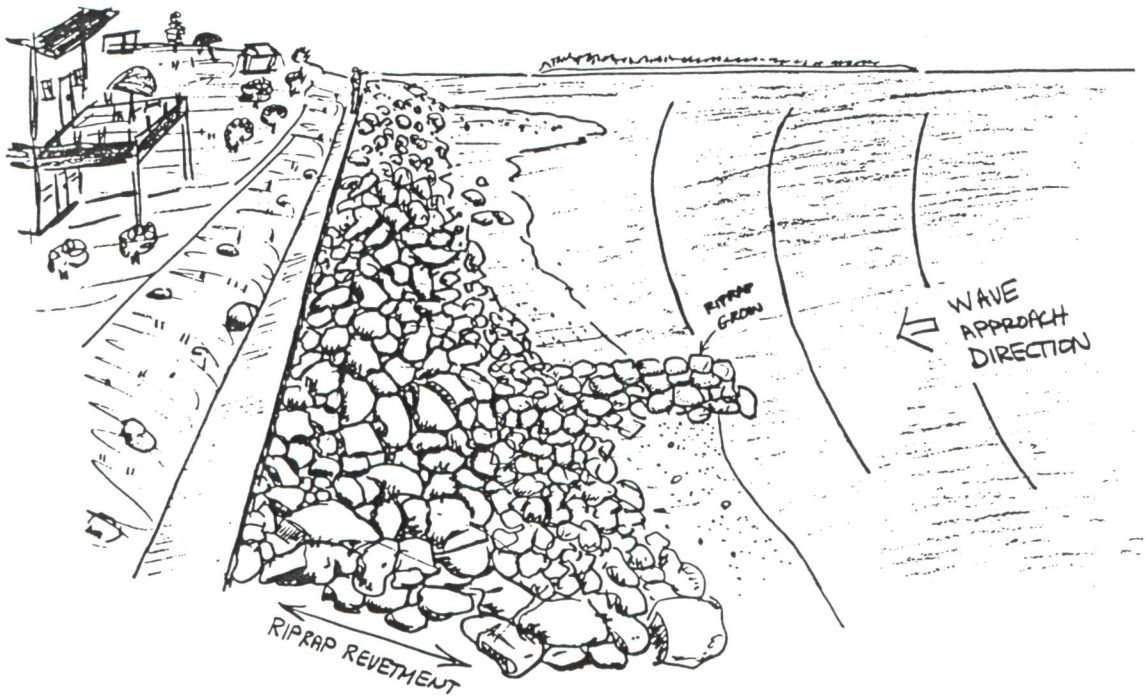
- These areas are composed of low banks with grasses (subject to flooding) or steeper banks with trees going to the water's edge.
- They are found in fresh or brackish water localities.
- They are composed of a variety of plant species.

Predicted Oil Impact

- Light oil concentrations will coat the outer fringes of the area.
- Heavy oil concentrations will penetrate into the area and heavily coat the plant and ground surfaces.
- Biological impact may be severe if oil concentrations are heavy.
- Oil persistence may be several months if not cleaned.
- During winter, shore-fast ice could prevent or limit oil impact.
- Odor and taste of fresh water supplies could be impacted by trace contamination.

5 Rank not used in this area

6 Riprap Structures



Description

- Riprap structures are composed of cobble to boulder-sized rocks; they are placed for shoreline protection and inlet stabilization.
- Organism and plant life on the riprap may be plentiful and varied.

Predicted Oil Impact

- On riprap structures, deep penetration of oil between the boulders is likely.
- If oil is left uncleaned it, may become asphaltized.
- Resident fauna and flora may be killed by the oil.

Recommended Response Activity

- All oiled debris should be removed
- Use sorbents to remove pooled oil in crevises.
- It may be necessary to remove heavily oiled riprap and replace it with clean material to prevent chronic sheening.

Recommended Response Activity

- Currents and waves can be very effective in natural removal of the oil.
- Cleanup is very difficult (and possible only during low tides).
- The use of heavy machinery should be restricted to prevent mixing of oil into the sediments.
- On sand flats, oil will be removed naturally from the flat and deposited on the adjacent beaches where cleanup is now more feasible.

Recommended Response Activity

- This is a high-priority area necessitating the use of spill protection devices to limit oil spill impact; deflection or sorbent booms and open water skimmers should be used.
- Cleanup of the flat surface is very difficult because of the soft substrate and many methods may be restricted.
- Manual operations and deployment of sorbents from shallow-draft boats may be helpful.

ESI NO.9
Freshwater Swamps

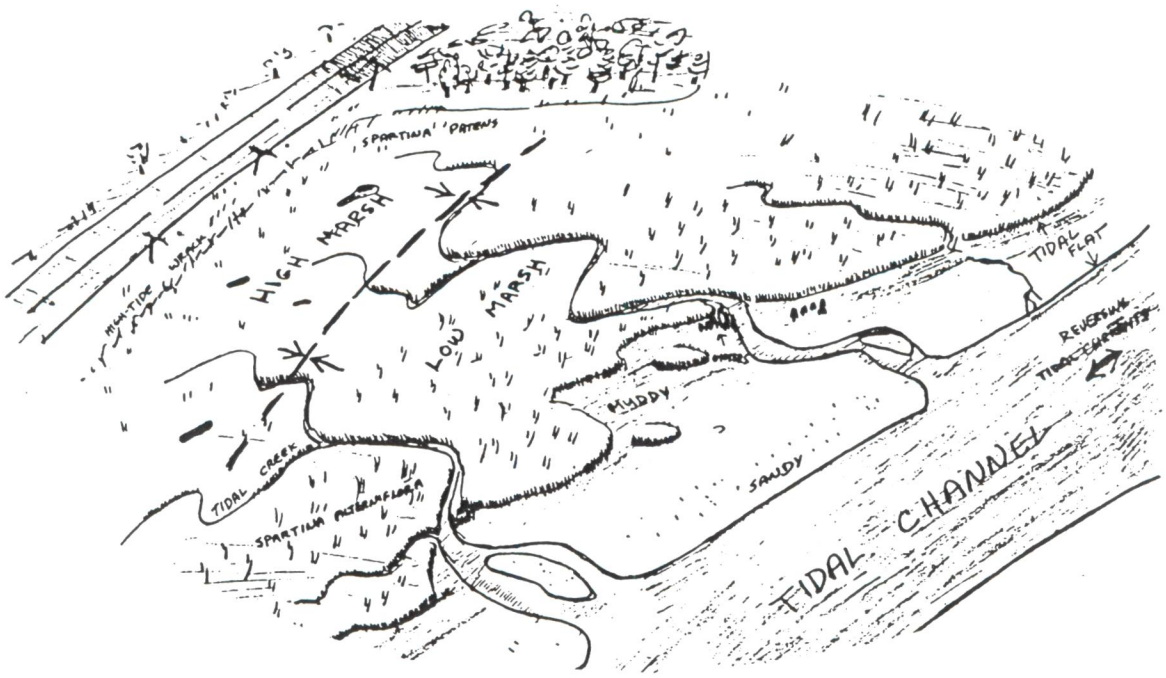
Predicted Oil Impact (cont.)

