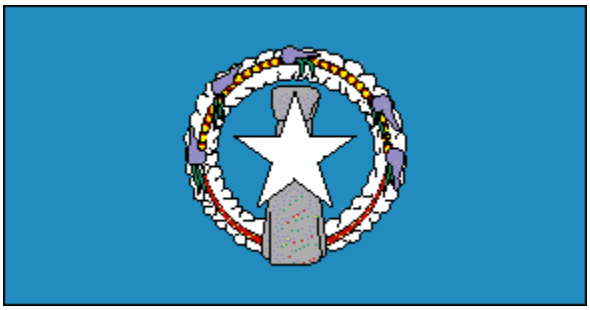
Mariana Islands Area Contingency Plan (MIACP)



July 2008 W/Change 1 DTD 15 Oct 15

Developed by the MIACP Committee

U.S. Department of Homeland Security
United States Coast Guard

Commander
U. S. Coast Guard
Sector Guam

PSC 455 BOX 176
FPO AP 96540-1056
Staff Symbol: (s)
Phone: (671)355-4801
Fax: (671)355-4852

CGSECGUCHGNOTE 16471
15 Oct 15

CGSECTOR GUAM CHANGE NOTICE 16471

Subj: CH-1 TO MARIANA ISLANDS AREA CONTINGENCY PLAN (MIACP) JUL 2008

1. PURPOSE. This Sector Guam Change Notice publishes a change to the Mariana Islands Area Contingency Plan (MIACP) 2008.

2. ACTION. All members of the MIACP committee shall review this notice and be familiar with the Mariana Islands Area Contingency Plan (MIACP) July 2008 with Change 1.

3. DIRECTIVES AFFECTED. With the addition of this Sector Guam Change Notice, the Mariana Islands Area Contingency Plan (MIACP) July 2008 is updated.

4. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel, MIACP Committee, and the Mariana Islands Spill Management Team.

5. MAJOR CHANGES.

   a. Section 3000 (Operations) of the MIACP General Plan.

   b. Section 8000 (Marine Firefighting) of the MIACP General Plan.

   c. Section 9000 (Appendices) of the MIACP General Plan.

6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental considerations were examined during the development of this notice and have been determined to be not applicable.

DISTRIBUTION – SDL No. 167

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A																										
B																										
C																										
D																										
E																										
F																										
G																										
H																										

NON-STANDARD DISTRIBUTION: Sector Guam, CGC Assateague, CGC Washington, Station Apra Harbor, CGC Sequoia, Mariana Islands Area Contingency Plan Committee.

7. DISTRIBUTION. No paper distribution will be made of this notice. An electronic version will be located on USCG Homeport (https://homeport.uscg.mil/guam), in the Area Contingency Plan section.

8. PROCEDURE. Remove and replace the following sections of the Mariana Islands Area Contingency Plan (MIACP):

Remove	Replace
Pages vi and vii	
Pages 1-i through 1-v	Page 1-i through 1-iii
Pages 1-11 through 1-13	Pages 3000-1 through 3900-1
Page 1-28	Pages 8000-1 through 8000-29
Pages 1-29 through 1-30	Pages 9000-1 through 9900-1
Pages 2-I through 5-14	
Section 6 Appendices	

9. RECORDS MANAGEMENT CONSIDERATIONS. This instruction has been evaluated for potential records management impacts and has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 et seq., National Archives and Records Administration (NARA) requirements, and the Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy does not have any significant or substantial change to existing records management requirements.

10. FORMS/REPORTS. None.

11. REQUEST FOR CHANGES. For changes to this Notice, please contact USCG Sector Guam Contingency Planning and Force Readiness at telephone (671) 355-4941/4889.

J. B. PRUETT /s/
Captain, U.S. Coast Guard
Commander, Sector Guam

U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Sector Guam

PSC 455, Box 176
FPO AP 96540-1056
Staff Symbol: (s)
Phone: 671-355-4800
Fax: 671-355-4803

16471

MEMORANDUM

From: W. R. Marhoffer, CAPT
CG Sector Guam

Reply to
Attn of:

To: Distribution

Subj: LETTER OF PROMULGATION OF MARIANA ISLANDS AREA CONTINGENCY PLAN

Ref: (a) 40 CFR 300.210, National Contingency Plan
(b) 40 CFR 300.212, National Contingency Plan
(c) Oceania Regional Contingency Plan

1. PURPOSE. The Mariana Islands Area Contingency Plan (MIACP) functions as the Commonwealth of the Northern Mariana Islands' (CNMI) and the Territory of Guam's master plan for primary response and planning coordination for conducting responses to discharges of oil and releases of hazardous substances, as required by reference (a).

2. ACTION. Members of the response communities in CNMI and Guam shall plan their response operations in accordance with this plan. The plan shall remain in effect until superseded and shall be amended as required. When changes are promulgated, they shall be entered and noted on the record of changes page. This plan is a non-registered, unclassified publication. Extracts may be made. However, portions of the plan may reference matters that are proprietary in nature and can only be reviewed on an as needed basis.

3. DIRECTIVES AFFECTED. The MIACP 2005 is hereby cancelled in its entirety. Superseded plans shall be destroyed.

4. MISSION. The MIACP is the framework by which the response community plans, coordinates and controls response operations for discharges of oil and releases of hazardous substances in the coastal zone. Members of the response community shall periodically exercise this plan in accordance with reference (b).

5. IMPROVEMENTS. In an effort to make the MIACP more useful for the response community, the following improvements and modifications have been made to this plan:

a. The development of a General MIACP Section. This section primarily contains and references regulatory information in accordance with reference (c). The Oceania Regional Contingency Plan can be found at the Oceania Regional Response Team website: http://www.nrt.org/production/NRT/RRTHome.nsf/AllPages/rrt_orrt_home.htm?OpenDocument

b. The development of MIACP individual geographical sections. This section of the MIACP consists of response information specific to the islands of Guam, Saipan, Tinian, and Rota. This revised MIACP consists of response zones using National Oceanic and Atmospheric Administration Environmental Sensitivity Index (ESI) Maps. Each response zone has distinct geographic, current, and sensitive area characteristics that require the response community to develop different strategies in order to effectively mitigate discharges of oil or releases of hazardous substances throughout the Mariana Islands. For example, Guam has been divided into 4 response zones consisting of ESI maps 1 through 13. Saipan has been divided into two response zones consisting of ESI maps 24 through 27. Tinian has been divided into one response zone consisting of ESI maps 19 through 23. Rota has been divided into one response zone consisting of ESI maps 14 through 17.

c. The development of MIACP pre-scripted initial Incident Action Plans (IAPs). Each individual geographical section of the MIACP will ultimately contain completed specific response zone IAPs to support incident management actions and strategies in accordance with the National Response Framework and Homeland Security Presidential Directive (HSPD) 5, Management of Domestic Incidents. The IAPs will also provide a means to incorporate "best-practices" response approaches necessary to mitigate average most probable, maximum most probable and worst case discharges which are outlined in the National Preparedness for Response Exercise Program (PREP) Guidelines.

6. The MIACP is only as useful as the accuracy of the data it contains. As such, it is imperative that the material contained herein be routinely reviewed, improved and updated. Comments and suggestions concerning this plan are encouraged and should be submitted to the Chairperson or Co-Chairpersons of the MIACP Committee via mail, electronic means, or as discussion items during the triennial MIACP committee meetings or annual executive committee meetings. Otherwise, this plan will be revised in part or in its entirety per guidance from the Federal On-Scene Coordinator, higher authority or simply by routine maintenance and lessons learned updates completed by the Executive Secretary. The current version of the MIACP can be viewed on the Coast Guard's non-secure HOMEPORT web portal http://homeport.uscg.mil by selecting "Guam" the from Port Directory.

Date: 17 JULY 2008	Date:_____	Date:_____
W. R. MARHOFFER	L. T. CRISOSTOMO	M. S. PANGELINAN
Federal On-Scene Coordinator Chairperson	Administrator, Guam EPA MIACP Committee Member	Acting Director, CNMI EMO Co-Chairperson

Distribution:

To be determined (TBD).

RECORD OF CHANGES			
CHANGE NUMBER	**DATE OF CHANGE**	**DATE ENTERED**	**BY WHOM ENTERED**
Change	15 Oct 2015	15 Oct 2015	Mr. Larry Kramer, USCG Sector Guam

TABLE OF CONTENTS

THIS PAGE LEFT IS LEFT INTENTIONALLY BLANK

1000 INTRODUCTION

1010 INTRODUCTION / AUTHORITY

Section 311 of the Federal Water Pollution Control Act (FWPCA) (33 U.S.C. 1321 (j)) is an important statutory reference that outlines the development of a National Planning and Response System. As part of this system, Area Committees have been established for each area designated by the President. These Area Committees are comprised of qualified personnel from State and local agencies as outlined in Section 4202 of the Oil Pollution Act of 1990 (OPA 90).

