

United States Coast Guard Marine Safety Unit Savannah



Area Contingency Plan

Note: This plan was published in February 2011 and may have been revised. For the most current version of the base plan, please visit <https://homeport.uscg.mil/savannah>.

9000 Appendices

9100 Emergency Notification

9110 Federal Agencies

Agency / Office	Phone
U.S. Coast Guard	
National Response Center (NRC)	(800) 424-8802
Fax	(202) 267-2165
Marine Safety Unit Savannah (24 hour)	(912) 652-4353
Fax	(912) 652-4180
National Strike Force Coordination Center	(919) 331-6000
Atlantic Strike Team	(609) 724-0008
Fax	(609) 724-0232
Gulf Strike Team	(205) 639-6601
Fax	(205) 639-6610
D7 Marine Safety Division	(305) 536-5651
D7 Marine Safety Division Beeper	(305) 795-5570
D7 Command Center (24HR)	(305) 536-5611
D7 Public Affairs	(305) 536-5641
COMDT Public Affairs (Contact through NRC)	(800) 424-8802
Marine Safety Center (24 hour)	(202) 267-2100
Not needed	
Air Station Savannah	(912) 652-4646
Sector Charleston	(843) 724-7616
Station St. Tybee	(912) 786-5440
Station Brunswick	(912) 267-7999
Other Federal Agencies	
FEMA (24hr)	(202) 566-1600
EPA	(202) 272-0167
Natural Resource Trustees	
National Park Service	(404) 507-5600
Department Of Interior, Atlanta, GA	(404) 331-4524
NOAA HAZMAT (Seattle WA)	(206) 526-6317
NOAA Scientific Support Coordinator (SSC)	(305) 530-7931
National Marine Fisheries – Endangered Species	(727) 403-2641
National Marine Fisheries – Essential Fish Habitat	(727) 824-5317
Environmental Protection Division	(404) 656-4863
U.S. Fish and Wildlife	(800) 344-9453
U.S. Fish & Wildlife Service Atlanta	(404) 763-7959
National Wildlife Refuge, Savannah	(912) 832-4608
National Wildlife Refuge, Harris Neck	(912) 832-4608

9120 State Agencies

State Response Agencies	
Georgia Environmental Protection Division	(404) 656-4863
Protection Commission (EPC) Air Quality	(912) 353-3225
Georgia Department of Natural Resources	(800) 241-4113

Environmental Resources Corp.	(904) 448-4066
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9130 Local Agencies

9130.1 Chatham County Notification List

Chatham Emergency Contacts	
Savannah Chatham Metropolitan Police	(912) 652-6500
Chatham County Emergency Management	(912) 201-4500
Chatham Chemical Team (HIT)	911
Savannah Fire Department	(912) 652-6525
Garden City Fire Department	(912) 966-7780

9130.2 Bryan County Notification List

Bryan County Emergency Contacts	
Bryan County Sheriff's Department	(912)-653-3800
Hazardous Chemical Team	911
EMS	(912) 858-2599

9130.3 Camden County Notification List

Camden County Emergency Contacts	
Camden County Emergency Services	(912)-729-3911
Hazardous Chemical Team	911
EMS	(912) 729-5602

9130.4 Effingham County Notification List

Effingham County Emergency Contacts	
Effingham County Sheriff	(912) 754-3449
Hazardous Chemical Team	911
EMS	(912) 754-2149

9130.5 Glynn County Notification List

Glynn County Emergency Contacts	
Brunswick Police Department	(912)
Glynn County Sheriff's Department	(912) 554-7600
Glynn County Emergency Management	(912) 267-5678
Hazardous Chemical Team	911
Glynn County Coalition	(912) 466-0934
EMS	(912) 267-5678

9130.6 McIntosh County Notification List

McIntosh County Emergency Contacts	
Hazardous Chemical Team	911
Hazard Reduction and Recovery	(912) 437-6671
McIntosh County Sheriff	(912) 437-6622

9130.7 Liberty County Notification List

Liberty County Emergency Contacts	
Liberty County Sheriff	(912) 876-2131
Hazardous Chemical Team	911
Liberty County Coalition	912-754-4668
EMS	(912) 368-2201

9130.8 Drawbridge Telephone Numbers

Bridge Official Name	Bridge Waterway	Mile Marker	Bridge Owner	Owner Phone	POC Phone Number
Skidaway Narrows	AICW - Skidaway Narrows	592.9	Chatham County	912-652-6840	912-652-6840
CSX Railroad Bridge	Savannah River	60.9	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Ocmulgee River	194.9	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Satilla River	25.7	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Big Ogeechee River	30.7	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Altamaha River	59.4	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Altamaha River	139.9	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Ocmulgee River	135.4	CSX R/R	877-744-7279	800-232-0142
Railroad	Ocmulgee River	95.9	CSX R/R	904-393-8191	800-232-0142
CSX Railroad Bridge	Altamaha River	23.5	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Savannah River	27.4	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Savannah River	195.4	CSX R/R	877-744-7279	800-232-0142
CSX Railroad Bridge	Ocmulgee River	11.8	CSX R/R	904-393-8191	800-232-0142
Causton Bluff Bridges	AICW - Wilmington River	579.9	GADOT	404-656-5280	404-656-5280
Jacksonville Ferry Bridge	Ocmulgee River	51.2	GADOT	912-262-2349	912-262-2349
U S Highway 46	Oconee River	44.3	GADOT	404-656-5280	404-656-5280
U S Highway 17	Savannah River	21.6	GADOT	912-262-2349	912-256-0880
Augusta	Savannah River	199.6	GADOT	912-651-2144	912-651-2144
Savannah River RR Bridge	Savannah River	199.9	Norfolk Southern Corporation	800-453-2530	800-453-2530

9140 Response Guidance

9140.1 Essential Information

It is important for response personnel to obtain as much information as possible to clearly understand and plan for response operations. This section provides a list of essential information.

9140.2 Spill Report Form

See "Oil or HazMat Release".

9140.3 Initial Response Guide

See "Pollution Response Guidelines"

9140.4 Notification Checklist

See "Oil or HazMat Release".

9140.5 Response Strategies

The purpose of this appendix is to outline strategies for responding to all spills within the MSU Savannah AOR. The area includes seven counties along the East Coast of Georgia. These coastal areas contain many different economic and ecological areas, archeological sites and numerous aquatic/animal/bird habitats and sanctuaries. "Sensitive areas" (including mangroves, beaches, etc.) make the AOR one of the more difficult to clean in the event of a catastrophe and one of the more challenging when planning for prevention and spill response.

The first step in any spill incident is to assess the situation and determine a set of priorities. The mitigation and overall response to a spill should then be carried out to address these priorities. At a minimum, the following must be addressed:

- Response Priorities
- Protect human life and health
- Minimize ecological impacts
- Minimize economic and public impacts
- Determination of protection priorities
- Determination of appropriate countermeasures
- Determination of natural collection areas and boom sites throughout the area
- Determination of containment techniques
- Determination of removal techniques
- Determination of shoreline cleanup techniques/strategies

The second action to effectively minimize economic and ecological impacts is the necessity to control the spill source. Minimizing the amount of product released will aid in protecting human life, wildlife and environmental and human habitation areas.

In the event of a hazardous spill, contact the National Response Center at (800) 424-8802 and for immediate danger to life or property call 911.

9140.6 Response Checklist

1. Evaluate level of response needed for incident; use scenarios as general guide.
 - Most probable discharge
 - Maximum most probable discharge
 - Worst case discharge
2. Evaluate if special circumstances exist requiring special actions.
 - Fire/explosion
 - Vessel grounding
 - Lightering operations
 - Salvage operations
 - Search and rescue
 - Public safety hazards
3. On scene weather conditions, use NOAA's PORTS system.
4. Implement support infrastructure based on level of response.
5. Determine response structure that will be used, and determine level of support needed to fill position in the structure.
6. Key federal, state, local and contractor personnel must be easily recognizable on scene and should wear their company's shirts, hats or vests appropriately marked to identify their personnel (Supervisor, Volunteer, Site Safety Officer, Beach Master, etc.)
7. Command center and command post access is limited to authorized personnel only. All personnel checking into a command post will sign in and out at the designated location and provide picture identification, credentials and the purpose of the visit. Distinctive colored identification tags will be issued to personnel allowing access to the command post(s).
8. Determine priority of and specific strategy for each area at risk.
 - Containment of source
 - Protection / deflection booming
 - Tear drop / cascading
 - Open water recovery
 - Recovery method

9. Mobilization of personnel. Determine personnel needed for response, and identify source of personnel. Ensure personnel are properly trained, and health and safety issues are addressed. Ensure accurate accounting of personnel and resources (hours for personnel, vehicle, mileage, boats) and cost incurred.