- The degree of vegetation is a function of tidal range and local topography.
- The season of oiling is important—dormant vegetation is least sensitive to oil; blooming and seeding plants are most sensitive.
- Resident biota are likely to be heavily impacted, particularly reptiles, amphibians, and crustaceans, with high mortality predicted.
- Odor and taste of fresh water supplies could be impacted by trace contamination.

Recommended Response Activity

- These are high-priority areas necessitating the use of spill protection devices to limit oil spill impact (deflection or sorbent booms and skimmers).

10 Fringing and Extensive Salt Marshes



Description

- Intertidal wetlands containing emergent, herbaceous vegetation.
- Width of the marsh can vary widely, from a narrow fringe to extensive.
- Relatively sheltered from waves and strong tidal currents.
- Resident flora and fauna are abundant and consist of numerous species.
- Provide a nursery ground for numerous fish species.
- Bird life is seasonally abundant.

Predicted Oil Impact

- Oil adheres readily to marsh vegetation.
- The band of coating will vary widely, depending upon the tidal stage at the time oil slicks are in the vegetation. There may be multiple bands.
- Large slicks will persist through multiple tidal cycles and coat the entire stem from the high-tide line to the base.

Special Considerations

The above shoreline types may also have associated sensitive biological resources and human-use areas, which include:

Subtidal Habitats

- Submerged aquatic vegetation

Birds

- Rookeries and nesting sites
- Waterfowl overwintering concentration areas
- High concentration migration stopovers
- High concentration resident bird colonies

Marine Mammals

- Migration corridors
- Population concentration areas

Terrestrial Mammals

- Concentration areas

Fish and Shellfish

- Anadromous fish spawning streams
- Estuarine areas which are important fish nursery areas
- Special concentration areas for estuarine and demersal fish
- Shellfish seed beds, leased beds, high concentration areas
- Crab, shrimp, and lobster nursery areas

Reptiles

- Marine turtle nesting beaches

Recreation

- High-use recreational beaches
- Marinas and boat ramps
- High-use boating, fishing, and diving areas

Management Areas

- Nature preserves and reserves
- Privately developed lands/facilities (Nature Conservancy Areas)

3 Shoreline Mapping and Prioritization

Guidelines for Shoreline Surveys

At most spills, a repetitive, detailed, and systematic survey of the extent and degree of shoreline contamination is needed for:

1. Assessment of the need for shoreline cleanup
2. Selection of the most appropriate cleanup method
3. Determination of priorities for shoreline cleanup
4. Documentation of the spatial oil distribution over time
5. Internally consistent historical record of stranded oil distribution for use by other scientific surveys of intertidal and subtidal impacts

Though general approvals for use of shoreline cleanup methods are to be developed during planning stages, site-specific cleanup recommendations must be based on field data on the shoreline types and type and degree of shoreline contamination. Thus, shoreline surveys become a very important component of the decision-making process, and they must be conducted in a systematic manner. Also, repeated surveys are needed to monitor the effectiveness and effects of on-going treatment methods (any migration of beached oil, as well as natural recovery), so that the need for additional treatment or constraints can be evaluated.

Several methods of data collection can be used to obtain information on shoreline character and degree of oil contamination. For example, aerial surveys provide reconnaissance-level information that is necessary for broad scale evaluations, definition of the impacted area, and general characterization of the oiling conditions. During aerial surveys, observers should note presence of resources at risk that need immediate protection, recommendations for boom deployment sites, access points, or restrictions, etc.

In addition to the core scientific group, the team also usually has representatives of: (a) operations group of the party responsible for cleanup; (b) the State government; (c) the Federal Government; and (d) the land owner or manager. At smaller spills or under emergency conditions, team members may have to assume more than one role.

Selecting and Naming Segments

The general approach is to divide the impacted area into segments, which are sections of the oiled shoreline for which detailed observations are recorded. The size of segments depends on the variabilities in degree of oiling and shoreline type. Boundaries of the segments should be defined where the shoreline geomorphology or degree of oiling changes significantly. However, it should be noted that new forms are completed for each segment, so the interval should not be so small that the number of forms required becomes unmanageable for the size of the spill. Segment lengths up to several kilometers would be acceptable for large spills, where smaller spills may have lengths in the hundreds of meters.

Numbering of the segments in a logical order helps location recognition. Usually an alpha-numeric code is employed, with two-letter abbreviations for the local area (e.g., CF for segments located along the Cape Fear River and BH for those on Bald Head Island), and numbers for each segment in the order it was surveyed. Thus, if Bald Head Island was divided into four segments, they would be designated as BH-1 through BH-4. The boundaries of the segments would be delineated on detailed maps.

The Shoreline Survey Evaluation Forms

For each segment, the Shoreline Survey Evaluation Form should be completed. Two versions of a Shoreline Survey Evaluation Form have been included in this manual. This section briefly outlines the methods to be used to complete the long form.

The Shoreline Terminology/Codes sheet lists the common terms and abbreviations to be used to describe the oil, sediments, and other features on the forms and sketch maps. The blocks on the Shoreline Survey Evaluation Form, where the codes are used, are indicated on the sheet. One member of the team, usually the OG, should be responsible for completing the forms, although all members collect the field data. The segment is walked and observations on the

Abbreviated Shoreline Surveys

Comprehensive surveys, as outlined above, are not always appropriate for smaller spills, or those that are relatively simple in oiling conditions. Yet, there is still the need for systematic observations and documentation of shoreline oiling conditions and cleanup progress. An abbreviated shoreline survey at smaller or less complicated spills would consist of:

- Trained team(s) with members from State and Federal response agencies, the cleanup contractor, and responsible party to document shoreline oiling conditions.
- Consistent terminology for description of oiling conditions and of shoreline features.
- Segmentation of the oiled areas into sections by shoreline type, degree of oiling, etc., and for which specific cleanup recommendations can be made.
- Field sketches to identify the area surveyed, record oil observations, identify sensitive areas to avoid, and utilize as the basis for a work plan by cleanup crews.
- Simplified forms for recording observations, making recommendations for cleanup, listing segment-specific restrictions, and generating summary statistics on shoreline oiling conditions. The forms would also document team composition, samples, photographs, etc., for each segment.

