Alabama, Mississippi, and Northwest Florida Area Contingency Plan (AL, MS, and NWFL ACP)

Risk Analysis: Area Planning Scenarios

Annex 1a May 2022

Record of Changes

Change Number	Change Description	Section Number	Change Date	Name
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Alabama, Mississippi, and Northwest Florida Area Contingency Plan

Table of Contents

1000 Introduction	1
1100 Average Most Probable Discharge	1
1200 Maximum Most Probable Discharge	1
1300 Worst Case Discharge	1
1400 Spill and Discharge History	2
1500 Risk Assessment	2
1600 Vulnerability Analysis	2
1700 Planning Assumptions – Background Information	3
2000 Possible Sources of WCD	3
2100 Offshore Facilities/Pipelines	3
2200 Onshore Facilities/Pipelines/Marine Terminals	3
3000 Vulnerability Analysis	4
3100 Planning Assumptions 3101 Offshore Facilities 3102 Response Resources for WCD Offshore Platform Scenarios 3103 Planning Scenarios	4 5
List of Tables	
Table 1: Spill and Discharge History	
Table 2: List of Blowout and Firefighting Specialists	5

1000 Introduction

The ACP has been developed by the Sector Mobile Captain of the Port, in consultation with the Alabama, Mississippi, Northwest Florida Area Committee, and is based on an assessment of all potential sources of discharges in this area meeting the provisions of 40 CFR §300.210(c) of the NCP. The ACP is intended to be the fundamental element for building confidence that the plan addresses the necessary elements for planning a successful response within the area.

1100 Average Most Probable Discharge

The Coast Guard has determined Average Most Probable Discharge as the lesser of 50 barrels or 1% of a Worst Case Discharge (WCD) for an offshore or onshore facility/pipeline/marine terminal, or the lesser of 50 barrels or 1% of cargo from a Tank Vessel during cargo transfer operations. This value was adopted for consistency with Federal Vessel and Facility Response Plans.

1200 Maximum Most Probable Discharge

The Coast Guard has defined Maximum Most Probable Discharge as the lesser of 1,200 barrels or 10% of the volume of a WCD for an offshore facility or onshore facility/pipeline/marine terminal; 2,500 barrels of oil for a vessel with an oil cargo capacity equal to or greater than 25,000 barrels; or 10% of the vessel's oil cargo capacity for vessels with a capacity less than 25,000 barrels for Tank Vessels. These values were adopted for consistency with Federal Vessel and Facility Response Plans.

1300 Worst Case Discharge

As defined by section 311(a) (24) of the Clean Water Act, the definition of a WCD in the case of a vessel is a discharge in adverse weather conditions of its entire cargo, and in the case of an offshore facility or onshore facility/pipeline/marine facility, the largest foreseeable discharge in adverse weather conditions. This definition has been adopted for consistency with Federal Vessel and Facility Response Plans.

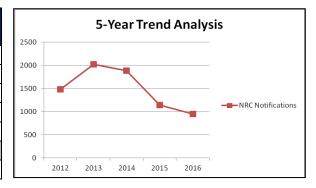
At a minimum, this annex addresses the following area planning elements:

- 1. Oil spill discharge and hazardous substance release history.
- 2. A risk assessment of potential sources of discharges within the area.
- 3. A description of planning assumptions describing a realistic assessment of the nature and size of possible threat and resources at risk.
- 4. Planning scenarios that provide for a Worst Case Discharge (WCD), a Maximum Most Probable Discharge (MMPD), and an Average Most Probable Discharge (AMPD) from a vessel, offshore facility, or onshore facility operating in the area as applicable.

1400 Spill and Discharge History

Table 1: Spill and Discharge History

Year	NRC Notifications
2012	1485
2013	2023
2014	1883
2015	1145
2016	948
Total	7484
5 Year Avg.	1497



In the 5-year period spanning 2012 - 2016, Sector Mobile continued to receive a high volume of oil spill / hazardous substances release notifications. The vast geographical area covered by USCG Sector Mobile attributes to these high notification numbers; however, in the 4-year period spanning 2013 - 2016 the analysis depicts a strong negative trend in reported discharges/releases within the Area of Responsibility.

1500 Risk Assessment

The Sector Mobile planning area contains 5 deepwater ports (Gulfport, Pascagoula, Mobile, Pensacola, and Panama City). Primary transportation routes and the navigational risks associated with each can be found in the National Oceanic and Atmospheric Administration (NOAA) Coast Pilot 5, Chapter 5. In addition to deep draft vessel traffic transiting the ports, there is a high volume of tugboat and barge traffic transiting the Gulf Intracoastal Waterway and the inland rivers of the Mobile COTP zone.

Of the five deepwater ports, the greatest risk for a major spill is in the Pascagoula area. The Port of Pascagoula has the highest volume of tank vessel traffic in the Mobile planning area, and has several large refineries and chemical plants.

There are numerous fixed platforms in the Mobile planning area, all of which are located in the western portion of the AOR. These platforms transfer petroleum products to shore via thousands of miles of pipelines.

1600 Vulnerability Analysis

The entire coastline of Mississippi, Alabama and Northwest Florida can be considered environmentally sensitive due to salt and freshwater marsh areas that make up the coastal wetlands. Additionally, a large part of the Mobile coastline consists of the Gulf Islands National Seashore (GINS), which stretches 160 miles from Cat Island in Mississippi to the eastern tip of Santa Rosa Island in Florida Horn and Petit Bois Islands located in Mississippi are federally designated wilderness areas. The deepwater entrance to Pascagoula harbor is the Horn Island Pass.