Area Committees, under the direction of the Federal On-Scene Coordinator (FOSC) for the area, are responsible for developing an Area Contingency Plan (ACP) which, when implemented in conjunction with the National Contingency Plan (NCP), shall be adequate to remove a worst case discharge of oil or a hazardous substance, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the geographic area.

Each Area Committee is also responsible for working with State and local officials to pre-plan for joint response efforts, including appropriate procedures for mechanical recovery, dispersal, shoreline cleanup, protection of sensitive environmental areas and protection, rescue, and rehabilitation of fisheries and wildlife. The Area Committee is also required to work with State, Territorial / Commonwealth and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

The functions of designating areas, appointing Area Committee members, determining the information to be included in Area Contingency Plans, and reviewing and approving Area Contingency Plans have been delegated by Executive Order 12777 of 22 October 1991, to the Commandant of the U.S. Coast Guard (through the Secretary of Homeland Security) for the coastal zone, and to the Administrator of the Environmental Protection Agency for the inland zone.

1100 PURPOSE OF THE MIACP

The purpose of the Mariana Islands Area Contingency Plan (MIACP) is to provide a resource document that will be used as a tool to develop and implement strategies to support a coordinated federal, local and private sector response to a discharge of oil or hazardous substance from a vessel, offshore facility, onshore facility or inland entity operating within the boundaries of Guam, Saipan, Tinian and Rota. This plan also addresses response and recovery efforts in dealing with a most probable discharge, a maximum most probable discharge, and a worst-case discharge, including discharges from fire or explosion. Planning for these three scenarios covers the expected range of spills likely to occur in these areas.

1120 COASTAL AND INLAND ZONES

The term coastal zone is defined in the current National Contingency Plan ((NCP), 40 CFR 300.5) to mean “all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, the waters of the contiguous zone, Exclusive Economic Zone (EEZ), other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters.” 40 CFR 300.5 defines Inland zone as “the environment inland of the coastal zone excluding the Great Lakes and specified ports and harbors on inland rivers.”

On an island, with its extensive coastline, it would be unproductive to create detailed maps showing the boundary between the coastal and inland zones. Instead, the following criteria is used to determine if a specific location is within the inland or coastal zone:

- Is the source of the spill in or immediately adjacent to waters used for commerce or waters affected by tide?

- If the answer is yes, then it is in the coastal zone.
- If the answer is no, it is in the inland zone.

An example of an 'immediately adjacent' area would be a spill that threatens waters defined by these criteria originating from a waterfront facility.

1200 SECTOR GUAM GEOGRAPHIC BOUNDARIES

In accordance with 33 CFR Part 3, Subpart 3.70-15(b), the Guam Captain of the Port Zone is comprised of the following: the Territory of Guam and the adjacent waters of the EEZ, and the Commonwealth of the Northern Mariana Islands and the adjacent waters of the EEZ.

1300 MIACP AREA COMMITTEE

The primary role of the MIACP Committees is to act as a spill preparedness and planning body. The committee describes the strategy for a coordinated federal, local and private sector response to a discharge or substantial threat of discharge of oil or a release of a hazardous substance from a vessel, offshore facility, onshore facility, or inland entity operating within the boundaries of Guam, Saipan, Tinian and Rota. There are two area components within MIACP Committee. These are the Guam Component and the CNMI component. Each component has an Executive and a General Committee. The MIACP Executive Committees act as a decision making body to assist the COTP/FOSC when addressing urgent spill response matters requiring rapid input/feedback. The COTP/FOSC of Sector Guam chairs the MIACP Committees. A goal of the MIACP Committees is to develop a consolidated MIACP Executive Committee consisting of members from both Guam and CNMI.

The complete list of MIACP Committee members can be found in the Appendix Section of the MIACP.

1310 SARA TITLE III LOCAL RESPONSE PLANS

Refer to Annex B, Section B.1.4 of the Oceania Regional Contingency Plan (ORCP).

1400 NATIONAL RESPONSE SYSTEM

Refer to Annex A, Section A.5.1 of the ORCP.

1410 NATIONAL RESPONSE TEAM

Refer to Annex B, Section B.1.1 of the ORCP.

1420 RESPONSIBLE PARTY RESPONSE POLICY

Refer to Annex A, Section A.5.4 of the ORCP.

1430 ROLE OF FEDERAL ON-SCENE COORDINATOR (FOSC)

Refer to Annex A, Section A.5.5 of the ORCP.

1440 INCIDENT COMMAND SYSTEM

Refer to Section 2000 of the General MIACP and the Incident Action Plans for Guam, Saipan, Tinian and Rota located in the Appendix Section of the MIACP.

1450 FEDERAL RADIOLOGICAL EMERGENCY RESPONSE PLAN

Response to radiological emergencies is coordinated under the Federal Radiological Emergency Response Plan (FRERP). This interagency agreement coordinates the response of various agencies, under a variety of statutes, to a large radiological accident. The lead Federal agency, defined by the FRERP, activates the FRERP for any peacetime radiological emergency which, based upon its professional judgment, is expected to have a significant radiological effect within the United States, its territories, possessions, or territorial waters and that could require a response by several Federal agencies. http://www.fas.org/nuke/guide/usa/doctrine/national/frerp.htm

1460 NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

The NCP is applicable to hazardous substance response actions taken pursuant to the authorities under Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (42 CFR 103).

1470 REGIONAL RESPONSE TEAM

Refer to Annex B, Section B.1.2 of the ORCP.

1500 STATE/LOCAL RESPONSE SYSTEM

The USCG is the lead agency for all spills in Guam's navigable waters in the event no responsible party (RP) is identified. In the event of a major spill, the appropriate local agencies in the Appendix Section of the MIACP may be activated in the Territory of Guam or CNMI governments to coordinate State actions, if needed.

1600 NATIONAL POLICY & DOCTRINE

The purpose of the National Response Policy is to ensure that all applicable laws and regulations are carried out. Those laws and regulations are intended to ensure effective and immediate removal of a discharge, and mitigation or prevention of a threat of a discharge, of oil or hazardous substances, contaminant or pollutant.

1610 BEST RESPONSE CONCEPT

The term "Best Response" means that a response organization will effectively, efficiently and safely respond to oil spills, minimizing the consequences of pollution incidents and to protect our environmental and economic interests. "Best Response" is a successful response based on achievement of certain key success factors (i.e., the things that a response must accomplish to be considered successful) as follows:

Human Health	**Public Communication**
No public injuries	Positive media coverage
No worker injuries	Positive public perception
Natural Environment	**Stakeholders Support**
Source of discharge minimized	Minimize stakeholder impact
Source contained	Stakeholders well informed
Sensitive areas protected	Positive meetings
Resource damage minimized	Prompt Handling of claims
Economy	**Organization**
Economic impact minimized	Standard Response Mgmt System
	Sufficient/Efficient Resources

1620 PUBLIC VS. PRIVATE RESOURCES UTILIZATION

The Oil Pollution Act of 1990 (OPA 90) reaffirmed the basic principle that the primary source of an oil spill preparedness and response system in the U.S. should be implemented and maintained by the private sector. It is not, nor should it be, the Coast Guard's intent to compete with the commercial oil and hazardous materials pollution response industry. The utilization of government resources in lieu of commercial resources can place the government in a competitive environment. This is not the intent of OPA 90, as it defeats the incentive for commercial enterprise to maintain equipment and trained personnel in a competitive market. The Coast Guard's pre-positioned response equipment, other publicly owned response equipment, and other initiatives under the Coast Guard's oil spill response program are only intended to supplement the oil and clean-up industry's response program or to be used if the commercial industry does not have readily available resources, and only until such time that the Federal On-Scene Coordinator (FOSC) or the Unified Command decides to release the resources.

The FOSC has the authority and responsibility in accordance with the National Contingency Plan to contain, control, and carry out response activities for the removal of a discharge posing a substantial threat to public health or welfare, or where natural resources are endangered. When the responsible party (RP) executes a suitable response at the direction and discretion of the FOSC and the Unified Command (UC), any government equipment deployed should be withdrawn as commercial equipment becomes available and is placed into service.

1630 CLEANUP ASSESSMENT PROTOCOLS AND GUIDELINES (HOW CLEAN IS CLEAN?)

When to terminate specific oil spill cleanup actions can be a difficult decision; When is clean, clean enough? The increasing cost of the cleanup and the potential damage to the environment caused by cleanup activities must be weighed against the ecological and economic effects of leaving the remaining oil in place. The decision to terminate cleanup operations is site-specific. Cleanup usually cannot be terminated while the following conditions exist:

- Recoverable quantities of oil remain on water or shores.
- Contamination of shore by fresh oil continues.
- Oil remaining on shore is mobile and may be re-floated to contaminate adjacent areas and near shore waters.