- Special Teams
- Reserve augmentation
- DRG Support
- SONS augmentation
- Corporate response team
- OSRO response
- USCG Air Operations

10. Mobilization of equipment: Ensure adequate supply of transportation vehicles is available to transport personnel and equipment.

- Type of equipment needed
- Quantity
- Location – staging area
- Support needed
 - Boat for hauling and positioning boom
 - Aircraft support for transporting equipment
- Additional requirements
- Contact list

11. Logistics

a) Logistics needed to support personnel

- Food and water
- Lodging
- Additional clothing
- Transportation

b) Logistics needed to support response

- Adequate communications – Ensure adequate supply and sufficient breadth of equipment to communicate to all parties. Electronic Communication equipment (Fax and computer) should be considered. Particular attention should be made to dedicated phone and fax lines between the Unified Command Center and Forward Command Center.
- Command Center – Establish command center at or near the scene at the deployment area to support response. Local Sheriff or Emergency Management Mobile Command Center augmented with USCG and OSRO communications may

supply rapid support. The command center must be of adequate size to support the anticipated number of personnel. A minimum of 3,000 square feet is required for the main Coast Guard command center, with partitioning for a 500 square feet responsible party office.

- An additional 1,000 square feet for a conference room are required and an additional 1,000 square feet for a Joint Information Center. Suitable site location(s) can be utilized to establish a command center(s) or forward command center(s). Some locations include hotels, motels, County Emergency Operation Center(s) EOC, such as Hillsborough County EOC, Pinellas County Regional Planning Council Office, portable or fixed trailers and federal, state, and local agency buildings as deemed necessary by the FOSC. Additionally, these site locations can be used for internal and external training exercise(s), deployment exercises, PREP training exercises / drills, triennial area training exercises(s) and TTX(s).

c) Air support (over-flights).

- Coast Guard and Auxiliary
- Other agencies
- Private resources
- Air Traffic Control Teams – In order to insure safety in the FAA designated restricted zone, contact USAF for on scene air traffic
- controllers

12. Local Impacts

- Impact on water intakes
- Drinking water
- Industrial
- Transportation of fresh water supply

13. Funding issues

- OSC access to the fund
- State access to the fund
- Vendors – BOA policy
- Responsible party funding process

14. Volunteers

15. Fish, wildlife and habitat protection and mitigation of damage

16. Ensure coordination with natural resource damage assessment personnel.

17. Develop and implement Site Safety Plan

18. Containment and Cleanup

- Strategy
 - Shore considerations
 - Near shore considerations
 - Shoreline considerations
 - Inland considerations
 - Sensitive areas

b) Staging areas

c) Integrated cleanup system

- Booming and containment
- Recovery of spilled product and contaminated debris (test for components of recovered product)
- Temporary storage (RCRA permit)
- Transport of collected material for disposal (RCRA permit).

d) Monitor oil movement

- Over-flights
- Computer modeling / trajectories
- Continue to monitor proximity of spill to sensitive areas

e) Use of dispersants, other chemicals or other spill mitigating devices or substances (Refer to Annex G)

- Pre-approved areas
- RRT approval process
- Forms
- Field tests
- Documentation of effectiveness

f) Shoreline cleanup

g) Set aside areas for research purposes and countermeasure effectiveness determination.

h) Monitor and refine cleanup strategies

i) Develop criteria / guidance for terminating cleanup. Input from:

- Unified Command (OSC, State, Responsible party)
- SSC and Federal, State and local scientific community including

- trustees
- RRT

19. Removal and Waste Disposal

- Federal, State, and local laws / regulations
- Volume of oil or hazardous substance for disposal
- Identify disposal locations (onsite vs. offsite)
- Obtain necessary permits
- Secure transportation for product disposal
- Outline disposal plan

20. Unified Command coordination

- Final survey
- c) Clean / return equipment
 - When clean is “clean”
- d) Survey / replace equipment
- e) Long term restoration of damaged areas
 - Consultation with appropriate Natural Resource Trustee

9200 Personnel and Services Directory

9210 Federal Services

9210.1 OSROS

The Coast Guard’s National Strike Force maintains and updates a listing of current OSRO’s and their equipment via the [United States Coast Guard Response Resource Inventory System](#).

9210.2 USCG National Strike Force

The National Strike Force (NSF) was created in 1973 as a Coast Guard staffed "Special Force." This special force assists On-Scene Coordinators (OSCS) responding to potential and actual oil and hazardous material spills as directed by the National Contingency Plan (NCP). The National Strike Force is composed of four units including three, 35 member Strike Teams. These teams are: The Atlantic Strike Team located in Fort Dix, NJ (609) 724-0008; the Gulf Strike Team located in Mobile, AL (334) 441-6601; and the Pacific Strike Team located in Novato, CA (415) 883-3311. A fourth unit, (National Strike Force Coordination Center) which is located in Elizabeth City, NC (252) 331-6000, manages the Strike Teams. The NSF is a unique, highly trained cadre of Coast Guard professionals who

maintain and rapidly deploy with specialized equipment in support of Federal On-Scene Coordinators preparing for and responding to oil and chemical incidents in order to prevent adverse impact to the public and reduce environmental damage. Requests for Strike Team assistance are outlined in the NCP, "The FOSC may request assistance directly from the Strike Teams. Requests for a team may be made to the Commanding Officer of the appropriate team, the USCG member of the RRT, or the Commandant of the USCG through the NRC." FOSC's are encouraged to use the NSF whenever its expertise or equipment is needed, or to augment the FOSC's staff when it is overburdened by a response to a given incident.

9210.3 USCG Public Information Assist Team

The Public Information Assist Team (PIAT) is an element of the NSFCC staff, which is available to assist OSC's to meet the demands for public information during a response or exercise. Its use is encouraged any time the OSC requires outside public affairs support. Requests for PIAT assistance may be made through the NSFCC or National Response Center.

9210.4 USCG District Response Group (DRG)

The District Response Group is a framework within each Coast Guard district to organize district resources and assets to support USCG FOSC's during response to a pollution incident. Coast Guard DRG assists the FOSC by providing technical assistance, personnel, and equipment, including the Coast Guard's pre-positioned equipment. Each DRG consists of all Coast Guard personnel and equipment, including fire-fighting equipment, in its district, with additional pre-positioned equipment.

9210.5 US Navy Supervisor Salvage (SUPSALV)

The U.S. Navy (USN) is the Federal agency most knowledgeable and experienced in ship salvage, shipboard damage control, and diving. The USN has an extensive array of specialized equipment and personnel available for use in these areas as well as specialized containment, collection, and removal equipment specifically designed for salvage related and open sea pollution incidents. The Supervisor of Salvage (SUPSALV) can provide salvage expertise and maintains a warehouse on each coast stockpiled with salvage and response gear. The nearest SUPSALV location is in Norfolk, VA. Refer to the NSFCC Spill Response Resource Inventory RRI for a listing of SUPSALV equipment.

9210.6 NOAA Scientific Support Coordinators (SSC)

NOAA Scientific Support Coordinators (SSCs) are the principal advisors to the USCG FOSC for scientific issues, communication with the scientific community, and coordination of requests for assistance from State and Federal agencies regarding scientific studies. The SSC leads a scientific

team and strives for a consensus on scientific issues affecting the response but ensures that differing opinions within the community are communicated to the FOSC. The SSC can also assist the FOSC with information relating to spill movements and trajectories. The NOAA SSC serves as the FOSC's liaison between damage assessment data collection efforts and data collected in support of response operations. The SSC leads the synthesis and integration of environmental information required for spill response decisions in support of the FOSC, coordinating with State representatives, appropriate trustees and other knowledgeable local representatives.