The Shoreline Survey Evaluation Short Form was developed to meet the documentation requirements at smaller spills. The form contains space for recording measurements of the length and degree of shoreline contamination, but allows for textual descriptions of the oiling conditions. It is important that the standard terms be used in these descriptions and that specific features be shown on the field sketch. The Short Form also includes space for recording segment-specific considerations for cleanup operations. This section would include information on the location of areas that should be avoided or that require special care or restricted activities by cleanup crews. For example, the location of sensitive wildlife such as eagle nests would be noted in this section. Sites to be avoided, such as archeological sites or private property, would be delineated. Photographs and samples taken at the site would be recorded in the section for Other Comments.

Shoreline Oil Terminology/Codes 11/5/92

Shoreline Slope (Enter in Block 3)

Low	Less than 30 degrees
Medium	Between 31 and 60 degrees
High	Between 61 and 90 degrees
Vertical	Vertical or near vertical

Oil Category Width (Enter in Block 4)
(To be determined for each segment, depending on width of the intertidal zone)

W	Wide	> 6 m wide
M	Medium	> 3 m to ≤ 6 m
N	Narrow	> 0.5 m to ≤ 3 m
V	Very Narrow	≤ 0.5 m

Oil Distribution (Enter in Block 5)

C	Continuous	91 - 100%
B	Broken	51 - 90%
P	Patchy	11 - 50%
S	Sporadic	1 - 10%
T	Trace	<1%

Surface Oiling Descriptors - Thickness (Enter in Block 5)

PO	Pooled Oil (fresh oil or mousse > 1 cm thick)
CV	Cover (oil or mousse from >0.1 cm to <1 cm on any surface)
CT	Coat (visible oil <0.1 cm, which can be scrapped off with fingernail)
ST	Stain (visible oil, which cannot be scrapped off with fingernail)
FL	Film (transparent or iridescent sheen or oily film)

Surface Oiling Descriptors - Type (Enter in Block 5)

FR	Fresh Oil (unweathered, liquid oil)
MS	Mousse (emulsified oil occurring over broad areas)
TB	Tarballs (discrete accumulations of oil <10 cm in diameter)
PT	Patties (discrete accumulations of oil >10 cm in diameter)
TC	Tar (highly weathered oil, of tarry, nearly solid consistency)
SR	Surface Oil Residue (non-cohesive, heavily oiled surface sediments, characterized as soft, incipient asphalt pavements)
AP	Asphalt Pavements (cohesive, heavily oiled surface sediments)
NO	No Oil
DB	Debris; logs, vegetation, rubbish, garbage, response items such as booms, etc.

SHORELINE SURVEY EVALUATION FORM

Page __ of __

1 GEN			
Segment Name: _____	Survey Date: _____	Survey Time: _____ to _____ (use military time)
Segment ID: _____		
Surveyed From: Foot / Boat / Helicopter	Weather: Sun / Clouds / Fog / Rain / Snow	

2 TEAM			
Team No.		Operations:	
OG:		State:	for:
ECO:		Federal:	for:
ARCH:		Land Manager:	for:

3 SHORE			
Overall Classification for UITZ–select one		Sediment Beach:	Sediment Flat:
Bedrock: Cliff ___ Platform ___		Boulder-Cobble __ Sand __	Boulder-Cobble __ Sand __
Manmade: Permeable ___ Impermeable ___		Pebble-Cobble __	Pebble-Cobble __
Marsh/Wetlands		Sand-Gravel __	Sand-Gravel __
Secondary Shore Type:		Backshore Type:	

4 LAND		
Geomorphology		
Slope: Low ___% Med. ___% High ___% Vert. __		Wave Exposure: Low / Medium / High
Estimated Segment Length: m		Total Estimated Length Surveyed:
Access Restrictions:		

5 OIL			
Oil Category Width:		Total Pavement: _____ sq.m by _____ cm	
Wide ____ m	Very Narrow _____ m	Patties/Tarballs _____ bags	Oiled Debris? Yes/No
Medium ____ m	No Oil _____ m	Debris/Amount: Logs _____	Vegetation _____
Narrow ____ m	Unsurveyed _____ m	Trash _____	Other _____

6 SURFACE OIL

SURFACE OIL LOC	AREA LENGTH m	AREA WIDTH m	ZONE SU	ZONE UI	ZONE MI	ZONE LI	DIST	THICKNESS RO	THICKNESS CV	THICKNESS CT	THICKNESS ST	THICKNESS FL	TYPE FR	TYPE MS	TYPE TB	TYPE PT	TYPE TC	TYPE SR	TYPE AP	TYPE ND	SHORELINE SEDIMENT TYPE

Distribution (DIST): C = 100-91%; B = 90-51%; P = 50-11%; S = 10-1%; T = <1% Photo Roll # _____ Frames _____

7 SUBSURFACE

SUBSURFACE LOC	TRENCHES SU	TRENCHES UI	TRENCHES MI	TRENCHES LI	TRENCH DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER OP	OP PP	OR	OF	TR	ND	WATER TABLE cm	SHEEN COLOR	SURFACE-SUBSURFACE SEDIMENTS	CLEAN BELOW Y/N

Sheen Color: B = Brown R = Rainbow S = Silver N = None

8 COMMENTS

SKETCH MAP

2/9/91

Segment Name LATOUCHE ISLAND, AK.
Segment No. N-15
Date 25 JUNE 1990
Names MOH/JM/DS/DN