Cleanup may normally be terminated when the following conditions exist:

- The environmental damage caused by the cleanup efforts is greater than the damage caused by leaving the remaining oil or residue in place.

• The cost of cleanup operations significantly outweighs the environmental or economic benefits of continued cleanup.
• The FOSC, after consultation with the members of the Unified Command, determines that the cleanup should be terminated as for worker safety reasons.

2000 Command

2100 UNIFIED COMMAND

The National Contingency Plan (NCP), as incorporated into the National Response Framework (NRF), requires FOSCs to direct response efforts and coordinate all other actions at the scene of a spill or release. The NCP further states that the basic format for the response management system is a structure that brings together federal and state agencies, and the RP to achieve an effective and efficient response. This response leadership structure is commonly referred to as the UC. The FOSCs coordinate their authority to direct response to a discharge or release with agency officials that may have authority over other aspects of the emergency in a UC. Other aspects of an emergency may include fire suppression, search & rescue, medical triage, crowd control, evacuations, etc. Under a UC, no agency with statutory authority for an emergency abdicates its authority. Conversely, Unified Commanders must reach consensus on decisions relating to the response.

2110 ALL-HAZARDS COMMAND STRUCTURE: UNIFIED COMMAND

Homeland Security Presidential Directive-5 (HSPD-5) was enacted for the purpose of calling for the development of a national incident management system to provide a consistent nationwide approach for federal, state, tribal and local governments to work together to prepare for, prevent, respond to and recover from domestic incidents, regardless of cause, size or complexity. The UC represents an “all-hazards” command and management structure based on the National Incident Management System (NIMS). When there is more than one jurisdiction or agency with authority for an emergency, the Incident Commander (IC) should establish a UC consisting of the federal IC (i.e., FOSC), the State’s IC, the Local IC and the Responsible Party IC. The IC/UC is responsible for assigning individuals from within the response community (federal, state, local or private), as necessary, to fill key ICS management positions. The IC/UC is responsible for managing all functional positions until they assign that position to another individual. These assignments will be predicated on the nature/scale of the discharge and the need for extensive staffing.

2120 COMMAND AND GENERAL STAFF – ICS

In order to assist a UC, Command Staff positions are established to assign responsibility for key activities not specifically identified in the General Staff functional elements. These positions may include the Public Information Officer, Safety Officer and Liaison Officer, or other positions assigned by the IC. In order to manage an incident, the ICS organization is built around four major management functions that are applied to the response of any incident, whether large or small. The following functions represent the General Staff: Operations, Planning, Logistics, and Finance. A major

advantage of the ICS organization is the ability to expand and contract organizationally as required by the incident. For some incidents, only a few of the organization's functional elements may be required. For larger or more complicated responses, additional positions exist within the ICS framework to meet virtually any need.

For more information, refer to the Unified Command chapter of the U.S. Coast Guard Incident Management Handbook (IMH).

2130 UNIFIED COMMAND RESPONSIBILITIES

For more information, refer to the Command Staff chapter of the IMH.

2140 COMMAND STAFF RESPONSIBILITIES

For more information, refer to the Command Staff chapter of the IMH.

2150 COMMAND RESPONSE AUTHORITIES

Federal OSCs have command response authorities pursuant to Oil Pollution Act of 1990 (OPA 90), CERCLA and the NCP. Federal OSCs assume the role of Federal Incident Commander for responses under their jurisdictional authorities (i.e., discharges of oil to navigable waters of the United States, releases of hazardous substances, and releases of pollutants or contaminants that pose a substantial threat to public health, welfare or the environment). EPA OSCs have individual emergency contracting procurement authority up to $250,000 to take immediate actions to protect the public and the environment from the hazards posed by a discharge or release and to initiate cleanup operations until further funding, if needed, is authorized by the Agency. Additionally, Federal OSCs have the authority to request response support and assets from other Federal agencies under the National Response System as described in the NCP.

2160 FEDERAL RESPONSE

Refer to Section 2150 of the General Section of the MIACP.

2170 FOSC RESPONSE COORDINATION

Depending upon jurisdictional applicability the USCG or EPA OSC directs Federal response efforts and coordinates all other Federal efforts at the scene of a discharge or release. The FOSC may monitor local or private entity actions to remove a discharge or release and may provide technical assistance to local or responsible party response personnel.

2180 GUIDANCE FOR SETTING RESPONSE OBJECTIVES

In support of U.S. policy, the paramount response strategy that should be implemented by the UC is to allocate resources to their optimum use; i.e., the most oil recovered, contained, or prevented from being discharged per expenditure of resources. The only variance from this strategy should be considerations of safety and the protection of critical environmentally sensitive or economically, culturally or archeologically significant resources that may demand protection even though manpower and equipment may be deployed elsewhere to more efficiently recover oil.

2200 SITE SAFETY PLAN

To ensure the safety of all responders to effectively mitigate a response, the development of a site safety plan (SSP) is required. The use of Incident Command System (ICS) Form 208 (Site Safety and Control Plan) is encouraged. In addition, the U.S. Department of Labor's Occupational Safety & Health Administration (OSHA) has provided responders with a standardized SSP format that can be found at: http://www.osha.gov/SLTC/etools/ics/safe_off.html .

2210 SAFETY OFFICER

The Safety Officer is responsible for the safety of all activities associated with the response and compliance with applicable safety laws and regulations. Also, the Safety Officer is responsible for assessing hazardous and unsafe situations and developing measures for assuring personnel safety. This responsibility is limited to the boundaries of the response and does not extend to public safety measures not under the incident control and authority of the IC/UC.

For more information, refer to the Command Staff chapter of the IMH.

and http://www.dem.ri.gov/topics/erp/8_2_4.pdf

2230 SAFETY ASSISTANCE AVAILABLE

Refer to Annex F, Section F.1 of the ORCP.

2300 INFORMATION

The importance of well-managed information and communication is paramount to the success of managing an incident. Internal communication resources / capabilities must be effectively coordinated in order to ensure mission success. External communications must also be timely and accurate in order to keep the public calm and informed. Without sound internal and external communication processes and protocols, the efforts to respond to an incident can be greatly impaired (in the case of internal communications) or perceived to be ineffective by the public (in the case of external communications).

2310 INFORMATION OFFICER

The Joint Information Center (JIC) is a facility established within or near the Incident Command Post where the Information Officer and staff can coordinate and provide information on the incident to the public, media and other agencies. The JIC is normally staffed with representation from the FOSC, state and local incident command authorities, RP and other agencies in UC.

For more information, refer to the Command Staff chapter of the IMH.

2320 JOINT INFORMATION CENTER (JIC)

For more information, refer to the IMH.

2400 LIAISON

For more information, refer to the IMH.

2410 LIAISON OFFICER

The Liaison Officer is responsible for establishing liaison, as needed, with representatives of assisting and cooperating agencies. The Liaison Officer will act as a link between agencies and interests both inside and outside of the UC.

For more information, refer to the Command Staff chapter of the IMH.

SECTION 3000

OPERATIONS

TABLE OF CONTENTS

3000 OPERATIONS SECTION

The Operations Section is responsible for directing the tactical actions to meet incident objectives. See Chapter 7 of the Incident Management Handbook COMDTPUB P3120.17B and Operation Section Chief Job Aid located at (https://homeport.uscg.mil/ics) for duties and responsibilities.