9210.7 EPA National Response Teams (ERT)

The EPA's National Response Team (NRT) has expertise in treatment technology, biology, chemistry, hydrology, geology, and engineering. The NRT can provide the OSC access to special equipment to deal with chemical releases and can provide the OSC with advice concerning hazard evaluation, multimedia sampling and analysis, risk assessment, on-site safety, cleanup techniques, water supply decontamination and protection, use of dispersants, environmental assessment, degree of cleanup required, and the disposal of contaminated materials. The NRT also offers various training courses to prepare response personnel. To obtain additional information about NRT or on various training courses visit their website at: <http://www.nrt.org/>

9210.8 Agency for Toxic Support and Disease (ATSDR)

The Agency for Toxic Substances and Disease Registry (ATSDR) maintains appropriate disease/exposure registries, provides medical care and testing of individuals during public health emergencies. ATSDR also develops, maintains, and informs the public concerning the effects of toxic substances, maintains a list of restricted or closed areas due to contamination, conducts research examining the relationship between exposure and illness, and conducts health assessments at contaminated sites. The ATSDR also assists the EPA in identifying most hazardous substances at CERCLA sites, develops guidelines for toxicological profiles of hazardous substances, and develops educational materials related to the health effects of toxic substances. ATSDR resources are an important tool for the OSC to use in assessing the possible effects of an environmental emergency on the public's health. Additional information can be obtained by contacting ATSDR at 1-404-498-0110 or 1-888-422-8737 or visit their website at: <http://www.atsdr.cdc.gov/>

9210.9 USCG Incident Management Assist Team

NIIMS ICS guidance provides for Type Teams that can assist local units. Incident Management Assist Teams (IMATs) are the Coast Guard's Type Teams. IMATs are groups of trained and experienced personnel who exercise and deploy as a team to augment the local response and support organization when requested by the Coast Guard Incident

Commander (CGIC). It should be clearly understood that IMATs are intended to support the Incident Commander, not to supersede or preempt the Commanding Officer or local incident management personnel. IMATs have the capability to provide incident management command and control surge support for a period not to exceed 21 days plus adequate time for overlap and relief, at which time the second IMAT team will deploy, as necessary, from the other CG Area.

9220 State Services

9220.1 Georgia Environmental Protection Division

Protects Georgia's air, land and water resources through the authority of state and federal environmental statutes. These laws regulate public and private facilities in the areas of air quality, water quality, hazardous waste, water supply, solid waste, surface mining, underground storage tanks, and others. EPD issues and enforces all state permits in these areas and has full delegation for federal environmental permits except Section 404 (wetland) permits. The ability to offer "one-stop" permit review and issuance makes the permitting process more efficient for applicants.

9220.2 Georgia Protection Commission (EPC) Air Quality

Part of Georgia Environmental Protection Division. This group is able to conduct air quality monitoring in support of emergency response operations.

9220.3 Georgia Department of Natural Resources

Is to sustain, enhance, protect and conserve Georgia's natural, historic and cultural resources for present and future generations, while recognizing the importance of promoting the development of commerce and industry that utilize sound environmental practices.

Refer to Section 9110 of this plan for contact information for each of the above listed state agencies.

9230 Local Services

9230.1 Local Pilot Services

Georgia Pilots	
Savannah Pilots	(912) 236-0226
Brunswick Pilots	(912) 280-9464 (office)
	(912) 258-6100 (cell)
John McCarthy (Federal Pilot, Savannah)	(912) 233-0800
	(912) 235-7158 (emergency)
Docking Pilots (Moran Towing)	(912) 232-8103
Docking Pilots (Crescent Towing)	(912) 236-2571

9230.2 Local Environmental Agencies

Refer to the appropriate County Emergency Management Manual or contact GEPD at (404) 657-5947

9230.3 Environmental and Health Laboratories

To obtain information on laboratories, contact Georgia Division of Health at (404) 657-2700.

9240 Private Services (OSROS)

Company Name	American Pollution Control, Inc. (AMPOL)
Address	401 W. Admiral Doyie Dr. New Iberia, LA 70560
Contact Person	Kirk Headley (800) 482-6765 24hr (337) 365-7847
Affiliation	Coast Guard OSRO certified
Trained Personnel	40 hour HAZWOPER certification, 30 Total
Equipment	401 W. Admiral Doyie Dr.
Location	New Iberia, LA 70560

Company Name	Clean Harbors Environmental
Address	1875 Forge St Tucker, GA 30084
Contact Person	Jeff Beswick (800) 444-4244 (770) 934-0902
Affiliation	Contractor - BOA
Trained Personnel	24 & 40 Hr OSHA Certified; 300 Total
Equipment	3300 Cummings Road
Location	Chattanooga, TN 37419

Company Name	HEPACO, Inc.
Address	192 S. Industrial Loop Orange Park, FL 32073
Contact Person	(800) 888-7689 Emergency (904) 215-0011
Affiliation	Coast Guard OSRO certified
Trained Personnel	40 hour HAZWOPER certification, 20 Total
Equipment	192 S. Industrial Loop
Location	Orange Park, FL 32073

Company Name	Heritage Environmental Services - (HES)
Address	4132 Pompano Rd Charlotte, NC 28216
Contact Person	877/436-8778 Scott Swolt (704) 391-4503 x 104
Affiliation	Contractor - BOA
Trained Personnel	40 hour HAZWOPER certification, 40 Total
Equipment	4132 Pompano Rd
Location	Charlotte, NC 28216

Company Name	Jacksonville Pollution Control
Address	3117 Talleyrand Ave. PO Box 3005 Jacksonville, FL
Contact Person	Earl Edenfield (904) 355-4164
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 30 Total
Equipment Location	3117 Talleyrand Ave. PO Box 3005 Jacksonville, FL

Company Name	LCM Corporation
Address	PO Box 13487 Roanoke, VA 24034
Contact Person	(800) 774-5583 Lawrence Musgrove III (540) 344-5583
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 24 Total
Equipment Location	11 Ranhorn Ct. Hampton, VA 23661

Company Name	Marine Spill Response Corp. (MSRC)
Address	220 Spring St Suite 500 Herndon, VA 20170
Contact Person	(800) 645-7745 (800) 259-6772
Affiliation	Coast Guard OSRO certified
Trained Personnel	40 hour HAZWOPER certification, 300 Total
Equipment Location	Ocean Terminal Facility - Berth 16 W. River Street Ocean Terminal Savannah, GA 31415

Company Name	Moran Environmental Recovery
Address	251 Levy Road Atlantic Beach, FL 32233
Contact Person	Steve Jenkins (904) 241-2200
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 150 Total
Equipment Location	420 Telfair Rd. Savannah, GA 31415

Company Name	National Response Corporation
Address	3500 Sunrise Highway / Suite T 103 Great River, NY 11739
Contact Person	(800) 899-4672 Duty Officer (516) 369-8644
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 150 Total
Equipment Location	16 Foundation Drive Savannah, GA 31408

Company Name	Oil Mop, LLC
Address	131 Keating Dr. Belle Chasse, LA 70037

Contact Person	Edward Turner (800) 645-6671 (504) 394-6110
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 150 Total
Equipment	3401 Jack Brooks Rd.
Location	New Iberia, LA 70560

Company Name	Southeast Response & Remediation
Address	PO Box 221 Wilmington, NC 28402
Contact Person	Rick Miles (910) 763-6274
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 50 Total
Equipment	4920 US Hwy 421N
Location	Wilmington, NC 28402

Company Name	SWS Environmental First Response
Address	P.O. Box 18619 Panama City Beach, FL 32417
Contact Person	James Weber Butch (800) 852-8878
Affiliation	Contractor – BOA
Trained Personnel	40 hour HAZWOPER certification, 150 Total
Equipment	16 Foundation Drive
Location	Savannah, GA 31408

9300 Response Capabilities

The United States Coast Guard's [Response Resource Inventory System](#) contains current information on Oil Spill Response Organizations (OSRO).

In addition, to the list of OSRO's and their capabilities, a list of [Georgia Emergency Management Agencies \(GEMA\)](#) response capabilities has been provided.

9400 Area Planning Documentation

9410 Spill History

Fishing vessels, marinas, and pleasure craft account for a majority of the reported spills in the coastal zone, typically ranging from 5 to 50 gallons of diesel fuel or gasoline. Occasionally fishing vessels or larger recreational vessels are responsible for bigger spills ranging from 200 to 1,000 gallons, in large part due to grounding and/or sinking. Significant incidents in the AOR include:

- March 1986: 200 gallons of oil leaked into Pipemakers Canal. Georgia Ports Authority finds leak was from a waste oil-holding tank in the machine shop.
- December 1986: 50,000 gallons of fuel oil is spilled from M/V Amazon Venture. A pumping system failure caused the leak. The Savannah Wildlife Refuge was impacted and sustained damage.