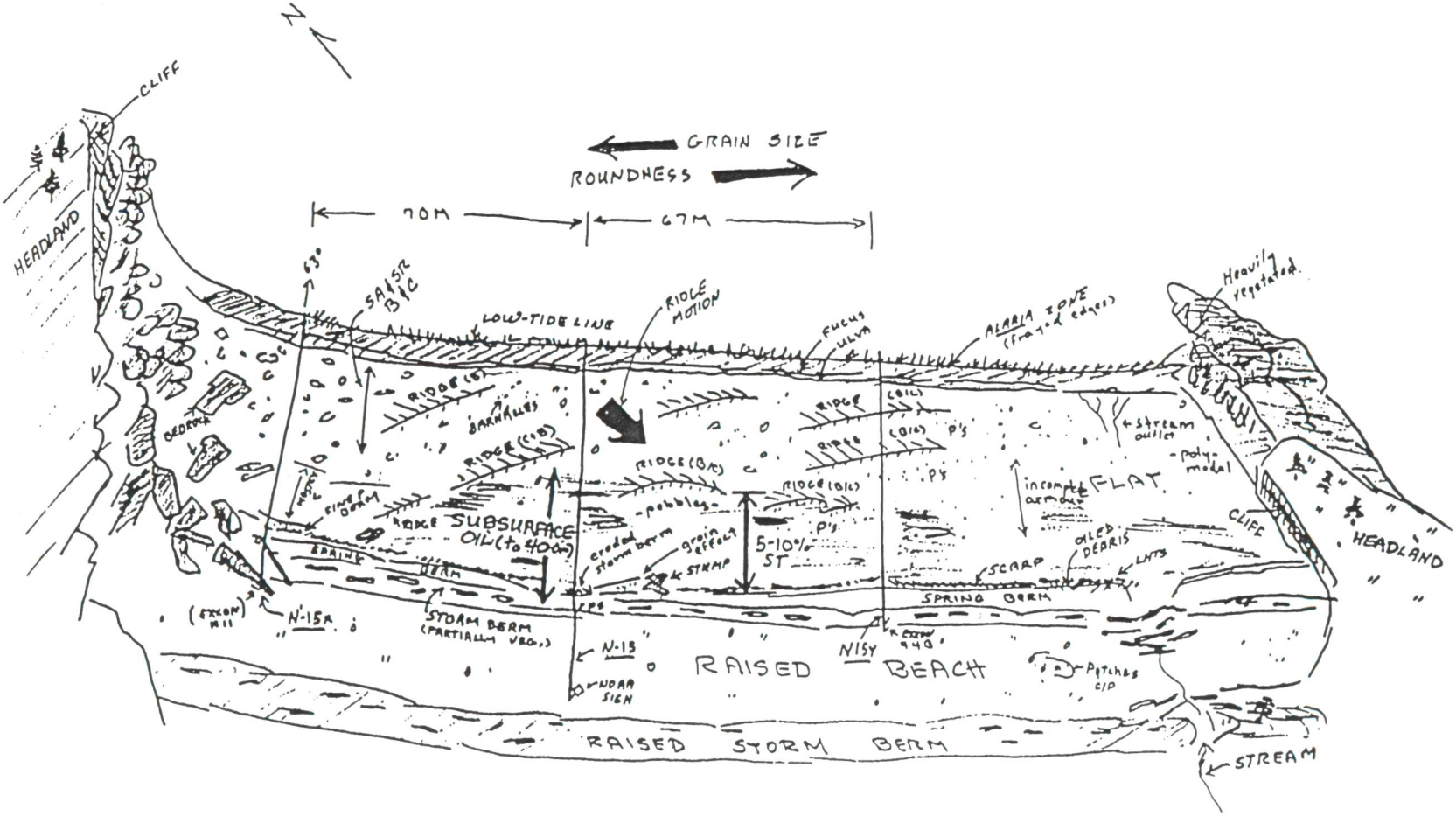
Checklist

- ✓ North Arrow
- ✓ Scale
- ✓ Oil Distribution
- ✓ High Tide Line
- ✓ Low Tide Line
- ✓ Substrate Types
- X Trench Locations

Legend

1△
Trench Number.
No Subsurface Oil

2▲
Trench Number.
Subsurface Oil



resources. Extremely sensitive areas are limited to manual cleanup methods. It is important to note that the primary goal of countermeasure implementation is the removal of oil from the shoreline with no further injury or destruction to the environment. The three categories of guidance used in the matrices are defined as follows:

R	Recommended	Method which best achieves the goal of minimizing destruction or injury to the environment
C	Conditional	Viable and possibly useful but may result in limited adverse effects to environment
	Shaded	Do not use

Shoreline Countermeasure Matrix

Light Oils (Diesel, No. 2 Fuel Oils, Light Crudes)

- Moderately volatile; will leave residue (up to 1/3 of spilled amount)
- Moderate concentrations of toxic (soluble) compounds
- Will "oil" intertidal resources with long-term contamination potential
- Has potential for subtidal impacts (dissolution, mixing, sorbtion onto suspended sediments)
- No dispersion necessary
- Cleanup can be very effective

SHORELINE TYPE CODES

1 - Seawalls, piers	6 - Riprap
2 - Eroding bluffs	7 - Exposed tidal flats
3 - Fine sand beach	8 - Sheltered tidal flats
4A- Coarse sand beach (including gravel)	9 - Freshwater marshes
4B - Vegetated river bank	10- Fringing and extensive salt marshes

COUNTERMEASURE	SHORELINE TYPES									
	1	2	3	4A	4B	6	7	8	9	10
1) No Action	R	R	R	R	C	C	R	R	R	R
2) Manual Removal		C	C	C	C	C	C	C	C	C
3) Passive Collection (Sorbents)	R	C	R	R	C	C	C	C	C	C
4) Debris Removal										
5) Trenching			C	C						
6) Sediment Removal			C	C						
7) Cold Water Flooding (Deluge)	C		C	C	C				C	C
8) Cold Water Washing										
a) Low Pressure (< 50 psi)	C	C		C	C	C	C		C	C
b) High Pressure (< 100 psi)						C				
9) Warm Water Washing/Mod.-High Pressure	C	C		C	C	C				
10) Hot Water/High Pressure Washing										
11) Slurry Sand Blasting										
12) Vacuum	C	C	C	C	C	C	C	C	C	C
13) Excavation, Cleansing, and Replacement										
14) Cutting Vegetation *										
15) Chemical Treatment †										
a) Oil Stabilization with Elastomizers										
b) Protection of Beaches										
c) Cleaning of Beaches										
16) *In situ* Burning †										
17) Nutrient Enhancement †			C	C			C	C	C	C
18) Microbial Addition †			C	C			C	C	C	C
19) Sediment Reworking †			C	C						

* Cutting will depend upon time of year. Consider only if reoiling of birds possible.

† Requires RRT approval

R - Recommended - may be preferred alternative

Do Not Use

C - Conditional

This countermeasure advisability matrix is only a general guide for removal of oil from shoreline substrates. It must be used in conjunction with the entire Shoreline Countermeasures Manual plus field observations and scientific advice. The countermeasures listed are not necessarily the best under all circumstances, and any listed technique may need to be used in conjunction with other techniques (including ones not listed herein). The Federal On-Scene Coordinator (FOSC) or the state OSC operating with the FOSC's authorization has the responsibility for and authority to determine which countermeasure(s) are appropriate for the various situations encountered. Selection of countermeasures is based on the degree of oil contamination, the shoreline type, and the presence of sensitive resources.