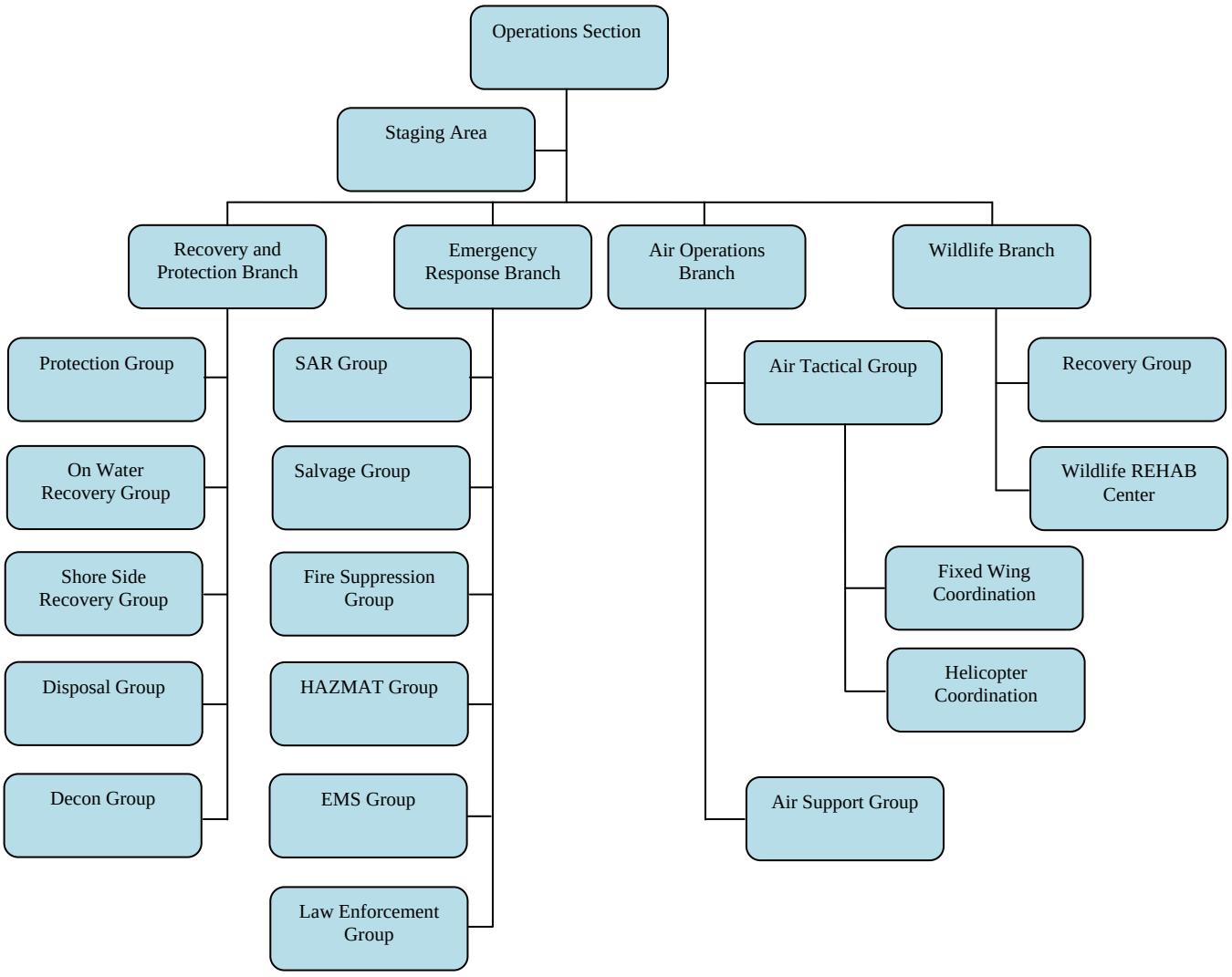
In general, the following response priorities will be followed:

- Protect human life and health.
- Minimize ecological impacts.
- Minimize economic and public impacts.

SECTION 3100

OPERATIONS SECTION ORGANIZATION

3100 Operations Section Organization



The Operations Section is responsible for all field activities directly applicable to the primary mission. The section also directs the preparation of unit operational plans, requests or releases resources makes expedient changes to the Incident Action Plan as necessary and reports such to the Incident Commander (IC/UC). The Operations Section is comprised of the Recovery and Protection Branch, Emergency Response Branch, Air Operations Branch, and Wildlife Branch, each with subordinate units. The IC/UC will determine the need for a separate Operations Section at an incident or event. Until Operations is established as a separate Section, the IC/UC will have direct control of tactical resources. See Appendices 9100 Required Emergency Notifications and 9200 Personnel and Services Directory for response resources and additional information including Geographic Response Plans and Chemical Countermeasures.

SECTION 3100

OPERATIONS SECTION ORGANIZATION

The Operations Section is organized as follows:

- Staging Area Manager. Staging Areas are locations set up at an incident where resources can be placed while awaiting a tactical assignment.
- Recovery and Protection Branch. This branch is responsible for the deployment of equipment, the recovery of pollutants from the environment.
  - Protection Group. This group is responsible for the deployment and maintenance of equipment deployed to prevent areas from becoming contaminated.
  - On-Water Recovery Group. This group is responsible for the deployment and maintenance of equipment deployed in the On-Water environment.
  - Shoreside Recovery Group. This group is responsible for the deployment and maintenance of equipment deployed in the shoreside environment.
  - Disposal Group. This group is responsible for the removal and final disposition of materials collected and contaminated during the incident.
  - Decontamination (DECON) Group. This group is responsible for the cleaning of equipment contaminated during the incident.
- Emergency Response Branch. This branch is responsible for responding to the emergent issues that occur during the incident.
  - Search and Rescue (SAR) Group. This group is responsible for search and rescue operations that occur during the incident.
  - Salvage Group. This group is responsible for salvage and recovery operations that occur during the incident.
  - Fire Suppression Group. This group is responsible for the fighting of fires that occur during the incident.
  - Hazardous Materials (HAZMAT) Group. This group is responsible for coordinating the response to Hazardous Materials (HAZMAT) and Substances (HAZSUB) during the incident.
  - Emergency Medical Services (EMS) Group. This group is responsible for the recovery and evacuation of persons affected by the incident.
  - Law Enforcement Group. This group is responsible for the law enforcement support needed during the incident.
- Air Operations Branch. When activated, the Air Operations Branch is responsible for managing all air operations at an incident. This includes both tactical and logistical operations. Prior to activation, management of aircraft operations is the responsibility of the Operations Section Chief.
  - Air Tactical Group. This group is responsible for coordinating the airborne tactical operations of fixed and/or rotary-wing aircraft operating on an incident.
    - Helicopter Coordinator. This person is responsible for the coordinating the actions of rotary-wing aircraft assigned to the incident.
    - Fixed Wing Coordinator. This person is responsible for the coordinating the actions of fixed wing aircraft assigned to the incident.
  - Air Support Group. This group provides logistical support for all aircraft assigned to an incident.
- Wildlife Branch
  - Wildlife Recovery Group. This group is responsible for the rescue and transport of animals trapped by the incident and their transport to the rehabilitation center.

- Wildlife Rehabilitation Center. This is where animals trapped by the incident are taken for treatment and recovery.

3110 Operations Section Chief

The Operation Section Chief is responsible for the management of all operations directly applicable to the primary mission. The Operations Section Chief activates, supervises and directs elements in accordance with the IAP and the Site Safety Plan. In addition, the Operations Section Chief directs the preparation of unit operational plans, requests and releases resources makes changes to the IAP as necessary and reports to the Incident Commander.

Other Operations Section Chief responsibilities include:

- Implement and manage the Operations Section branches, divisions, and groups needed to proactively accomplish Operations Section actions.
- Assist the Planning Section in defining strategic response goals and tactical operational objectives detailed in the Incident Action Plan.
- Develop detailed mission assignments, sortie schedules, duty lists, and operational assignments to accomplish the strategic response goals and tactical operational objectives.
- Identify additional response resources required or recommend the release of resources to the Unified Command.
- Evaluate and report on response counter measure efficiency.

3120 Operations Section Preliminary Objectives

3120.1 0-4 Hours (Initial Response (Emergency) Phase)

- Confirm the spill and determine if the pollution source can be secured and direct operations to secure.
- Confirm all necessary emergency notifications have been made (State Warning Point, USCG Sector Guam Command Center, Area Committee, and Territories as applicable (see Section 9111 Notifications for contact info).
- Assess the situation, using ICS 201, including any grounding, firefighting, salvage or additional problems. Determine immediate objectives, priorities, and strategies.
- Request Emergency Medical Services assistance as necessary.
- Coordinate with the Qualified Individual / Responsible Party response team.
- Conduct Hazardous Materials situation assessment including site surveys and air monitoring. Analyze any HAZMAT problems detected.
- Institute Operational Risk Management (ORM) in accordance with Section 9000 of this plan for all personnel involved in the response, including civilian OSRO personnel.
- Deploy field response teams as soon as possible. Activate special teams as necessary.
- Deploy containment boom as close to the source as reasonably possible.
- Estimate current, tide, and weather effects on the situation and product movement.
- Identify high-priority areas for early protection and select appropriate response strategies (see Section 3200 Recovery and Protection Branch of this plan).
- If salvage, lightering, or dewatering operations will be required, provide tasking to those on scene and to support personnel ashore. Provide tasking to divers as necessary.

- Request marine inspector / surveyor for vessel incident.
- Identify potential staging areas ASAP and sites for immediate pre-cleaning and assign personnel.
- Continuously order personnel and equipment required for initial response as the needed. Do not wait to submit an organized or forward-projected estimate for the next operational period. Keep track of all call-ups using ICS 201.
- Direct the delivery and deployment of the first equipment to arrive on-scene.
- Establish well-qualified on-scene supervisors.
- Activate Oil Spill Recovery Vessels and D14 (drm) Equipment Specialist for VOSS support as necessary (see Section 9111 Notifications for contact info). (Consider use of USCGC Sequoia as potential vessel of opportunity)
- Contact USCG/State officials to commence drug and alcohol testing (in conjunction with marine investigators and other investigators).
- Monitor personnel for signs of exhaustion and need for relief/replacement at the 4 hour mark.