- October 1987: Savannah Sugar Refinery spills over 1,000 gallons of due to equipment malfunction. The spill is quickly contained.
- July 1988: Up to 400 gallons of diesel fuel leak into the river when a work barge sinks.
- December 1989: M/V Africa Star spills approximately 1,000 gallons of oil. The company is charged for the cleanup.
- August 1990: Union Camp takes responsibility for a 500 gallon spill that occurred when a pipe ruptured at the mill.
- November 1990: Savannah Electric and Power Co. has an 8,000 gallon leak from the Port Wentworth power plant.
- December 1992: M/V Baltic Skou is found to have left a sheen on the river as it departs for sea.
- August 1994: Paktank Corp. prevents about 65,000 gallon from spilling into the river. A sheen develops but the spill is confined to the property.
- November 2004: The M/V FORTUNE EPOCH ran aground after losing power during an outbound transit. The vessel sustained substantial hull damage and released 6,000 gallons of Intermediate Fuel Oil 180. Impacted wildlife was recovered as far north as the northern tip of Hilton Head Island and as far south as Ossabaw Island.
- June 2006: An investigation is launched after approximately 2,000 gallons of crude oil seeped into the river from the north bank of Hutchinson Island. Valero L.P. was deemed responsible.
- July 2006: The M/V Vernet is suspected to have spilled an estimated 27,000 gallons of heavy fuel oil. The port is shut down for approximately 10 hours due to response efforts.
- February 2008: M/V CENTAURUS LEADER grounded and breached its hull in the vicinity of two lower fuel tanks. There was no product release but, due to the potential, the National Strike Force was mobilized.
- December 2008: A mystery spill of Sodium Hydroxide occurred in Port Wentworth. Approximately 3,500 gallons of product was released. This was a CERCLA case with EPA mobilization.
- March 2010: The M/V Liberty punctured its hull at Ocean Terminal and released approximately 7,000 gallons of diesel fuel into the Savannah River.
- January 2011: Nustar Asphalt Terminal had a breach in storage tank four, resulting in an approximate discharge of 200 bbls of crude oil into the surrounding enclosed berm, i.e., the area which comprises the EPA regulated secondary containment. The terminal implemented its facility response plan with OSROs and prevented product from entering the river.

9410.1 Most Probable Discharge

Not including small gasoline spills at local marinas and non-point source pollution, the most probable discharge will be a 200 to 1,000 gallon diesel fuel spill from a sunken fishing vessel in the East River in Brunswick or at one of the local seafood distribution docks throughout coastal Georgia. A majority of state and federal pollution response efforts in the coastal zone are a direct result of sunken or dilapidated fishing vessels where the

owners do not have the financial means to salvage their vessels. Once the threat of pollution is eliminated, these boats typically remain either sunk at the pier or on the banks of coastal Georgia waterways. In addition to fishing vessels, the area has seen a recent increase in the number of larger recreational boats and some tugs and construction barges also contribute to this problem. Since 2004, MSU Savannah has conducted federal projects involving the multiple vessels of this description, including the JEAN, OLD BOBBY, TAMMY ROSE, CAPT JAKOB, BIG MACK, ALL EYES ON ME, MONTEY WALKER BARGE, RIPTIDE, MISS ALLI, and MISS IRENE. Depending on the location of the sinking and the amount of fuel discharged, these spills could threaten environmentally sensitive areas, recreational and commercial fishing areas, and public beaches and recreation facilities.

9410.2 Maximum Most Probable Discharge

The maximum most probable discharge is the partial or complete loss of cargo from a tank barge after striking a submerged object or grounding in the Atlantic Intra-coastal Waterway (ICW). In 2003, the Army Corps of Engineers stopped conducting maintenance dredging of the ICW based on the relative decrease in commercial use of the waterway from Port Royal Sound, South Carolina to Cumberland Sound, Georgia. Since then, two tank barges carrying approximately 378,000 gallons of JP4 jet fuel have grounded in the middle of the ICW channel. Although neither of the tank barges suffered serious hull damage, an increasing potential exists for a major discharge as the result of a grounding in portions of the ICW experiencing shoaling. Tank barges make jet fuel deliveries to Marine Corps Air Station Beaufort via the ICW every eight to ten days, making them the most likely source of the maximum probable discharge.

A major discharge on the ICW would cause significant impact to environmentally sensitive areas and could cause a major disruption to commercial and recreational vessel traffic on the waterway. Because some portions of the ICW are remote and not readily accessible by land, there could be significant logistical challenges in responding to a major discharge.

Although the shoaling conditions will change over time, the most probable area for these groundings would be:

Location	Mile Marker (Approx.)	Description
Jekyll Creek	681-685	Entire creek between St. Simon's Sound and Jekyll Sound, worst from the bridge northward
Buttermilk Sound	659	Shoaling
Little Mud River	654-655.5	Entire creek filled with soft mud
Florida Passage	608.5	Shoaling
Hells Gate	601	Entire passage filling in
Skidaway	590.5-591	Shoaling at entrance of Isle of Hope River
Wilmington River	580.5	Channel filled in several places

9410.3 Worst Case Discharge – Vessel

The worst-case scenario for a vessel within the Savannah COTP zone would involve a complete loss of cargo by a tank ship carrying 6,000,000 gallons of No. 6 fuel oil. This discharge would likely be the result of a major mechanical casualty followed by a collision, allision, or grounding on the Savannah River. In reviewing historical records and in speaking with the Savannah Pilot Association's Master Pilot, there has not been a collision involving two deep draft vessels in the Savannah River over at least the last 20 years. The geographic layout of the river makes it very difficult for two vessels to collide in such a way to completely negate either vessel's structural integrity. However, a collision involving a large container ship and a tank vessel, with either vessel sinking in the middle of the channel would be the worst-case scenario.

9410.4 Worst Case Discharge – Facility

The worst-case scenario for a waterfront facility within the Savannah COTP zone would involve a major pipe rupture during No. 6 Fuel Oil transfer operations at Colonial Oil Berth #1. This scenario is also identified in Colonial Oil's Integrated Contingency Plan. In this situation, 2 lines pumping 6,000 barrels per hour for 15 minutes would result in a 3,000 barrel (126,000 gallon) spill, plus an additional 354 barrels worth of line volume, making the total worst case discharge 3,354 barrels.

9420 Possible Scenarios

This section is designed for response personnel to consider various spill scenarios and potential courses of action. The responses described in these scenarios are not intended to be all-inclusive, but serve as a guiding framework for responders. In any spill response, all operations should comply with the [National Response Plan](#) and the National Incident Management System.

9420.1 Most Probable Discharge Scenario

9420.1.1 The Event

MSU Savannah receives a phone call from a local fisherman that a 60-foot shrimp boat has sunk at the shrimp docks on the East River in Brunswick. The boat is upright and appears stable, but is 80% submerged. Diesel fuel is slowly bubbling up from the vents of the submerged fuel tanks, with a large sheen extending south toward the Brunswick River. Follow-on calls to the vessel's owner reveals there is 1,000 gallons of diesel fuel on board along with approximately 10 gallons of oil in the bilges.

9420.1.2 Incident Actions/Objectives

Response actions and incident command objectives for any pollution incident will largely be dictated by initial site assessments and on-scene

conditions. This section is not intended to provide specific information on a full-scale response to the given scenario. However, it does provide a framework of general incident objectives and potential actions to consider using typical response objectives outlined in the Coast Guard's Incident Management Handbook.

Manage a coordinated response effort: Ensure immediate notifications are completed to include the National Response Center, Georgia DNR, Coast Guard Sector Charleston and Coast Guard Station Brunswick. Evaluate need to notify Department of Interior and Department of Commerce representatives in accordance with [Section 4720](#) of this plan. Determine if Georgia DNR intends to send a representative to the scene.

Ensure the safety of citizens and response personnel: Once on scene, the Coast Guard representative must confirm that all response personnel, regardless of affiliation, are outfitted in the appropriate personal protective equipment. If necessary, the on-scene personnel could establish a safety perimeter and restrict access to the vessel. There are also the standard safety concerns whenever personnel are working in the marine environment on a potentially unstable platform including physical hazards (slips, trips, and falls), high noise levels, confined spaces, or poor weather conditions.

Control the source of the spill: Depending on water depth and the orientation of the submerged vessel, it may be possible to get access to the fuel tank vents and/or fill pipe at low tide without the use of a diver. If the fuel tanks are structurally sound, plugging the vents and fill pipe could be the only action necessary to control the source of the spill. In situations where the tank vents remain submerged at low tide, it may be necessary to contract a diver to attempt to plug the vents and eliminate the source.

Maximize protection of environmentally sensitive area including wildlife and historic properties: The discharged fuel would impact a majority of the East River's banks when carried by the strong outbound current and would likely extend into the Brunswick River. In reviewing the environmentally sensitive area maps of this plan, a majority of the impacted coast would be saltwater marsh with some impact to exposed and vegetated tidal flats. Andrew's Island, on the western side of the East River, is home to a wide range of birds Historic properties.