Shoreline Countermeasure Matrix

Heavy Oils (Heavy Crude Oils, No. 6 fuel, Bunker C)

* Heavy oils with little or no evaporation or dissolution
* Water-soluble fraction likely to be <10 ppm
* Heavy contamination of intertidal areas likely
* Severe impacts to waterfowl and fur-bearing mammals (coating and ingestion)
* Long-term contamination of sediments possible
* Weathers very slowly
* Dispersion seldom effective
* Shoreline cleanup difficult under all conditions

SHORELINE TYPE CODES

1 - Seawalls, piers	6 - Riprap
2 - Eroding bluffs	7 - Exposed tidal flats
3 - Fine sand beach	8 - Sheltered tidal flats
4A - Coarse sand beach (including gravel)	9 - Freshwater marshes
4B - Vegetated river bank	10- Fringing and extensive salt marshes

COUNTERMEASURE	SHORELINE TYPES									
	1	2	3	4A	4B	6	7	8	9	10
1) No Action	C	C	C	C		C	C	C	C	C
2) Manual Removal		C	R	R	C	C	C	C	C	C
3) Passive collection (sorbents)	R	R	R	R	C	C	C	C	R	R
4) Debris Removal			C	C	C				C	C
5) Trenching				C						
6) Sediment Removal			C	C		C				
7) Cold Water Flooding (deluge)		C	C	C	C		C	C	C	C
8) Cold Water Washing										
a) Low Pressure (< 50 psi)	C	C	C	C	C	C	C		C	C
b) High Pressure (< 100 psi)	C			C		C				
9) Warm Water Washing/Mod.-High Pressure	C	C	C	C	C	C				
10) Hot Water/High Pressure Washing	C					C				
11) Slurry Sand Blasting	C					C				
12) Vacuum	C	C	C	C	C	C	C	C	C	C
13) Excavation, Cleansing, and Replacement			C	C		C				
14) Cutting Vegetation *					C				C	C
15) Chemical Treatment †										
a) Oil Stabilization with Elastomizers			C	C			C	C		
b) Protection of Beaches	C	C	C	C	C	C			C	C
c) Cleaning of Beaches	C	C	C	C		C				
16) *In situ* Burning †	C	C	C	C	C	C			C	C
17) Nutrient Enhancement †			C	C	C		C	C	C	C
18) Microbial Addition †			C	C	C		C	C	C	C
19) Sediment Reworking †			C	C						

* Cutting will depend upon time of year. Consider only if reoiling of birds possible.

† Requires RRT approval

R - Recommended - may be preferred alternative

C - Conditional

Do Not Use

This countermeasure advisability matrix is only a general guide for removal of oil from shoreline substrates. It must be used in conjunction with the entire Shoreline Countermeasures Manual plus field observations and scientific advice. The countermeasures listed are not necessarily the best under all circumstances, and any listed technique may need to be used in conjunction with other techniques (including ones not listed herein). The Federal On-Scene Coordinator (FOSC) or the state OSC operating with the FOSC's authorization has the responsibility for and authority to determine which countermeasure(s) are appropriate for the various situations encountered. Selection of countermeasures is based on the degree of oil contamination, the shoreline type, and the presence of sensitive resources.

1. No Action

Objective

No attempt to remove any stranded oil, to minimize impacts to the environment or because there is no proven effective method for cleanup.

Description

No action is taken. However, the OSC continues to monitor the incident.

Applicable Shoreline Types

Can be used on all shoreline types.

When To Use

If the shoreline is extremely remote or inaccessible, when natural removal rates are very fast, or cleanup actions will do more harm than leaving the oil to be removed naturally.

Biological Constraints

This method may be inappropriate for areas where high numbers of mobile animals (birds, marine mammals, crabs, etc.) use the intertidal zone or adjacent nearshore waters.

Environmental Effects

Intertidal — The same as the oil.

Subtidal — The same as the oil.

taken to remove the sediments only to the depth of oil penetration, which can be difficult with heavy equipment.

Biological Constraints

Mechanized equipment may be restricted when sensitive habitats are adjacent (e.g., stream mouths, tidal flats, marshes, or dunes).

Environmental Effects

Intertidal — The equipment is heavy, and required support personnel is extensive. May be detrimental if excessive sediments are removed without replacement. All organisms resident in the beach will be affected, though the need for removal of the oil may be determined to be the best overall alternative.

Subtidal — Release of oil and fine-grained oily sediments to the water during sediment removal activities and tidal flushing of the excavated beach surface.

7. Cold Water Flooding (Deluge)

Objective

To wash surface oil and oil from crevices and rock interstices to water's edge for collection.

Description

A large diameter header pipe is placed parallel to the shoreline above the oiled area. A flexible perforated header hose is used during deluge of intertidal shorelines to better conform to their profiles. Ambient seawater is pumped through holes in the header pipes and flows down the beach face to the water. On porous beaches, water flows through the substrate pushing loose oil ahead of it (or floats oil to the water's surface) then transports the oil down slope for pickup. Flow is maintained as long as necessary to remove the majority of free oil. Oil is trapped by booms and picked up with a skimmer or other suitable equipment.

Applicable Shoreline Types

Beaches with sediments coarser than sand, and gently sloping rocky shorelines. Generally not applicable to mud, sand, vegetated, or steep rocky shorelines.

marshes, use only at high tide and either from boats or the high-tide line to prevent foot traffic in vegetation.

Environmental Effects

Intertidal — If containment methods are not sufficient, contamination may be flushed into lower intertidal zone.

Subtidal — Oiled sediment may be transported to shallow subtidal areas, contaminating them and burying benthic organisms.

8b. Cold Water/High Pressure Washing

Objective

Remove oil that has adhered to hard substrates or man-made structures.

Description

Similar to low pressure washing except that water pressure is up to 100 psi. High pressure spray will better remove oil that has adhered to rocks. Because water volumes are typically low, may require placement of sorbents directly below treatment areas.

Applicable Shoreline Types

Riprap and seawalls. Can be used to flush floating oil or loose oil out of tide pools and between crevices on riprap.

When To Use

When low pressure washing is not effective for removal of adhered oil, which must be removed due to continued release of oil. When directed water jet can remove oil from hard-to-reach sites. To remove oil from man-made structures for aesthetic reasons.

Biological Constraints

May need to restrict use of flushing to certain tidal elevations so that the oil/water effluent does not drain across sensitive low tide habitats.

Environmental Effects

Intertidal — Removes many organisms on the surface. May drive oil deeper into the substrate if water jet is improperly applied. If containment methods are not sufficient, contamination may be flushed into lower intertidal zone.

Subtidal — Oiled sediment may be transported to shallow subtidal areas, contaminating them and burying benthic organisms.

10. Hot Water/High Pressure Washing

Objective

Dislodge trapped and weathered oil from inaccessible locations and surfaces not amenable to mechanical removal.

Description

Water heaters mounted offshore on barges or small land-based units heat water to temperatures from 90°F up to 170°F, which is usually sprayed by hand with high pressure wands. Used without water flooding, this procedure requires immediate use of vacuum (vacuum trucks or super suckers) to remove the oil/water runoff. With a deluge system, the oil is flushed to the water surface for collection with skimmers or sorbents.