3120.2 4-24 Hours (First Operational Period)

- Transition from “emergency phase” driven response posture to a “pre-planned operation” response posture.
- Continue primary containment activities.
- Identify safety hazards that may be present and report observations to the Safety Officer.
- Continue gathering information on the extent of the spill and assist the Planning Section with situation and resource information.
- Arrange for initial over-flight with appropriate observers / Situation Unit Leader.
- Consider IR camera and video link to help tailor the response effort.
- Determine organization and staffing for the Operations Section.
- Obtain response objectives and priorities from Incident Commander / Unified Command.
- Estimate personnel and equipment required for objectives/priorities; adjust resources ordered as needed.
- Consider dispatching liaison assistants to involved Oil Spill Response Organizations (OSROs).
- Commence Incident Planning Process “P” with Planning Section Chief to develop response tactics for the Incident Action Plan.
- Review trajectory models from Environmental Unit/SSC, identify future impacted areas and deploy protective measures (boom, pre-treatment (if approved), etc.).
- Conduct oil recovery operations as able.
- Initiate incident documentation NOW. Identify and document the discharge source, responsible party, and preserve this information for the document unit and finance/administration section.
- Establish a restricted airspace, as needed (see section 3410.3 of this plan).
- Review results of over-flight with Unified Command and determine future air operations needs with the Planning Section Chief.

3120.3 24-48 Hours (Second Operational Period)

- Continue to assist Planning Section with information gathering and documentation.
- Continue Incident Planning Process "P" with the Planning Section to maintain the Incident Action Plan per op-period.
- Assist Environmental Unit Leader with data collection and evaluation of options to use alternative countermeasures such as dispersants or in-situ burning.
- Continuously monitor resource allocation to ensure that the most effective use is being made of personnel and equipment.
- Execute the completion and delivery of the following federal and territory forms:
  - Notice of Federal Interest;
  - Letter of Designation of Source;
  - Administrative Order (as needed); and
  - Letter of Federal Assumption (as needed).

3130 Scalability of the Operations Section

The Operations Section will naturally evolve based on the needs of the incident. The following Modular Development list illustrates a typical method of expanding the Incident Organization at an oil spill incident. This list is not meant to be restrictive, nor imply that this is the only way to build an ICS organizational structure from an initial response to a multi-branch organization. Refer to Incident Management Handbook COMDTPUB P3120.17B located at (https://homeport.uscg.mil/ics) for incident specific example organizations.

Initial Response Organization - Initial Response resources are managed by the IC who will handle all Command and General Staff responsibilities until a unified command is established.

Reinforced Response Organization - The UC has established a Protection Group and a Recovery Group to manage on-water activities and a shoreline division to manage land-based resources. A Safety Officer and Information Officer have been assigned.

Multi-Division/Group Organization - The UC has assigned all Command Staff positions and established a number of Divisions and Groups as well as an Operations Section Chief and Planning Section Chief. Some Logistic Units are established.

Multi-Branch Organization -The UC has established all Command and General Staff positions and has established four branches.

3140 Operational Risk Management (ORM)

Human error causes a significant number of mishaps every year that result in the loss of personnel, cutters, boats, aircraft, and equipment. Many times faulty risk decisions place our personnel at greater risk than necessary. After four major marine casualties between 1991 and 1993, including the capsizing and sinking of the F/V SEA KING, the National Transportation Safety Board issued two recommendations documenting the need for Coast Guard risk assessment training.

The application of Operational Risk Management (ORM) is not limited to Coast Guard operations as the Coast Guard usually defines them. All response missions and daily activities require decisions managing risk. In ORM "operational" refers not solely to a rated person or operator, but includes any response personnel who contribute to the overall goal of safe and effective clean up. All organizational levels contribute either directly or indirectly to operational

mission success. Therefore, ORM's target audience includes all those involved in operations, maintenance, and support activities.

Traditional risk management practices assert risk is "bad". In reality, that may not be so. Taking calculated risk is essential for an organization to grow and capitalize on its capabilities. ORM's aim is to increase mission success while reducing the risk to personnel, resources, and the environment to a level acceptable for a particular response in a given situation. Responders should identify risk using the same disciplined, organized, logical thought processes that govern all other aspects of response operations. ORM provides the framework to minimize risk, show concern for colleagues, and maximize the unit's mission capabilities, helping to achieve the Unified Command's direction. Additional benefits include safeguarding our responders' health and welfare and conserving vital resources and support equipment.

3141 Risk Terminology

Responders need to understand terms clearly and communicate risk effectively in order to use the ORM process. Understandably, each facility and activity will differ in how it interprets risk assessment and risk management results due to unique mission differences and its members' varying degrees of knowledge, skill, experience, and maturity. All personnel shall use the common key terms when communicating risk across program and activity lines.

Operational Risk Management (ORM): A continuous, systematic process of identifying and controlling risks in all activities according to a set of pre-conceived parameters by applying appropriate management policies and procedures. This process includes detecting hazards, assessing risks, and implementing and monitoring risk controls to support effective, risk-based decision-making.

Risk: The chance of personal injury or property damage or loss, determined by combining the results of individual evaluations of specific elements that contribute to the majority of risk concerns. Risk generally is a function of severity and probability. The models in this plan, however, single out exposure as a third risk factor.

Severity: An event's potential consequences in terms of degree of damage, injury, or impact on a mission.

Probability: The likelihood an individual event will occur.

Exposure: The amount of time, number of cycles, number of people involved, and/or amount of equipment involved in a given event, expressed in time, proximity, volume, or repetition.

Mishap: An unplanned single or series of events causing death, injury, occupational illness, or damage to or loss of equipment or property.

Hazard: Any real or potential condition that can endanger a mission; cause personal injury, illness, or death; or damage equipment or property.

Risk Assessment: The systematic process of evaluating various risk levels for specific hazards identified with a particular task or operation. Various models are available to complete this step in the ORM process.

Risk Rating Scale: A scale of specific risk degrees, determined during the ORM process's risk assessment step. Various responder communities and activities should use the safety industry's

standard terms low, medium, and high when discussing risk across program lines. However, each community will define low, medium, and high risk in terms meaningful to its own personnel.

3142 Operational Risk Management Principles

Accept No Unnecessary Risk: All response operations and daily routines entail risk. Unnecessary risk conveys no commensurate benefit to safety of a mission. The most logical courses of action for accomplishing a response are those meeting all response requirements while exposing personnel and resources to the lowest possible risk. ORM provides tools to determine which risk or what degree of risk is unnecessary.

Accept Necessary Risk When Benefits Outweigh Costs: Compare all identified benefits to all identified costs. The process of weighing risks against opportunities and benefits helps to maximize unit capability. Even high-risk endeavors may be undertaken when decision-makers clearly acknowledge the sum of the benefits exceeds the sum of the costs. Balancing costs and benefits may be a subjective process open to interpretation. Ultimately, the appropriate decision authority may have to determine the balance.

Make Risk Decisions at the Appropriate Level: Depending on the situation, anyone can make a risk decision. However, the appropriate level to make those decisions is that which most effectively allocates the resources to reduce the risk, eliminate the hazard, and implement controls. Supervisors at all levels must ensure subordinates are aware of their own limitations and when subordinates must refer a decision to a higher level.

ORM is Just as Critical in Executing as in Planning: While ORM is critically important in operational planning stages; risk can change dramatically during an actual mission. Therefore, supervisors and senior leadership should remain flexible and integrate ORM in executing tasks as much as in planning for operations.

3143 Quantitative G-A-R Risk Evaluation Process

We can address more general risk concerns, such as those involving planning operations or reassessing risks, as milestones within our plans are met by using the **Green-Amber-Red (GAR)** model. A survey of response personnel identified the following elements as contributing to the majority of risk in their operations:

(1) Supervision,
(2) Planning,
(3) Crew selection,
(4) Crew fitness,
(5) Environment, and
(6) Event or evolution complexity.

The GAR model incorporates these elements, further defined below:

Supervision: Supervisory control should consider how qualified a supervisor is and whether he or she actually is supervising. Even if a person is qualified to perform a task, supervision further minimizes risk. The higher the risk, the more a supervisor should focus on observing and checking. A supervisor actively involved in a task (doing something) can be distracted easily and probably is not an effective safety observer in moderate to high-risk conditions.

Planning: Preparation and planning should consider how much information is available, how clear it is, and how much time is available to plan an evolution or evaluate the situation.

Crew Selection: Crew selection should consider the experience of the persons performing the specific task or evolution. If individuals are replaced during the evolution, assess the new team members' experience.

Crew Fitness: Crew fitness should judge the team members' physical and mental state; generally, a function of how much rest they have had. Quality of rest should consider how a platform rides and its habitability, potential sleep length, and any interruptions. Fatigue normally becomes a factor after 18 hours without rest; however, lack of quality sleep builds a deficit that worsens the effects of fatigue.