Contain and recover spilled material: Depending on contractor response time, it may be necessary to request CG Station Brunswick deploy the pre-staged hard boom at Station Brunswick around the fishing vessel. Once the contractors are on-scene, they would likely place sorbent boom inside of the hard boom to further contain spilled product. The contractor would monitor the effectiveness of the boom configuration and adjust the amount and time-in-water as appropriate. On-scene personnel would also evaluate the likely amount of time the vessel will remained submerged and have the contractor remove all product to eliminate the threat of continued discharge.

Remove oil from impacted areas: In all likelihood, response personnel would not remove oil from difficult-to-reach marsh areas and beaches. The large tidal range and fast currents of the East and Brunswick Rivers would assist in minimizing impacts through natural flushing. Ferrying response personnel to these locations to remove oil would likely cause more damage to these areas than the natural degradation process.

Minimize economic impacts: The spilled diesel fuel in this scenario should not cause a negative impact to the local economy. However, the fishing vessel's submerged location could potentially impede other fishing vessels from getting underway or could keep the seafood company from receiving other vessels. In these situations, the local fishermen and/or the seafood company may work collectively with the sunken vessel's owner to develop an immediate salvage plan. This plan should be put in writing and thoroughly evaluated prior to implementation using the salvage guidelines of 4870 of this plan. The economic concerns of the fishermen and the seafood company should not outweigh the requirement for a safe and systematic salvage operation.

Keep stakeholders informed of response activities: Most stakeholders in this scenario do not have a structured organization through which information can be distributed. Information to stakeholders would be provided as necessary by personnel on-scene. If there is an unexpected request from stakeholders for response updates, the FOSC will create a more structure flow of information.

Keep the public informed of response activities: Historically, there is little to no local media interest in diesel spills of this size. If media interest does develop, information will be disseminated to the public via joint press releases and/or on-camera interviews.

9420.2 Maximum Most Probable Discharge Scenario

9420.2.1 The Event

Coast Guard Station Tybee receives a call via VHF Channel 16 that a tank barge is hard aground in the ICW in the vicinity of Skidaway Narrows. The master believes he struck a submerged object and reports the tank barge has sustained hull damage below the waterline resulting in at least one ruptured tank. He has 378,000 gallons of JP4 fuel en route to Marine Corps Air Station Beaufort.

9420.2.2 Incident Actions/Objectives

Response actions and incident command objectives for any pollution incident will largely be dictated by initial site assessments and on-scene conditions. This section is not intended to provide specific information on a full-scale response to the given scenario. However, it does provide a framework of general incident objectives and potential actions to consider

using typical response objectives outlined in the Coast Guard's Incident Management Handbook.

Manage a coordinated response effort: Working with the responsible party, determine a location for the Incident Command Post and begin establishing an ICS organization. Ensure immediate notifications are completed to include the National Response Center, Georgia DNR, Coast Guard Sector Charleston, Coast Guard Air Station Savannah and Coast Guard Station Tybee. A spill of this size and potential would require Department of Interior and Department of Commerce representative notification in accordance with [Section 4720](#) of this plan.

Ensure the safety of citizens and response personnel: JP4 is a volatile liquid that could pose as a respiration hazard for emergency response personnel. A Safety Officer would be identified to serve as a part of the Command Staff and maintain the Site Safety Plan for response personnel. At a minimum the plan should include health and safety hazard analysis for each site, task or operation with a comprehensive operations work plan. This should address personnel training requirements, personal protective equipment selection criteria, and confined space entry procedures. In addition, it should detail an air monitoring plan, site control measures, and the format for pre-entry and pre-operations briefings. If necessary, the Captain of the Port could establish a safety zone around the tank barge requiring Captain of the Port permission to enter to protect both citizens and response personnel. A Broadcast Notice to Mariners could be issued to urge mariners to exercise caution when transiting in the vicinity of Skidaway Narrows and to travel at minimum wake speed.

Control the source of the spill: With only one ruptured tank and all watertight bulkheads intact, the total amount of spill would be approximately 60,000 gallons. Shipboard personnel should be able to quickly determine the structural integrity of the remaining tanks.

Maximize protection of environmentally sensitive area including wildlife and historic properties: As per the Savannah Area Response Plan Map and Environmental Sensitivity Index, the primary sensitive area in this scenario is Skidaway Island State Park, a critically sensitive salt marsh and possible home to the wood stork, a threatened species. This area could be protected with 1000 feet of sorbent boom and possibly skimmers. Depending on the path of the fuel, the next priorities would be the Skidaway Institute water intake and the Wormsloe State Historic Site.

Contain and recover spilled material: The high currents in the ICW would make containing the oil at the site extremely difficult and ineffective. Sorbent boom should be used as primary containment around the vessel, with hard boom as an option for secondary containment. The location of this spill would make it nearly impossible to use land-based recovery assets including vacuum trucks. Most recovered JP4 would be a result of on-water recovery using skimmers and sorbent material. In this case, boom would be most effective when used in conjunction with the river's

natural collection points. Depending on their exact location, oil could be recovered at these natural collection points using surface skimmers.

Recover and rehabilitate injured wildlife: In a discharge of this magnitude there could be impacted wildlife that require rehabilitation. Once reports of impacted wildlife are received, the Unified Command should discuss the activation of rehabilitation personnel

Remove Oil from impacted areas: JP4 is a light fuel oil with a high API gravity. Generally, this type of oil is less persistent and may evaporate within 24 hours. However, a spill of this size would still result in a considerable amount of marsh impact. NOAA's Characteristics of Coastal Habitats summarizes the technical rationale behind oil removal from the coastal environment and provides relative environmental impacts for a host of removal techniques including natural recovery, manual cleaning, mechanical recovery, debris removal, sediment reworking, and vegetation cutting. Unified Command should also consult with NOAA's Scientific Support Coordinator and other local environmental experts available prior to executing an oil removal plan. Following a JP4 spill, using natural recovery and tidal flushing may cause the least amount of impact to coastal marshes with only slightly less oil removal than manual or mechanical methods.

Minimize economic impacts : In a spill of this magnitude, the potential exists for a complete waterway closure at least during the initial response phase. Commercial and recreational mariners would be required to exit the ICW at the Ogeechee or Vernon Rivers and could re-enter at the Wilmington River. This new route would delay vessel traffic by a few hours, but would not eliminate commercial and recreational use of the ICW.

Keep stakeholders informed of response activities: Stakeholders not part of the Unified Command would be notified through the same methods as the general public, or on a case-by-case basis via telephone. Waterfront facilities on the Savannah River receive very few vessel arrivals by way of the ICW and would not require regular information updates.

Keep the public informed of response activities: The Unified Command would issue joint press releases and possibly conduct press briefings and/or joint on-camera interviews. Because this scenario takes place in Chatham County, Chatham Emergency Management Agency could arrange the press briefings through their pre-established and regularly used media contacts. Broadcast Notices to Mariners would be used to inform the public of waterway closures and recommend safe routes.

9420.3 Worst Case Scenario - Vessel

9420.3.1 The Event

The Chief of Response receives a call from the Savannah Pilot Association's Master Pilot that an outbound container ship from Garden City Terminal just collided with a tankship inbound to the Colonial Oil facility. The tankship had 6,000,000 gallons of No. 6 fuel oil on board and suffered catastrophic damage. A major portion of the hull was breached and sunk almost instantaneously in the middle of the federal channel. There is already an oil slick spanning from the Talmadge Bridge to River Street. The outbound container ship received some damage but was able to safely moor at Ocean Terminal with tug assistance. There is no indication that the container ship is leaking oil.

9420.3.2 Incident Actions/Objectives

Manage a coordinated response effort: Working with the responsible party, determine a location for the Incident Command Post and begin establishing an ICS organization. Ensure immediate notifications are completed to include the National Response Center, Georgia DNR, Coast Guard Sector Charleston, Coast Guard Air Station Savannah and Coast Guard Station Tybee. Further Coast Guard briefings would occur using the Critical Incident Communications timelines. A spill of this size and potential would require Department of Interior and Department of Commerce representative notification in accordance with [Section 4720](#) of this plan.

Control the source of the spill: The tanker has sustained such extensive damage that the source cannot be secured and the rate of discharge cannot be reduced. There will be a complete cargo discharge of 6,000,000 gallons.

Ensure the safety of citizens and response personnel: A Safety Officer would be identified to serve as a part of the Command Staff and maintain the Site Safety Plan for response personnel. At a minimum the plan should include health and safety hazard analysis for each site, task or operation with a comprehensive operations work plan. This should address personnel training requirements, personal protective equipment selection criteria, and confined space entry procedures. In addition, it should detail an air monitoring plan, site control measures, and the format for pre-entry and pre-operations briefings. If necessary, the Captain of the Port could establish a safety zone around the tank barge requiring Captain of the Port permission to enter to protect both citizens and response personnel. A Broadcast Notice to Mariners would be issued outlining the safety zone and keeping mariners informed on waterway closures.