For more information on environmentally sensitive areas, refer to the Sector Mobile Geographic Response Plan (GRP).

1700 Planning Assumptions – Background Information

Subcommittees review applicable sections & are evaluated by Chairman and Steering Committee for final approval. Area Contingency Plans shall be reviewed and updated annually by the Area Committee. Plans shall be reviewed to ensure all information is current, and in particular, the following areas shall be looked at:

- Emergency Notification List
- Sensitive Areas
- Response Strategies
- Dispersant Approval

Any changes to the plan must be noted on the Record of Changes page.

The FOSC shall periodically conduct drills of removal capability, without prior notice, in areas for which Area Contingency Plans are required, to assess the effectiveness of such plans and relevant Vessel/Facility Response Plans. These drills may include participation by Federal, State, local agencies, owners and operators of vessels/facilities in the area, and private industry.

2000 Possible Sources of WCD

The sections below describe the scenarios surrounding the source of a worst case discharge (WCD) scenario for offshore facilities, onshore facilities/pipelines/marine terminals, tank vessels and nontank vessels.

2100 Offshore Facilities/Pipelines

See Table 4 of Section 3301 of the Alabama, Mississippi, and Northwest Florida Area Contingency Plan for OCS facilities and pipeline WCD volumes. Also see Section 3303: Gulf of Mexico Offshore Technical Information for Area Contingency Planning in the ACP base plan for OCS WCD scenarios and modeling.

2200 Onshore Facilities/Pipelines/Marine Terminals

The WCD from an onshore facility, pipeline, or marine terminal will be contingent on the specific location, type of product, weather conditions and scenario in which the discharge occurs. The Sector Mobile planning area is home to numerous onshore petrochemical facilities. Additionally, these facilities utilize thousands of miles of pipelines to receive feed stocks and transport products to other facilities and terminals.

3000 Vulnerability Analysis

The Sector Mobile Captain of the Port zone includes many areas that are considered vulnerable for the effects of an oil spill. The potential effects of the spill could affect human health, property, and the environment. Information taken from real world events and spill trajectories has shown that a WCD from any source could have a devastating effect on fish, wildlife, and sensitive environments in the area. The analysis shows that the following items could be vulnerable from the effects of a major oil spill in the area:

- (1) Water intakes (drinking, cooling, or other)
- (2) Businesses
- (3) Residential areas
- (4) Wetlands and other sensitive environments
- (5) Fish and wildlife
- (6) Endangered flora and fauna
- (7) Recreational areas
- (8) Marine transportation system
- (9) Utilities
- (10) Other areas of economic importance (beaches, marinas).
- (11) Unique habitats or historical sites.

A WCD from a Very Large Crude Carrier tank vessel or an offshore/onshore facility would most likely impact these vulnerable and sensitive environments, which are identified and described in Section 9000: Environmentally and Economically Sensitive Environments, and in Section 10000: Fish and Wildlife and Sensitive Environments Plan (FWSEP) of the ACP base plan. The strategies and tactics used to protect, recover, and mitigate the effects of a WCD are addressed in Section 6400: Oil Spill Containment, Recovery and Cleanup of the ACP base plan.

3100 Planning Assumptions

The probability of a WCD occurring in the area is low. However, offshore facility operations, large crude carrier vessel transits, navigational hazards, and the operational activities associated transfer, handling, and storage of oil, along with the activities associated with offshore oil and gas exploration and production within the area provide high consequence situations for a WCD. Factor in natural disasters such as tropical storms and other severe weather events, the likelihood of a major spill occurring in the area increases significantly.

3101 Offshore Facilities

Please see Section 3303 of the ACP base plan for information related to oil and gas exploration and production.

3102 Response Resources for WCD Offshore Platform Scenarios

For a list of the most up to date offshore response resources please see the Marine Well Containment Company (\underline{MWCC}) or the \underline{HWCG} websites; additional links to offshore resource may be found in Section 7000 of the ACP base plan.

Table 1: List of Blowout and Firefighting Specialists

Firefighting Boats	
Edison Chouest Offshore, Inc Galliano, LA	(985) 601-4444
Jackup Boats	
Cudd Energy Service	
Houston, TX	(832)295-5555
Houston, TX Toll Fee	(800) 899-1118
Robstown, TX	(361) 387-8521
Robstown, TX Toll Fee	(800) 762-6557
Danos & Curole - Larose, LA	(985) 693-3313
Global Industries	
Carlyss, LA	(337) 583-5000
Toll Free	(800) 256-7587
Tetra Applied Technologies – Belle Chasse, LA	(504) 394-3506
Firefighting Experts	
Boots & Coots - Houston, TX – Toll Free	(800) 256-9688 / (281) 931-8884
Cudd Energy Service / Houston, TX	(713) 849-2769 / (832) 295-5555
Toll Free	(800) 899-1118
Wild Well Control - Houston, TX	(281) 784-4700
Williams Fire & Hazard Control	
Vidor, TX	(281) 999-0276
Alternate Number	(409) 727-2347

3103 Planning Scenarios

Given the applicable conditions described above, the WCD volumes from all potential sources is listed in the table below. The MMPD and the AMPD scenario volume is calculated based on a fixed number established for an offshore facility, an onshore facility/pipeline/marine terminal, or a percentage of the WCD rate from each potential source. For tank and non-tank vessels, the MMPD and the AMPD scenario volume is calculated based on a fixed number, a percentage of the cargo capacity, or the cargo transfer rate.