Environment: Environment should consider all factors affecting personnel, unit, or resource performance, including time of day, lighting, atmospheric and oceanic conditions, chemical hazards, and proximity to other external and geographic hazards and barriers, among other factors.

Event or Evolution Complexity: Event or evolution complexity considers both the time and resources required to conduct an evolution. Generally, the longer the exposure to a hazard, the greater the risks involved. However, each circumstance is unique. For example, more iterations of an evolution can increase the opportunity for a loss to occur, but on the positive side, may improve the proficiency of the team conducting the evolution, depending on the team's experience, thus possibly decreasing the chance of error. Other factors to consider in this element include how long the environmental conditions will remain stable and the precision and level of coordination needed to conduct the evolution.

Calculating Risk: To compute the total degree of risk for each hazard, assign a risk code of 0 for no risk through 10 for maximum risk to each of the six elements to obtain an estimate of the risk. Add the risk scores to come up with a total risk score for each hazard. If the total risk value falls in the **(G)reen** zone (1-23), the risk is rated low. A value in the **(A)mber** zone (24-44) indicates moderate risk; consider adopting procedures to minimize it. If the total value falls in the **(R)ed** zone (45-60), implement measures to reduce the risk before starting the event or evolution. The GAR model is good for a gross assessment of operational risk. If the degree of risk appears unduly high for one or more of the elements above, perform a second assessment using the SPE model for each element of concern, since the SPE model is more specific. As with the SPE model, rank-order all hazards assessed in the GAR model from the highest to the lowest risk to target areas of greatest concern first.

Risk Ratings: The ability to assign numerical values or color codes to risk elements in GAR model is not the most important part of risk assessment. What is critical in this ORM step is team discussion to understand the risks and how the team will manage them. Different Coast Guard operational communities have adopted the GAR model, but may interpret green, amber, and red differently for their own missions and operators. For example, law enforcement personnel may define a "green" risk level a bit higher than personnel involved in recreational boating safety.

Understanding these differences will improve communications among communities. However, a low/medium/high scale is generally understood throughout the Coast Guard and is the safety industry's widely used standard. Therefore, discussions of risk among various Coast Guard activities will use the terms low, medium, and high, but each operational community will define those terms meaningfully for its own operators. See Section 2230 Operational Risk Management (ORM) for a detailed discussion of the ORM process and GAR model that all supervisors in the

SECTION 3100

OPERATIONS SECTION ORGANIZATION

Operations Section should be executing for each response activity they perform prior to performing it.

SECTION 3200

RECOVERY AND PROTECTION

3200 Recovery and Protection

3201 Recovery and Protection Branch

The Recovery and Protection Branch is responsible for overseeing and implementing the protection, containment and clean-up activities established in the IAP. Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

General strategies for response to oil spills in the Mariana Islands are identified in this section. The following response priorities will follow PEPE:

1. Protect People (human life and health);
2. Protect Environment (minimize ecological impacts);
3. Protect Property (minimize public impacts);
4. Protect Economy (minimize economic impacts)

Due to the large amount of environmentally sensitive wetlands and the abundance of endangered and threatened fauna and flora that are common to this area, the best strategy for pollution response is prevention. Should a significant spill occur in the area covered by this plan, there will almost certainly be significant environmental damage.

In the event of a spill, the fundamental protection strategy will utilize barrier boom across the mouths of creeks that lead back into marshes areas, tidal flats and mangrove swamps. This strategy, if employed correctly, will protect the maximum of environmentally sensitive areas with a minimum amount of boom.

The probability of success for boom protection strategies is dependent upon wind and current. Wind waves can be expected. The speed of response will determine the amount of damage to environmentally sensitive areas. Due to the amount of boom required, it is not feasible to protect all areas during a significant spill.

Numerous environmentally sensitive areas place a high priority on rapid collection of oil. Several collection points have been identified in the Sector Guam area. The majority of locations are suitable for vacuum truck/skimmer units; this area has vacuum trucks and a few skimmers. Water-based skimmers are also critical to rapid removal of oil in this area but are in extremely short supply.

3202 Shoreline Types

Environmental Sensitivity indices list 10 types of shorelines. For response purposes, this plan has grouped these 10 types into three categories.

Note: Parks, refuges and reserves for natural resource conservation and management have not been included. This is because the habitat types designated in the following sections above provide more effective and detailed delineation.

Shoreline cleanup will be conducted in accordance with shoreline sensitivity classification as outlined in the following sections.

3202.1 High Sensitivity: Class A Ecosystem / Shoreline Types – High Priority

This section outlines critical operations information about Class A Ecosystem / Shoreline Types in the Mariana Islands. Class A Ecosystem / Shorelines include:

- Rare species and their critical habitats (some seasonal)
- Breeding, nesting, spawning areas (some seasonal)
- Coral Reefs, shallow (<3 meters deep)
- Salt Marsh and Mangrove Swamp
- Freshwater Marshes and Swamps
- Inlets, tidal creeks, passes which would convey oil to high priority habitats/areas
- Vegetated River Banks
- Sea grass beds, shallow (<l meter deep)
- Shellfish Harvesting Areas
- Hard "live" bottom, shallow (<1 meter deep)
- Human health and safety
- Public utilities water intakes
- Archeological sites

The water intakes are identified on the various sensitivity maps. When a spill occurs that may result in the contamination of the intakes, the appropriate facility owner/operator shall be notified.

3202.11 Coral Reefs

Predicted Oil Impacts:

- Most quantities of oil, typical cargoes to Sector Guam AOR, should remain near the surface of the water with little or no immediate danger to deeper water colonies. Depth of water is a critical component to exposure.
- Corals that are spawning at the time of an oil spill however, can be damaged because the eggs and sperm, which are released into the water at very precise times, remain at shallow water depths for various times before they settle. Thus, in addition to compromising water quality, oil pollution can disrupt the long-term viability and reproductive success of corals, rendering them more vulnerable to other types of disturbances. Timing of a spill is also a critical component to exposure.
- Excessive silting in shallower water may occur due to heavy response boat traffic causing potential suffocation of polyps.
- Excessive damage can occur from multiple booming anchors in vicinity of coral colonies.

Recommendations during spill response:

- While coating of oil upon any part of a coral will kill the affected area, physical cleaning will induce additional damage due to the fragile nature of the species and therefore is not advised.
- Protective and diversion booming may be the best option to prevent potential oiling.
- Consult with NOAA SSC and / or Environmental Unit for incident specific strategies and tactics.

3202.12 Salt Marsh and Mangrove Swamp

Predicted Oil Impacts:

- Vegetation would become coated by oil, heavy oil may cause smothering;
- Persistence may be long term because of difficulty in cleaning;
- Water-soluble toxic fractions of oil may penetrate sediments;
- High degree of biologic stress to mangroves, contamination of food chain.

Recommendations for Cleaning:

- Generally cleaning is not recommended, and may cause additional physical damage to the marsh. Consult with Environmental Unit regarding high volume flushing.

3202.13 Sea Grass Beds

Predicted Oil Impacts:

- Greatest impacts occur on seagrasses that are intertidal, where the oil comes in direct contact with exposed blades.
- Oil readily adheres to exposed blades, particularly when the oil is heavy or weathered.
- Unless the sediments are also oiled, any oiled blades are quickly defoliated and the plants have the capacity to grow new leaves (the leaves grow from a relatively protected meristem). Recovery can occur with 6-12 months.
- Plant mortality has been observed at spills when the sediments were contaminated by oil, although such incidents have been rare.
- The most sensitive component of the seagrass ecosystem is the epiphytic community and juvenile organisms using the grass beds as a nursery. These species and life stages can be highly sensitive to both the water-soluble and insoluble fractions of oil.
- The plants can uptake hydrocarbons from the water column and sediments, potentially lowering their tolerances to other stresses.

Recommended Response Activities:

- Where possible, oil should be prevented from entering shallow, sheltered areas where sea grass beds occur. Highest priority should be those beds which are known to provide nursery areas for commercially important species.
- Little can be done to protect seagrass beds along exposed sections of shoreline.
- Extreme care should be taken not to disturb the sediments during cleanup operations in the vicinity of seagrasses, which could result in total loss of the seagrass bed.
- Cleanup efforts onshore should not result in the deposition of oiled sediments in the beds, e.g., from water flushing of intertidal substrates.
- Oiled wrack on adjacent beaches should be removed quickly, to prevent re-entry of oiled detritus into the nearshore environment.
- Removal of oiled blades should only be considered when it can be demonstrated that special species (such as endangered turtles) are at significant risk of injury from contact or grazing on the blades.
- Otherwise, the best strategy for oiled blades is to allow natural recovery; the oiled blades are sloughed off within days to weeks.