Maximize protection of environmentally sensitive area including wildlife and historic properties: In a spill of this magnitude with unpreventable environmental impacts, the Unified Command must establish protection

priority areas for initial response. The Savannah Area Response Plan Map and the Environmental Sensitivity Index should serve as the foundation for establishing these priorities. In this particular scenario, the Area Response Plan Maps indicate the highest priority areas for protective booming are the Ogeechee Canal Access near Ocean Terminal, the Savannah Electric industrial intake, the entrance to the Back River. If the entrance to the Back River is not boomed off quickly enough, the Back River tide gate could be closed and used as a collection point for recovery. Depending on the spread rate and the availability of initial response assets, the second phase of protection should focus on the Back River entrance at Mackay Point and the entrances to the ICW at Fields Cut and Elba Island Cut. Adverse effects of floating No.6 fuel oil are related primarily to coating of wildlife on the water surface, smothering of intertidal organisms, and long-term sediment contamination. No.6 fuel oil is not expected to be as acutely toxic to water column organisms as lighter oils, such as No.2 fuel oil. Direct mortality rates can be high for seabirds, waterfowl, and fur-bearing marine mammals, especially where populations are concentrated in small areas, such as during bird migrations. This scenario would not affect historic properties.

Contain and recover spilled material: No. 6 fuel oil is a dense, viscous oil that usually spreads into thick, dark colored slicks when spilled on water. It is a persistent oil in that only 5-10% is expected to evaporate within the first hours following a discharge. The high currents in the Savannah River would make containing the oil at the site extremely difficult and ineffective. In this case, boom would be most effective when used in conjunction with the river's natural collection points. Depending on their exact location, oil could be recovered at these natural collection points using surface skimmers and/or vacuum trucks. Oil recovery by skimmers and vacuum pumps can be very effective early in a spill of No. 6 fuel oil because the oil is unlikely to disperse into the water column. Before identifying a natural collection point, NOAA's Scientific Support Coordinator and other local environmental experts should be contacted to minimize impact to environmentally sensitive sites.

Recover and rehabilitate injured wildlife: Wildlife rehabilitation experts should be immediately notified and mobilized in accordance with [Section 3600](#) of this plan. Pre-identified rehabilitation facilities should be contacted in preparation for potential use. Initial press conferences and press releases should outline specific procedures for the general public to follow when discovering impacted wildlife to include appropriate protective action and contact phone numbers for reporting.

Remove Oil from impacted areas: Because of its high viscosity, beached No. 6 fuel oil tends to remain on the surface rather than penetrate into marshy sediments. Light accumulations usually form a "bathtub ring" at the high-tide line while heavy accumulations can pool on the beach. Shoreline cleanup can be very effective before the oil weathers. After the oil is subject to the environment for an extended period of time, it becomes stickier and even more viscous. Natural degradation rates for these heavy

oils are very slow, meaning the oil may persist on beaches for months to years. The most important factors determining the impacts of No.6 fuel oil contamination on marshes are the extent of oiling on the vegetation and the degree of sediment contamination from the spill or disturbance from the cleanup. Many plants can survive partial oiling; fewer survive when all or most of the above-ground vegetation is coated with heavy oil. However, unless the substrate is heavily oiled, the roots often survive and the plants can re-grow.

NOAA's Characteristics of Coastal Habitats summarizes the technical rationale behind oil removal from the coastal environment and provides relative environmental impacts for a host of removal techniques including natural recovery, manual cleaning, mechanical recovery, debris removal, sediment reworking, and vegetation cutting. Unified Command should also consult with NOAA's Scientific Support Coordinator and other local environmental experts available prior to executing an oil removal plan.

Minimize economic impacts: A sunken tankship in the middle of navigational channel just down river of the Talmadge Bridge would cause a complete disruption of commercial traffic. The Marine Safety Center's Salvage Emergency Response Team should be notified, and if possible mobilized. Early dissemination of an accurate assessment of the vessel's condition and deployment of appropriate response resources is essential.

Deep draft vessels calling on the following facilities would not be able to transit the Savannah River until the salvage operation is complete: Newport Terminal, Savannah Electric, Atlantic Wood, Savannah Sugar, PCS Phosphate, Garden City Terminal, Vopak, National Gypsum, Southern Bulk, Georgia Kaolin, CITGO, Colonial Oil, and Ocean Terminal. Commercial fishing and recreational marinas would not be significantly impacted. Delayed and diverted shipping traffic during the salvage operation would result in multi-million dollar losses for the Port of Savannah.

Keep stakeholders informed of response activities: Because a majority the Savannah River facilities would be impacted, information would be distributed via Marine Safety Information Bulletins over e-mail and fax. The Captain of the Port would also maintain close communication with stakeholders through the Savannah Maritime Association.

Keep the public informed of response activities: The Unified Command would issue joint press releases and possibly conduct press briefings or joint on-camera interviews. Because this scenario takes place in Chatham County, Chatham Emergency Management Agency could arrange the press briefings through their pre-established and regularly used media contacts. Broadcast Notice to Mariners would also be used to inform the public of waterway closures and recommend safe routes.

9420.4 Worst Case Scenario - Facility

9420.4.1 The Event

MSU Savannah receives a call from the Operations Manager at Colonial oil that they experience a major pipe rupture during No. 6 Fuel Oil transfer operations at Colonial Oil #1. Facility personnel were able to secure the source after approximately 15 minutes. Based on calculations in Colonial Oil's Integrated Contingency Plan, 2 lines pumping 6,0000 barrels per hour for 15 minutes would result in a 3,000 barrel (126,000 gallon) spill, plus an additional 354 barrels worth of line volume, making the total worst case discharge 3,354 barrels.

9420.4.2 Incident Actions/Objectives

Manage a coordinated response effort: Working with the responsible party, determine a location for the Incident Command Post and begin establishing an ICS organization. Ensure immediate notifications are completed to include the National Response Center, Georgia DNR, Coast Guard Sector Charleston, Coast Guard Air Station Savannah and Coast Guard Station Tybee. Further Coast Guard briefings would occur using the Critical Incident Communications timelines. A spill of this size and potential would require Department of Interior and Department of Commerce representative notification in accordance with [Section 4720](#) of this plan.

Control the source of the spill: This Worse Case Discharge is the result of a major pipe rupture. Facility responders were not able to get the spill under control for 15 minutes, resulting in a 3,354 barrel discharge.

Ensure the safety of citizens and response personnel: A Safety Officer would be identified to serve as a part of the Command Staff and maintain the Site Safety Plan for response personnel. At a minimum the plan should include health and safety hazard analysis for each site, task or operation with a comprehensive operations work plan. This should address personnel training requirements, personal protective equipment selection criteria, and confined space entry procedures. In addition, it should detail an air monitoring plan, site control measures, and the format for pre-entry and pre-operations briefings. If necessary, the Captain of the Port could establish a safety zone around the facility requiring Captain of the Port permission to enter to protect both citizens and response personnel. A Broadcast Notice to Mariners could be issued to urge mariners to exercise caution when transiting in the Savannah River.

Maximize protection of environmentally sensitive area including wildlife and historic properties: In a spill of this magnitude with unpreventable environmental impacts, the Unified Command must establish protection priority areas for initial response. The Savannah Area Response Plan Map and the Environmental Sensitivity Index should serve as the foundation for establishing these priorities. In this particular scenario, the

Area Response Plan Maps indicate the highest priority areas for protective booming are the Ogeechee Canal Access near Ocean Terminal, the Savannah Electric industrial intake, the entrance to the Back River. If the entrance to the Back River is not boomed off quickly enough, the Back River tide gate could be closed and used as a collection point for recovery. Depending on the spread rate and the availability of initial response assets, the second phase of protection should focus on the Back River entrance at Mackay Point and the entrances to the ICW at Fields Cut and Elba Island Cut.

Contain and recover spilled material: No. 6 fuel oil is a dense, viscous oil that usually spreads into thick, dark colored slicks when spilled on water. It is a persistent oil in that only 5-10% is expected to evaporate within the first hours following a discharge. The high currents in the Savannah River would make containing the oil at the site extremely difficult and ineffective. In this case, boom would be most effective when used in conjunction with the river's natural collection points. Depending on their exact location, oil could be recovered at these natural collection points using surface skimmers and/or vacuum trucks. Oil recovery by skimmers and vacuum pumps can be very effective early in a spill of No. 6 fuel oil because the oil is unlikely to disperse into the water column. Before identifying a natural collection point, NOAA's Scientific Support Coordinator and other local environmental experts should be contacted to minimize impact to environmentally sensitive sites.