Applicable Shoreline Types

Gravel beaches, riprap, and seawalls that are heavily oiled.

When To Use

When the oil has weathered to the point that even warm water at high pressure is not effective for removal of adhered oil, which must be removed due to continued release of oil. To remove oil from man-made structures for aesthetic reasons.

Biological Constraints

Restrict use to certain tidal elevations so that the oil/water effluent does not drain across sensitive low tide habitats (damage can result from exposure to oil, oiled sediments, and hot water). Should be restricted near stream mouths, tide pool communities, etc. Released oil must be recovered to prevent further oiling of adjacent environments.

Environmental Effects

Intertidal — All attached organisms in the direct spray zone will be removed or killed, and significant mortality of the lower intertidal communities will result even when used properly. Where the intertidal community is rich, the tradeoff between damage to the intertidal community from the hot water washing versus potential damage from leaving the oil has to be weighed.

Subtidal — Oiled sediment may be transported to shallow subtidal areas, contaminating them and burying benthic organisms.

When to Use

When free, liquid oil is stranded on the shoreline (usually along the high-tide line) or trapped in vegetation which is readily accessible.

Biological Constraints

Special restrictions should be identified for areas where foot traffic and equipment operation should be limited, such as rich intertidal communities. Operations in wetlands are to be very closely monitored, with a site-specific list of restrictions.

Environmental Effects

Intertidal — Minimal impacts if used properly and minimal substrate is removed.

Subtidal — None.

When to Use

Applicable on beaches with large amounts of subsurface oil, where permanent removal of sediment is undesired and other cleanup techniques are likely to be ineffective.

Biological Constraints

Excavating equipment must not intrude upon sensitive habitats. Only the upper and supratidal areas should be considered. Generally restricted in spawning areas. There may be site-specific constraints limiting placement of temporary sediment storage piles. Replaced material must be free of oil and toxic substances. The washing must not change the grain size of the replaced material, either by removal of fines or excessive breakage of friable sediments.

Environmental Effects

Intertidal — All resident organisms will be affected, though the need for removal of the oil may be determined to be the best overall solution. Equipment can be heavy, large, and noisy, disrupting wildlife. Transportation to site may entail aircraft, land vehicles, or barges, which contribute to environmental disruption. There may be a period of beach instability as the replaced sediments are redistributed.

Subtidal — May release oil and fine-grained oily sediments into the water during excavation. This is a concern due to tidal flushing of beach sediments and exposed excavations.

14. Cutting Vegetation

Objective

Removal of oiled vegetation to prevent oiling of wildlife.

Description

Manual cutting of oiled vegetation using weed eater, and removal of cut vegetation with rakes. The cut vegetation is bagged immediately for disposal.

Applicable Shoreline Types

Marshes composed of emergent, herbaceous vegetation.

When to Use

When heavy concentrations of liquid oil are on the substrate and adjacent water body, and physical removal can not be completed prior to the next tide so that the oil is likely to move to a more sensitive shoreline type. Should be used in conjunction with booming or other physical containment.

Biological Constraints

Not suitable for vegetated or riprap shore types. Should be avoided when birds or other wildlife that may be more adversely impacted by the congealed oil can not be kept away from the treated shoreline. The congealed oil may stick to vegetation and wildlife, increasing physical damage to both. On riprap the congealed oil may remain in crevices where it may hamper recovery and prolong the release of sheens.

Environmental Effects

May enhance the smothering effect of oil on intertidal organisms. Thus, the treatment should be considered only for heavily oiled beaches where smothering effects are already maximal. The congealed oil may stick to vegetation and wildlife increasing physical damage, such as impaired flight in birds or impaired thermoregulation in mammals and birds whose feathers or fur become oiled.

15b. Chemical Protection of Beaches

Objective

Pretreat shoreline to prevent oil from adhering to the substrate.

Description

Certain types of water-based chemicals, some of which are similar in composition to dispersants, are applied to beaches in advance of the oil.

Applicable Shoreline Types

Coarse- and fine-grained sand beaches, seawalls and piers (particularly piers or waterfront facilities that are of historical significance), eroding bluffs, wave-cut platforms, and riprap.

When to Use

When oil is projected to impact an applicable shoreline, particularly those which have high recreational or aesthetic value.

Use may be restricted where suspended sediment concentrations are high, adjacent to wetlands and tidal flats, and near sensitive subtidal resources.

Environmental Effects

If more oil is dispersed into the water column, there could be more oil sorbed onto suspended sediments and transferred to subtidal habitats, particularly along sheltered shorelines. Intertidal habitats might survive better, if cooler water temperatures are possible.

16. In Situ Burning

Objective

Removal of oil from the shoreline by burning.

Description

Oil on the shoreline is burned, usually when it is on a combustible substrate such as vegetation, logs, and other debris. Oil can be burned off of nonflammable substrates with the aid of a burn promoter.

Applicable Shoreline Types

On any shoreline type except tidal flats.

When to Use

Early in the spill event, after ensuring that the product is ignitable.

Biological Constraints

Should only be considered for use in the upper intertidal or supratidal zones since destruction of plants and animals from heat and burn promoters will be extensive. This technique is subject to restrictions and permit requirements established by federal, state and local laws. It should not be used to burn PCB's, wastes containing more than 1,000 ppm of halogenated solvents, or other substances regulated by EPA.

Environmental Effects

Little is known about the relative effects of burning oiled wetlands compared to other techniques or natural recovery. Burning may cause significant air pollution, which must be considered when weighing the potential benefits and risks of the technique. The combustion products may travel great distances before deposition.

environment. About 99 percent of butoxyethanol, a toxic component of the Inipol formulation, (the fertilizer commonly used in Alaska) degraded to non-toxic compounds within 24 hours after Inipol treatments of cobble shorelines. Researchers also found no evidence that the nutrients released from the treated shorelines stimulated algal blooms.

18. Microbial Addition

Objective

To speed the rates of natural microbial degradation of oil by addition of nutrients **and** microbial products. Microbial biodegradation is the conversion by microorganisms of dissolved and dispersed hydrocarbons into oxidized products via various enzymatic reactions. Some hydrocarbons are converted to carbon dioxide and cell material, while others are partially oxidized and/or left untouched as a residue.

Description

Formulations containing hydrocarbon-degrading microbes and fertilizers are added to the oiled area. The argument is made that indigenous organisms will be killed by the oil, so new microbial species need to be added to begin the process of biodegradation.

Applicable Shoreline Types

Could be used on any shoreline type where safe access is allowed.