3202.14 Turtle Nesting Areas

Predicted Oil Impact:

- The greatest threat of oil spills on land is the toxic effects of direct contamination of eggs in the nest. However, it should be noted that, because the eggs are laid above the high-tide line, direct oiling is unlikely when it occurs during nesting.
- The number of unhatched eggs is much higher when fresh crude oil is on the sand surface during the last half to quarter of the incubation period. This effect is thought to be due to displacement of oxygen by the lighter oil fractions when the rate of oxygen consumption is at its peak.
- Many weathered crude oils are less toxic to turtle eggs than fresh crude oils.
- Hatchling morphology is affected by the amount of oil and time of oiling. Weights are lower and sizes are smaller when the eggs are exposed to a light dosage of oil mixed in the sand.
- Young turtles exposed to oil in water in tests have demonstrated disturbed diving and respiratory patterns, decreased blood glucose levels, reddening and sloughing off of the skin, and dysfunction of the salt glands.
- Turtles feed on floating objects, therefore they are susceptible to ingestion of tarballs and coating of oil on their flippers and in their mouths.

Recommended Response Activity

- Removal of eggs from nests along beaches under immediate threat of oiling is seldom an option because the eggs should not be moved after 24 hours post-laying. The yolks and embryos settle to one side within 48 hours, thus any movement after that period usually results in decreased viability.
- Only experienced or trained personnel should attempt to move threatened eggs.
- Nesting beaches should receive highest priority for cleanup if they are oiled prior to the nesting period.
- Rapid removal of oil from a beach with active nests may be attempted, particularly if the oil has not reached the nest sites.
- If hatchlings emerge while oil is coming onshore and slicks are still in nearshore waters, hatchlings should be captured and released in clean waters.
- Hatchlings usually emerge during night hours, so nests should be monitored to intercept hatchlings before they swim into contaminated waters.
- Cleanup activities on nesting beaches should be monitored by experienced personnel so that the nests are not physically disturbed.

3202.15 Shellfish Harvesting Areas

Predicted Oil Impacts:

- Most oyster reefs are inter-tidal and would be coated with oil during ebb tides.
- Oysters are in danger of smothering from silting of sediments suspended in the water column.
- Large economic losses predicted if oiling occurs in shellfish harvesting areas.

Recommendations for Cleaning:

- Do not use clean-up methods that stir up bottom sediments or mechanically damage oyster reefs.
- Consult with Environmental Unit regarding natural cleaning, low/medium volume flushing or low pressure cold wash.

3202.2 Moderate Sensitivity: Class B Shoreline Types – Moderate Priority

This section outlines critical operations information for Class B Shoreline Types in the Mariana Islands. Class B Shorelines include:

- Coral Reefs, deeper (>3 meters deep)
- Sea grass, deeper (>1 meter deep)
- Hard "live" bottom, deeper (>1 meter deep)
- Rocky shores
- Fine Sand Beaches
- Coarse/Mixed Sand Beaches, Gravel Beaches, Spoil Sites, Rip Rap, and Fill Sites
- Tidal flats (sand/mud; no vegetation)
- All other natural shores (including sand beaches) within conservation areas

3202.21 Fine Sand Beaches

Predicted Oil Impacts:

- Large oil accumulations would cover entire active beach face.
- Light oil accumulations would be deposited as oily swashes along the upper intertidal zone.
- Oil would accumulate in any wrack that may be present.
- Penetration of oil into the beach can be up to 10 cm; burial would be minimal.
- Asphalt pavements can form under heavy accumulations; pavements change the nature and stability of the substrate and thus its biological utilization.
- Shorebirds resting/feeding on these beaches may be oiled.
- Biological effects include temporary declines in beach organisms, which may also affect feeding shorebirds.

Recommendations for Cleaning:

- Fine-grained sand beaches are the easiest beach type to clean.
- Cleanup should concentrate on removal of oil and oiled wrack.
- Sand removal should be minimized to avoid erosional problems; sediment removal activities should commence only after all the oil has come ashore.
- Manual cleanup, rather than use of road graders and front-end loaders, is advised to minimize volume of sand removed and prevent grinding the oil deeper, depending on the size of the oiled area.
- Techniques which wash oiled sand into the lower intertidal and subtidal should be avoided. Care should be taken to prevent mechanical mixing of oil deeper into sediments.

3202.22 Coarse/Mixed Sand Beaches, Spoil Sites, Rip Rap, and Fill Sites

Predicted Oil Impacts:

- Oil may penetrate deeply into sediments on coarse sand beach, with toxic effects primarily on epifaunal amphipods.
- Little penetration of oil into fill.
- Oil will penetrate between boulders of rip rap, causing lethal effects on resident flora and fauna.
- Toxic effects on invertebrates in any of these shoreline types will have detrimental effects on grazing shorebirds.

Recommendations for Cleaning:

- On coarse or mixed grain beaches, minimize sand removal. Manual cleanup is most effective.
- Avoid excessive removal of sediment from fill, use manual cleanup or low pressure spray.
- Remove oiled debris from rip rap, consider spraying, and/or replacement of heavily oiled rip rap to prevent chronic leaching.

3202.23 Tidal Flats

Predicted Oil Impacts:

- Oil would not be expected to penetrate water saturated sediments, but may coat the surface layer on an ebb tide.
- Biological damage may be severe with significant impact from smothering.
- Persistence may be long term in sheltered flats.

Recommendations for Cleaning:

- Deployment of sorbents from shallow-draft boats.
- Careful removal of oiled wrack.
- Mechanical damage from walking on flats can be severe.

3202.3 Low Sensitivity: Class C Shoreline Types – Low Priority

This section outlines critical operations information about Class C Shoreline Types in the Mariana Islands. Class C Shorelines include:

- Seawalls Industrial facilities and Piers
- Rocky Platforms
- Man-made canal systems (w/o riprap shoreline)
- Sand beaches (not included in above habitats)
- Storm water drains
- Developed and agricultural lands

3202.31 Sea Walls and Piers

Predicted Oil Impacts:

- Oil may percolate between joints of wooden or stone structures.
- Some biota would be damaged; other species would exhibit greater tolerance.
- Persistence of oil would be dependent upon exposure to high-energy waves and currents.

Recommendations for Cleaning:

- High-pressure washing to prevent chronic leaching.

3202.32 Rocky Platforms

Predicted Oil Impacts:

- Oiled wrack and/or heavy oils may accumulate in depressions along rocks, slowing natural cleaning.
- Amphipods and isopods are relatively tolerant of toxic effects of oil, however, thermal absorbance capacity or rock surface may be increased.

Recommendations for Cleaning:

- Removal of oiled wrack.
- High-pressure spray may be effective where plants and animals are not attached.
- Natural cleaning in high-energy areas.

3203 NOAA Shoreline Countermeasures Manual

The following strategies and matrices in this section are drawn from the NOAA Shoreline Countermeasures Manual for Tropical Coastal Environments:

(http://response.restoration.noaa.gov/sites/default/files/shoreline_countermeasures_tropical.pdf).

The Environmental Sensitivity indexes in that manual list 10 types of shorelines and utilizes a Shoreline Countermeasure Matrix to indicate RECOMMENDED, FEASIBLE, CONDITIONAL and NOT RECOMMENDED shoreline countermeasures for oil spill response to different types of oil. The Matrix contains countermeasures for the following types of oils:

- Very Light Oils (Jet fuels, Gasoline)
- Light Oils (Diesel, No. 2 Fuel Oils, Light Crudes)
- Medium Oils (Most Crude Oils)
- Heavy Oils (Heavy Crude Oils, No. 6 fuel, Bunker C)

Disclaimer: These countermeasure matrixes are only a general guide for removal of oil from shoreline substrates. They must be used in conjunction with the Shoreline Countermeasures Manual plus field observations and scientific advice. The countermeasures listed are not necessarily the best under all circumstances, and any listed technique may need to be used in conjunction with other techniques (including ones not listed herein).

The Federal On-Scene Coordinator (FOSC) or the state OSC operating with the FOSC's authorization has the responsibility for and authority to determine which countermeasure(s) are appropriate for the various situations encountered.

Selection of countermeasures is based on the degree of oil contamination, the shoreline type, and the presence of sensitive resources. Extremely sensitive areas are limited to manual cleanup countermeasures.