Recover and rehabilitate injured wildlife: Wildlife rehabilitation experts should be immediately notified and mobilized in accordance with [Section 3600](#) of this plan. Pre-identified rehabilitation facilities should be contacted in preparation for potential use. Initial press conferences and press releases should outline specific procedures for the general public to follow when discovering impacted wildlife to include appropriate protective action and contact phone numbers for reporting.

Remove Oil from impacted areas: Because of its high viscosity, beached No. 6 fuel oil tends to remain on the surface rather than penetrate into marshy sediments. Light accumulations usually form a "bathtub ring" at the high-tide line while heavy accumulations can pool on the beach. Shoreline cleanup can be very effective before the oil weathers. After the oil is subject to the environment for an extended period of time, it becomes stickier and even more viscous. Natural degradation rates for these heavy oils are very slow, meaning the oil may persist on beaches for months to years. The most important factors determining the impacts of No.6 fuel oil contamination on marshes are the extent of oiling on the vegetation and the degree of sediment contamination from the spill or disturbance from the cleanup. Many plants can survive partial oiling; fewer survive when all or most of the above-ground vegetation is coated with heavy oil. However, unless the substrate is heavily oiled, the roots often survive and the plants can re-grow.

NOAA's Characteristics of Coastal Habitats summarizes the technical rationale behind oil removal from the coastal environment and provides relative environmental impacts for a host of removal techniques including natural recovery, manual cleaning, mechanical recovery, debris removal, sediment reworking, and vegetation cutting. Unified Command should also consult with NOAA's Scientific Support Coordinator and other local environmental experts available prior to executing an oil removal plan.

Minimize economic impacts: The Captain of the Port would establish a safety zone around Colonial Oil requiring all vessels to request permission prior to passing through the zone. This would effectively eliminate the possibility of vessel traffic upriver of Colonial Oil. Depending on the extent of the impact, many facilities downriver of Colonial Oil would also be impacted.

Keep stakeholders informed of response activities: Because a majority the Savannah River facilities would be impacted, information could be distributed via Marine Safety Information Bulletins over e-mail and fax. Additionally, the Captain of the Port would maintain close communication with stakeholders via the Savannah Maritime Association.

Keep the public informed of response activities: The Unified Command would issue joint press releases and possibly conduct press briefings or joint on-camera interviews. Because this scenario takes place in Chatham County, Chatham Emergency Management Agency could arrange the press briefings through their pre-established and regularly used media contacts. Broadcast Notice to Mariners would also be used to inform the public of waterway closures and recommend safe routes.

9500 List of Agreements

MOU's can be referenced in [section 4650](#) of this plan.

9600 Conversions

A user-friendly program for converting measurements of all types can be found at <http://www.onlineconversion.com/>.

9700 List of Response References

9710 Coast Guard Legal Authorities

Clean Water Act (CWA): Created in 1972, this is the principal federal statute protecting navigable waters and adjoining shorelines from pollution. Section 311 addresses pollution from oil discharges and hazardous substance releases. Key Provisions:

- Discharging oil and hazardous material into the waters of the U.S. and adjoining shorelines is PROHIBITED [CWA 311 (b)(3)(4)].

- The President shall direct all removal efforts in the case of a discharge that is a substantial threat to public health and welfare [CWA 311 (c)(2)].
- All efforts by federal, state, and local governments, and each owner and operator shall be in accordance with the National Contingency Plan (NCP) [CWA 311 (c)(3)].
- The President is required to establish regulations, methods, and procedures for removal of oil and hazardous substances as part of the National Response System [CWA 311(j)(1)(A)].
- The President is authorized to issue regulations to prevent discharges of oil from vessels and facilities [CWA 311(j)(1)(C)].
- The President is authorized to establish Area Committees to prepare Area Contingency Plans [CWA 311(j)(4)].

Oil Pollution Act of 1990 (OPA90): Created in response to the EXXON VALDEZ incident, the Oil Pollution Act of 1990 (33 U.S.C. 2701-2761) amended the Clean Water Act and addressed the wide range of problems associated with preventing, responding to, and paying for oil pollution incidents in navigable waters of the United States. It created a comprehensive prevention, response, liability, and compensation regime to deal with vessel- and facility-caused oil pollution to U.S. navigable waters. It also created the Oil Spill Liability Trust Fund. Key Provisions:

- OPA90 greatly increased federal oversight of maritime oil transportation, while providing greater environmental safeguards by:
- Setting new requirements for vessel construction and crew licensing and manning,
- Mandating contingency planning,
- Enhancing federal response capability,
- Broadening enforcement authority,
- Increasing penalties,
- Creating new research and development programs,
- Increasing potential liabilities; and,
- Significantly broadening financial responsibility requirements.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA): CERCLA, also known as the Superfund Act, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Key Provisions:

- Established the federal government's authority to designate certain substances as hazardous to the environment and public health [CERCLA 102].
- Established the responsibilities of a vessel or facility in the event of a discharge [CERCLA 103].

- Established response authorities in the event of a discharge that poses a substantial threat to the environment and public health [CERCLA 104].
- Established the National Contingency Plan as the guideline for response to hazardous substances, pollutants, and contaminants [CERCLA 105].
- Established the federal government's authority to respond beyond the actions of the State to protect public health, welfare, or the environment [CERCLA 106].
- Established liability provisions for responsible parties [CERCLA 107].

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL.

CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986. More about CERCLA: <http://www.epa.gov/superfund/policy/cercla.htm>

Superfund Amendment and Reauthorization Act (SARA): Created in 1986, amending CERCLA; it raised the limit on removal costs to \$2 million and time on removal actions to 1 year. It also authorized EPA to reimburse local governments for costs incurred in response to hazardous substance incidents and mandated that hazardous waste sites targeted for removal must comply with the Resource Conservation and Recovery Act (RCRA). Key Provisions:

- Established requirements for public participation in Superfund response activities [SARA 117].
- Established the applicability of Superfund laws to the federal government [SARA 121].
- Required the Secretary of Labor to establish safety provisions for employees during hazardous waste operations (e.g., HAZWOPER standards in 29 CFR a910.120) [SARA 126].

Executive Order 12580:

- Delegated the responsibility vested in the President by CERCLA to various agencies

- Established a National Response Team (NRT) for Superfund matters
- Established the Administrator of the EPA as chairman of the NRT and a representative from the Coast Guard as the vice-chairman.
- Delegated authority to Coast Guard OSCs to issue administrative orders for releases and threatened releases involving the coastal zone
- Designates DOD/DOE as OSC for releases originating from DOD/DOE facilities
- Assigns FEMA authority to conduct temporary and permanent evacuations
- Designates the Public Health Service responsibility for investigating complaints of illnesses attributable to hazardous substance releases

Executive Order 12777:

- Amended Executive Order 12580
- Delegated the responsibility vested in the President by CWA/OPA to various agencies
- Specified actions to be followed in the event of an accidental discharge or release of oil or a hazardous substance

Resource Conservation and Recovery Act (RCRA): RCRA is our nation's primary law governing the disposal of solid and hazardous waste. Congress passed RCRA on October 21, 1976 to address the increasing problems the nation faced from our growing volume of municipal and industrial waste. RCRA, which amended the Solid Waste Disposal Act of 1965, set national goals for:

- Protecting human health and the environment from the potential hazards of waste disposal.
- Conserving energy and natural resources.
- Reducing the amount of waste generated.
- Ensuring that wastes are managed in an environmentally-sound manner.

To achieve these goals, RCRA established three distinct, yet interrelated, programs:

- The solid waste program, under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
- The hazardous waste program, under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal – in effect, from "cradle to grave".
- The underground storage tank (UST) program, under RCRA Subtitle I, regulates underground storage tanks containing hazardous substances and petroleum products.

More about RCRA: <http://www.epa.gov/osw/laws-reg.htm>

9720 Coast Guard Directives

A listing of relevant Commandant's Instructions and Manuals can be accessed at: <http://www.uscg.mil/directives/>.

9730 District Seven Policy Letters

[RESERVED for development by the Commandant of the Coast Guard and the Commander, Seventh Coast Guard District]

9740 Geographic Response Plans

9740.1 Geographical Areas

There are five geographical area types that are routinely encountered during a response around the Georgia coastal areas. The strategies outlined are recommendations and should not be adhered to in a strict manner because the variables involved in the proper mitigation of a spill are different from case to case. The greatest effect on controlling a spill comes from good decision-making of the person(s) in charge. In the event of a worst-case discharge, quick, decisive actions are the key to a successful response.