Biological Constraints

Not applicable in shallow water, restricted embayments where nutrient overloading may lead to eutrophication, or where toxicity of nutrients, particularly ammonia, is of concern. There must be no risk of oxygen depletion. Use is to be restricted adjacent to stream mouths, tide pool communities, etc. Bioassay test results should be carefully evaluated, as other chemicals in the formulation could be toxic to aquatic organisms.

Environmental Effects

Yet to be evaluated for full-scale field applications.

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Owens, E.H. and A.R. Teal. 1990. Shoreline cleanup following the *Exxon Valdez* oil spill–field data collection within the SCAT program. Proceedings of the 13th Arctic and Marine Oil Spill Program Technical Seminar, June 6-8, 1990, Edmonton, Canada, pp. 411-421.

Booms

Both containment and absorbent, are used for the collection, deflection, and containment of spreading oil. Containment booms are somewhat rigid structures extending both above and below the water acting as barriers to surface oil. Primary containment booms are usually deployed close to oiled shorelines to trap oil being flushed from beaches before it is collected. Secondary containment booms are deployed further out to trap oil which leaks past primary booms. Absorbent boom is used along the shore-water interface to collect oil dislodged during treatment operations. It is important that absorbent boom be changed once the sorbent capacity is reached. Great care should be taken to seal the shore ends of booms so that no oil can get past. This is particularly difficult at rocky shorelines, or areas strewn with boulders and cobbles. The use of absorbent pads or other materials, such as "pom pom", can be effective sealants.

Brackish

Intermediate in salinity (0.50 to 17.00 parts per thousand) between sea water and fresh water.

Clam shell

A mechanical device mounted at the end of a crane which picks up soil or mud with a pincer-like movement.

Coagulating agent

Chemical additives applied to oil to form a more cohesive mass.

Contact period

The time required to maximize the efficiency of the sorbent or chemical agent or the time before plant or animal damage occurs.

Dispersant

Chemical agent used to disperse and suspend oil in water leading to enhanced biodegradation.

Distillate

A refined hydrocarbon which is obtained by collection and condensation of a known vapor fraction of the crude oil.

Flash point

The lowest temperature at which vapors from a volatile liquid (e.g., oil) will ignite.

Flushing

Use of a water stream to make oil flow to a desired location or recovery device.

Fouling

Accumulation of oil or other materials, such as debris, that makes a device inoperative.

Free oil

See mobile oil.

Gelling agent

See coagulating agents.

Habitat

The chemical, physical, and biological setting in which a plant or animal lives.

Herding agent

Chemical agent which confines or controls the spread of a floating oil film.

Intertidal

The part of the shoreline that lies between high tide and low tide water levels.

Lagoon

A shallow, linear, and usually oblong water body, located parallel with and connected to a larger water body by one or more inlet channels.

Landfill

A dump that has progressive layers of waste matter and earth.

Marsh fringe

The edge of the marsh adjacent to the water.

Permeability

The degree to which fluids can flow through a substance. Measured in Darcys. Permeability is not equal to porosity. High porosity of a material does not insure high permeability. However, a substance cannot be permeable without having some degree of porosity.

Physiography

General term for the shape of the earth's surface.

Pooled oil

Oil thickness exceeds 1 cm. This need not be uniform.

Porosity

The volume of void spaces in a sediment mass, measured in percent.

Riprap

(a) A layer of large, durable fragments of broken rock, specially selected and graded. Thrown together irregularly or fitted together. Its purpose is to prevent erosion by waves or currents and thereby preserve the shape of a surface, slope, or underlying structure. It is used for irrigation channels, river-improvement works, spillways at dams, and revetments for shore protection. (b) The stone used for riprap.

Recontamination

Contamination by oil of an area that was previously cleaned.

Rhizome

A rootlike stem under or along the ground, ordinarily in a horizontal position, which usually sends out roots from its lower surface and leafy shoots from its upper surface.

Salt pan

A pool above high tide, "drained" only by evaporation so that salt is accumulated and concentrated.

Solvent

A chemical agent which will dissolve oil.

Specific gravity

The measure of the density of a substance such as oil or sea water, usually determined at 20°C, compared to the density of pure water at 4°C. Thus, specific gravity varies slightly with temperature.

Sorbent

All sorbent materials work on the same principles—oil adheres to the outside of the material or sorbs into the material by capillary action. There are three basic types of sorbent materials
mineral based, natural organic, and synthetic organic. Currently, only synthetic organic sorbents are being used in the field in the form of booms, pads, and mops. Peat is currently in the testing and demonstration phase.

Stain

Oil thickness is greater than 1 mm.

Substrate

The substance, base, or nutrient on which, or the medium in which, an organism lives and grows, or the surface to which a fixed organism is attached; e.g., soil, rocks, and water.

Substrate penetration

Vertical distance from surface to which oil has percolated into the substrate.

Subtidal

That part of the coastal zone which lies below the lowest low-tide level, so that it is always underwater.

Sump

A pit or reservoir that serves as a drain from which oil can be collected.

Supratidal

Above the normal high-tide line.

The second system, barge-mounted vacuum trucks, use high-suction pumps and a cylindrical chamber capable of sustaining very low internal pressure, i.e., minus 12 psi. Vacuum is created in the chamber, and a 3–4-inch diameter hose is usually placed slightly below the surface of a floating oil slick, allowing a mixture of water and oil to enter the collection chamber. The position the open end of the vacuum hose is critical. If it is placed too far down into the oil slick, recovered fluid will be mostly water; if not deep enough, air will be sucked into the system, and much of the vacuum will be lost. The primary advantages of the vacuum truck system are: it can recover fluid of nearly any viscosity; it has a rapid pickup rate of thick oil layers; and it can recover a wide variety of small debris. Primary disadvantages are its limited lift, no more than 20 to 30 feet, and the length of time required to reestablish a vacuum if air enters the hose. As with the other vacuum, this one also picks up a high water/oil ratio.

Weathering

Natural influences such as temperature, wind, and bacteria, that alter the physical and chemical properties of oil.

Weir

A vertical barrier placed just below the surface of the water so that a floating oil slick can flow over the top.

Wetlands (as defined by the Annotated Code of Maryland Title 9)

State wetlands: Lands below the mean high tide line affected by the regular rise of tide. Private wetlands: Lands bordering on state tidal wetlands, below the mean tide line subject to the effects of the regular rise and fall of tide. Lands able to support growth of wetland vegetation.

Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, and is at least periodically saturated with or covered by water (Cowardin et al., 1979).

Wrack

Accumulations of plant debris that is deposited at or above the high-tide line (e.g., *Spartina* or kelp debris).

Appendix A

Guidelines For Treatment Operations

General Guidelines

Ensure familiarity and compliance with approved treatment methods, approved shoreline segment work plans, advisories, and special instructions. Restrict all access to wetlands and tidal flats, except with special authorization.