The five geographical area types in the Georgia COTP zone are:

Marshes, Tidal Flats and Seagrass Beds: These are high sensitivity areas where cleanup is not generally recommended because heavy equipment and laborers may cause more damage than good. Since a complete cleanup is nearly impossible, the best strategy is to protect the area prior to contamination. Considerations on whether a cleanup should be carried out would depend, in part, upon seasonal variations such as migrating bird patterns. The most effective procedure, if indeed a cleanup is carried out, would be skimmers along the waters edge and the deployment of deflection boom in order to shield the area from any recontamination. Tidal fluctuations are a prime concern. Another is the shallow depth of water making access by water more difficult. Strict avoidance of land contact should be made. The area should only be accessed via waterways. Booming or skimming operations would be difficult if not impossible during maximum flood or ebb tide. These areas are home to sea grasses, and numerous fauna, aquatic and fowl. Most often these are the sensitive areas requiring special attention.

Sand Beaches: Cleanup along sandy beach depends on the amount and type of fuel involved. If a sandy shoreline has heavy and extensive fuel coverage the use of heavy industrial equipment such as bulldozers or road graders could be utilized (this would be followed by the replacement of the sediment). In the case of minor ecological damage, a manual cleanup may be performed, if possible, which would eliminate the removal

of sediment and the overall effect on the ecological balance of a particular beach. Cleanup efforts must include effective measures to protect nesting sea turtles and shore birds.

Different types of cleanup methods may involve rock-washing, use of sorbent equipment, harbor boom for corralling a product against land and vacuum trucks to pick up the product.

Given the economic aspects of the tourist trade on the local economy, beach contamination and cleanup is very visible to the public and the press.

Bays and Water Inlets: The most effective weapon to combat an inlet-waterway spill is a quick response. The prompt, proper placement of deflection booms or corralling oil in boom for open water pockets can help reduce the spread of a product. Deflection boom should be used to guide the leading edge of a spill into a natural collection point where the product can be skimmed, vacuumed or absorbed with sorbent equipment.

Offshore Areas: In-areas offshore, the use of dispersant materials may be beneficial depending on on-scene weather, product type, quickness of application after spill, proper application and current patterns. The proper use of dispersants (many miles offshore) can minimize shoreline impact. A combination of unmanageable seas and wind conditions could impede the use of other forms of mitigation such as skimmers, booms or sorbents. A spill out at sea may not be as bad as a near shore spill because the effects of nature affect mitigation process as the product can be broken up or dissipate long before it creates a problem along the coastline. Refer to Annex G for more information regarding to dispersant use.

Islands: Along the West Coast, there are many barrier islands, which are inhabited by various species of wildlife. An oil spill in these areas could have a devastating impact on the ecological balance of a particular habitat. The use of protective booms placed along the shoreline of islands as well as skimmer usage is the most effective means in reducing the effects of a spill.

9750 Environmental and Tactical Maps (ESI and GRP)

For the MSU Savannah AOR, there are two sets of maps produced for reference in oil spill response. These are the Environmental Sensitivity Index Atlas Maps (Environmental) and the Geographic Response Plan Atlas Maps (Tactical). Each atlas covers the same geographic areas, but with different map themes (Environmental vs. Tactical). The maps from each atlas are based upon the same grid index for easy cross-referencing. This approach was chosen to minimize clutter on a single map.

[Environmental Maps](#) - The environmental sensitivity index (ESI) maps of the AOR are contained within an atlas titled "The Sensitivity of Coastal

Environments and Wildlife to Spilled Oil Atlas – Georgia – June 1997” and will aid in responding to a spill or hazardous substance release. They provide information on shoreline type, habitats, wildlife, and socio-economic features most sensitive to spilled oil in a map and a biological table on the rear of each map. Included are species threatened or endangered status, months present, activity (nesting/breeding), and relative concentration in the area. Shoreline is mapped at a scale of 1:24 k and classified on a scale of 10 to 1 (with 10 being Most Sensitive and 1 being Least Sensitive to spilled oil). These classifications are based upon a shorelines ecological sensitivity to spilled oil, the relative wave energy for natural cleansing, and the shoreline type’s difficulty of cleanup. There is extensive explanation of recommended cleaning activities and means of protection for each shoreline type mapped within the Introduction section of the atlas.

[Tactical Maps](#) – A separate tactical or Geographic Response Plan (GRP) atlas has been produced in 2011 for the AOR. The map extents are the same as those of the Environmental Maps so that each map may be viewed side by side showing the same area but with different themes. The GRP maps contain Area Committee and Resource Expert identified sites sensitive to spilled oil and protective booming strategies that depict suggested placement of boom to protect resources within the area. The maps in this atlas contain data sheets on each sensitive site which provide critical first response data for priority and response activities, key contacts, listed resources, and other geographic-specific information. Listed resource trustees should be contacted to participate in establishing protection priorities and response activities. Trustees are equipped with updated information on the status of resources, which may not be depicted on the maps so should thus quickly become part of the response.

[Additional Information](#) - The Environmental Sensitivity Index (ESI) maps of Georgia are a planning tool that shall be viewed when determining how to control a spill in Coastal Georgia. A current copy of these maps is maintained by Marine Safety Unit Savannah. Information on ESI maps and ordering information can be obtained through NOAA on the World Wide Web at: [http://response.restoration.noaa.gov/resource_resourcetopic.php?RECORD_KEY%28resourcetopics%29=resourcetopic_id&resourcetopic_id\(resourcetopics\)=37](http://response.restoration.noaa.gov/resource_resourcetopic.php?RECORD_KEY%28resourcetopics%29=resourcetopic_id&resourcetopic_id(resourcetopics)=37)

The [Environmental Sensitivity Index \(ESI\) maps](#) of Georgia are available as an electronic hyper-linked PDF version on the Digital ACP DVD and website at <http://ocean.floridamarine.org/acp/savacp/Maps.html>

The [Geographic Response Plan Atlas maps](#) of Georgia will also be available as a hyper-linked PDF version on the Digital ACP DVD and website at <http://ocean.floridamarine.org/acp/savacp/Maps.html>

9760 Technical References

Organization	Web Address	Items of Interest
National Response Team (NRT)	www.nrt.org	National Contingency Plan, Regional Response Plans, and

Organization	Web Address	Items of Interest
		National Response Policies
Environmental Protection Agency (EPA)	www.epa.gov	Inland Response Policy
EPA RRT IV	www.epa.gov/region4/	EPA RRT IV Policies on In Situ Burn, Bioremediation, Wildlife Response, and Dispersant Use.
U.S. Fish and Wildlife Service	www.fws.gov/	Emergency consultation policy
National Marine Fisheries Service	http://sero.nmfs.noaa.gov/	ESA & EFH information
National Park Service	www.nps.gov/	List of parks by geographic region
Georgia Department of Natural Resources (GA DNR)	http://www.gaepd.org/	State Response Policies to Oil and Hazardous Materials, State Waste Management Policy
National Pollution Funds Center (NPFC)	http://www.uscg.mil/hq/npfc/	OSLTF and CERCLA Fund Access Information and Expenditures guide Book, and Cost Documentation Information.
CHRIS Manual	http://www.chrismanual.com/	Product Information
Emergency Response Guidebook	http://www.tc.gc.ca/canutec/erg_gmu/erg2000_menu.htm	Product Information
NIOSH Pocket Guide	http://www.cdc.gov/niosh/npg/npg.html	Product Information
Incident Management Handbook	2001 PDF website: http://www.uscg.mil/hq/nsfweb/download/IMH/IMH-2001.pdf or 2006 PDF: Incident Management Handbook	Specific Information relating to responsibilities of incident responders
Oil Response in Fast Currents- Field Guide	http://www.epa.gov/oilspill/pdfs/hansenpaper.pdf	Quickly deploy effective fast-water spill response

9770 Marine Firefighting Checklist

See the [“Coastal Georgia Marine Fire Fighting Contingency Plan”](#)

9780 Rapid Salvage Survey Form

See MSU Savannah’s [“Salvage Response Plan for Transportation Security Incidents”](#), Annex 10200 to the COTP Savannah Area Maritime Security Plan.

9790 Salvage Plan and Information Checklist

See MSU Savannah’s [“Salvage Response Plan for Transportation Security Incidents”](#), Annex 10200 to the COTP Savannah Area Maritime Security Plan.

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