Conditions to avoid

- Treatment techniques (such as high pressure and hot water) which dislodge intertidal vegetation and invertebrates, e.g., mussels, barnacles, snails
- Clearing marshes and vegetated shorelines (the presence of algae does not characterize a vegetated shoreline)

Actions to encourage

- Boom off mud/grass flat adjacent to treatment areas to prevent further contamination.
- Boom off tidal creeks to prevent further contamination.
- Minimize impact to uncontaminated lower intertidal zones, including:
  - landing crews during tides which cover the lower intertidal zone
  - avoid high/low pressure washing where possible
  - work heavily oiled upper beach zone when lower intertidal zones are covered by high tides
  - employ sorbents along riprap and below oiled upper beach to protect lower intertidal zone from oiling

Ensure that all signs of human activity are removed when cleanup is completed. Ensure that all trash and wastes are removed daily:

- Oil trapped in booms must be picked up before the next tide cycle
- All food and associated trash must be removed to minimize attracting wildlife into contaminated areas

Appendix B

Best Management Practices

Specialized Areas of Concern - National
(These examples are provided as guidelines)

Marine Mammal Notice

Collection of Eagle Feathers and Marine Mammal Parts

Protection of Cultural Resources

Cutting of Oiled Bull Kelp

Cutting of Oiled Fucus (Popweed)

Instruction for the Disposition of Dead and Live Wildlife

Collection of Eagle Feathers and Marine Mammal Parts

In response to inquires about collection of eagle feathers and marine mammal parts by personnel involved in cleanup activities during a spill, the laws and regulations dealing with the collection and possession of such materials is summarized below.

Collection of Eagle Feathers: The Eagle Act (Public Law 95-616, 92 Stat. 3114, 16 U.S. Code 668) prohibits the collection and possession of any eagle parts, including feathers.

Collection of Marine Mammal Parts: The Marine Mammal Protection Act of 1972 (Public Lay 92-522, 88 State. 1027, 95 Stat. 979, 16 USC 1372) generally prohibits the collection and possession of any marine mammal parts. Under 50 CFR 18.26, the collection of certain dead marine mammal parts is allowed, as follows:

a. Any bones, teeth or ivory of any (non-endangered) dead marine mammal may be collected from a beach or from land within 1/4 of a mile of the ocean. The term "ocean" includes bays and estuaries.
b. Marine mammal parts so collected may be retained if registered within 30 days with an agent of the National Marine Fisheries Service, or an agent of the U.S. Fish and Wildlife Service.
c. Registration shall include (1) the name of the owner, (2) a description of the article to be registered, and (3) the date and location of collection. Items so collected and registered must be retained in the ownership of the collector. The sale of such items is prohibited.

Cutting of oiled bull kelp (Nereocystis luetkeana) as a technique for releasing and recovering trapped oil

(Based on research by NOAA conducted during the *Tenyo Maru* oil spill, off the coast of Washington, 1991)

Although bull kelp is an annual, with much of a year's growth typically removed by seasonal storms, Dr. Sandra Lindstrom, a phycologist with the University of British Columbia, cautions that removal of the upper portion of the stipe removes the entire active reproductive area of the plant, which is located in the fronds. Bull kelp reproduces by the production of spore cases, which drop to the bottom and subsequently grow into the following season's plants. If cutting is to take place, it should be limited to the fronds, leaving a portion on the plant, which would permit it to nominally survive. Cutting the stipe effectively kills the plant.

Cutting kelp beds abruptly changes the light regime on the seafloor below. This may have implications in that growth of young kelp plants is light-mediated, and an increase in light reaching the bottom may result in earlier growth than would otherwise occur.

Secondary ecological impacts of kelp removal should be carefully considered before arriving at a decision about cutting the near-surface portions of plants. The canopy provided by the kelp stipes and blades represents important habitat for fish species such as greenlings and rockfishes (a study in California counted 23 species of fish in a bull kelp bed), and substrate for organisms that are important prey items for fish.

Should cutting take place, cutting the upper portion of the plants is preferable to removal of the entire plant, and cutting only the blades and leaving the stipe intact is preferable to removal of the gas-filled bulb. Decisions will necessarily balance removal of oil from the environment with direct impacts on the plants and alteration of significant nearshore habitat.

Commercial harvesting equipment similar to that routinely employed in California coastal waters is a possibility, but *Nereocystis* is substantially different in nature than *Macrocystis*. If they worked, such harvesting barges would cut through the stipe and kill the plant–and whether they would be capable of cutting the stipe is not known.

Cutting of Oiled Fucus (Popweed)

(Developed by NOAA in 1989 during the *Exxon Valdez* oil spill)

The cutting of heavily oiled fucus still attached to the substrate in the intertidal zone is sometimes suggested during shoreline cleanup efforts. At issue is the benefit derived from removing a source of contamination compared with the costs to intertidal systems from fucus removal. Fucus defines the mid-intertidal zone and provides shelter and attachment for other animals. The spores, primarily the very small plants, are a sources of food for other animals. The plants are prone to breaking loose in exposed settings and may end up on the beach or in the water. The average half-life of fucus plants is 6 months, with the large, older overstory plants being up to 5 years old (in Prince William Sound).

Fucus is a particularly hardy species with respect to oiling. Mortality may occur as a result of the oil preventing photosynthesis from occurring, but it is extremely difficult to determine if a plants is dead or alive by looking at it when oiled. Reproduction in fucus is through the release of spores from buoyant reproductive receptacles that look like small air sacs located on the tips of the plant. The presence of mucus coming out of these receptacles when exposed during low tide indicates that the plant is fertile. Recruitment comes primarily from spores released by plants located no more that 3 to 10 feet away and occurs quite readily as long as sufficient numbers of other fucus plants are in the area. In the absence of other fucus plants, drift spores do come along, but recruitment from this source is very haphazard and not at all guaranteed.

Cutting of oiled fucus still attached to the rock is generally not recommended. Flushing (cold water) and other cleanup techniques should be tried first. If it is deemed necessary to remove heavily oiled fucus to prevent redistribution to very sensitive resources, a sufficient number of mature plants should be left in the area to facilitate recruitment(in patches or fringe 3-10 feet apart). If this is not done, recruitment may not take place. It is not necessary to leave the holdfasts when cutting plants.

-species, age, and sex of collected animals
-condition of the animal

Do not attempt capture of live sea otters without prior authorization from the appropriate agency. Inexperienced people can cause otters additional injuries. In addition, otters may bite can cause infections. A bite from an otter may results in inflammation of the joints and inability to bend one's fingers. Live, oiled otters are to be reported to the designated agency contact for the spill.