3203.1 Offshore Countermeasures Matrix

Countermeasures		Harbors				Nearshore				Open Sea			
Day 1		**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Natural Processes		R	R			R	R	F		R	R	F	
Sorbent Recovery		F	R	R	R		R	R	R				
Skimmers	Weir	F	R	R	R		R	R	R			R	R
	Oleophilic		R	R	R		R	R	R			R	R
	Vacuum	F	R	R	R		R	R	R			R	R
Booming		F	R	R	R	F	R	R	R	F		F	F
Dispersant Application ❖♦							C	C	C		C	C	C
In-Situ Burning ❖♦							C	C	C	C	C	C	C
Day 2 and 3		**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Natural Processes		R	R			R	R	F		R	R	F	
Sorbent Recovery		F	R	R	R		R	R	R				
Skimmers	Weir	F	R	R	R		R	R	R			R	R
	Oleophilic		R	R	R		R	R	R			R	R
	Vacuum	F	R	R	R		R	R	R	F		F	F
Booming		C	R	R	R	F	R	R	R	F		F	F
Dispersant Application ❖♦							C	C	C		C	C	C
In-Situ Burning ❖♦						C	C	C	C	C	C	C	C
Day 4		**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Natural Processes		R	R			R	R	F		R	R	F	
Sorbent Recovery		F	R	R	R		R	F	F				
Skimmers	Weir	F	R	R	R		R	R	R			R	R
	Oleophilic		R	R	R		R	R	R			R	R
	Vacuum	F	R	R	R		R	R	R			R	R
Booming		C	R	R	R	F	R	R	R	F		F	F
Dispersant Application ❖♦													
In-Situ Burning ❖♦													

Oil Type Codes

1. Very Light Oils (Gasoline, Jet Fuel)
2. Light Oils (Diesel, No. 2 Fuel Oils, Light Crudes)
3. Medium Oils (Most Crude Oils)
4. Heavy Oils (Heavy Crudes, No. 6 Fuel Oil, Bunker)

Countermeasures Codes

R -- Recommended - may be preferred alternative.
F -- Feasible - If logistically possible, may not be the preferred alternative.
C -- Conditional - Possibly useful but may result in adverse effects to environment.

If empty, countermeasure is Not Recommended

Special Codes

❖ -- Dispersant and *In-Situ* Burning Operations require ORRT Approval.
♦ -- May require Territory Approval.
⭘ -- Cutting will depend on time of year. Consider only if reoiling birds is possible.

3203.2 Very Light Oils Countermeasures Matrix

- Includes: Jet fuels, Gasoline, typical type 1
- Highly volatile (should evaporate within 1-2 days
- High concentration of toxic (soluble) components
- Result: Localized, severe impacts to water column and inter-tidal resources
- Duration of impact is a function of the resources recovery rate
- No dispersion necessary
- No cleanup necessary

1 Exposed rocky shores sea-cliffs and hard man-made structures (seawalls/piers)	6 Boulder/gravel beaches and rip-rap structures
2 Exposed wave-cut platforms	7 Exposed tidal/reef flats
3 Fine-grained sand beaches	8 Sheltered rocky shores/reef flats
4 Coarse-grained sand beaches	9 Sheltered tidal flats
5 Mixed sand and gravel (or shell/coral) beaches	10 Wetlands, marshes, mangroves

COUNTERMEASURE	SHORELINE TYPES									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
No Action	R	R	R	R	R	R				
Manual Removal										
Passive Collection (Sorbents)	R	R	R	R	R	R	R	R	R	R
Debris Removal	R	R	R	R	R	C	R	F	F	C
Trenching ♦										
Sediment Removal ♦			C	C	C					
Sand Berming/Defense Measures ♦					C					
Ambient Water Flooding (Deluge)						F		F	F	F
Washing (<50PSI)					F	C		F	C	C
Washing (<100PSI)	C							C		
Warm Water Washing/Mod.-High Pres								C		
Hot Water Washing/High Pres	C									
Slurry Sand Blasting										
Vacuum										
Sediment Reworking			C	C	C					
Excavation, Cleaning and Replacement										
Cutting Vegetation ⭘♦									C	C
Chemical Treatment										
Oil Stabilization with Elastomers❖♦										
Protection of Beaches❖♦										
Cleaning of Beaches❖♦										
In situ Burning of Shorelines❖♦										
Nutrient Enhancement❖♦				C	C					
Microbial Addition❖♦										

Countermeasures Codes
R -- Recommended - may be preferred alternative.
F -- Feasible - If logistically possible, may not be the preferred alternative.
C -- Conditional - Possibly useful but may result in adverse effects to environment.
If empty, countermeasure is Not Recommended

Special Codes
❖ -- Dispersant and *In-Situ* Burning Operations require ORRT Approval.
♦ -- May require Territory Approval.
⭘ -- Cutting will depend on time of year. Consider only if reoiling birds is possible.

3203.3 Light Oils (Diesel, No.2 Fuel Oils, Light Crudes) Matrix

- Moderately volatile; will leave residue (up to 1/3 of spilled amount)
- Moderate concentrations of toxic (soluble) compounds
- Will "oil" intertidal resources with long-term contamination potential
- Has potential for subtidal impacts (dissolution, mixing, sorption onto suspended sediments)
- No dispersion necessary
- Cleanup can be very effective

1 Exposed rocky shores and sea-cliffs	6 Boulder beaches and rip-rap structures
2 Exposed wave-cut platforms	7 Exposed tidal/reef flats
3 Fine-grained sand beaches	8 Sheltered rocky shores/reef flats
4 Coarse-grained sand beaches (including gravel)	9 Sheltered tidal flats
5 Gravel and mixed sand/coral beaches	10 Wetlands, marshes, mangroves

COUNTERMEASURE	SHORELINE TYPES									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
No Action	R	R	R	R	R	R	R	R	R	R
Manual Removal	C		R	R	C	C	C			C
Passive Collection (Sorbents)	R	R	R	R	R	R	R	R	R	R
Debris Removal	R	R	R	R	R	R	R	R	R	R
Trenching ♦			C	C	C	C				
Sediment Removal ♦			C	C	C					
Sand Berming/Defense Measures ♦					C					
Ambient Water Flooding (Deluge)	R	R		C	R	C	R	C		C
Washing (<50PSI)	R	C		C	F	C		F		C
Washing (<100PSI)	R	C			C	C				
Warm Water Washing/Mod.-High Pres	R	C			C	C				
Hot Water Washing/High Pres	C				C	C				
Slurry Sand Blasting										
Vacuum			C				R	R	R	R
Sediment Reworking										
Excavation, Cleaning and Replacement			C		F	C				
Cutting Vegetation ❂♦								C	C	C
Chemical Treatment										
Oil Stabilization with Elastomers❖♦										
Protection of Beaches❖♦										
Cleaning of Beaches❖♦										
In situ Burning of Shorelines❖♦										
Nutrient Enhancement❖♦				C	C					
Microbial Addition❖♦										

Countermeasures Codes
R -- Recommended - may be preferred alternative.
F -- Feasible - If logistically possible, may not be the preferred alternative.
C -- Conditional - Possibly useful but may result in adverse effects to environment.
If empty, countermeasure is Not Recommended

Special Codes
❖ -- Dispersant and *In-Situ* Burning Operations require ORRT Approval.
♦ -- May require Territory Approval.
❂ -- Cutting will depend on time of year. Consider only if reoiling birds is possible.

3203.4 Medium Oils (Mostly Crude) Matrix

- About 1/3 will evaporate within 24 hours
- Maximum water-soluble fraction is 10 – 100 ppm
- Oil contamination of intertidal areas can be severe/long term
- Impact to waterfowl and fur-bearing mammals can be severe
- Chemical dispersion is an option within 1 – 2 days
- Cleanup most effective if conducted quickly

1	Exposed rocky shores and sea-cliffs	6	Boulder beaches and rip-rap structures
2	Exposed wave-cut platforms	7	Exposed tidal/reef flats
3	Fine-grained sand beaches	8	Sheltered rocky shores/reef flats
4	Coarse-grained sand beaches (including gravel)	9	Sheltered tidal flats
5	Gravel and mixed sand/coral beaches	10	Wetlands, marshes, mangroves

COUNTERMEASURE	**SHORELINE TYPES**									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
No Action										
Manual Removal	F	F	R	R	R	R	R	R	R	C
Passive Collection (Sorbents)	F	R	R	R	R	R	R	R	R	R
Debris Removal	F	F	R	R	R	R	R	R	R	C
Trenching ♦			F	F	F	C				
Sediment Removal ♦			C	C	C			C		
Sand Berming/Defense Measures ♦			C	C						
Ambient Water Flooding (Deluge)	C	C	C	C	C	C	C	C	C	C
Washing (<50PSI)	C	C		C	F	C	C	C		
Washing (<100PSI)	C	C		C	F	C	C	C		
Warm Water Washing/Mod.-High Pres	C	C			F	C	C	C		
Hot Water Washing/High Pres	C				F	C	C	C		
Slurry Sand Blasting								C		
Vacuum			C	C	R		C	C	C	C
Sediment Reworking			C	C		C				
Excavation, Cleaning and Replacement		C	C	C	C		c			
Cutting Vegetation ⭘♦				C	C	C	C	C	C	C
Chemical Treatment					C	C				
Oil Stabilization with Elastomers❖♦										
Protection of Beaches❖♦									C	
Cleaning of Beaches❖♦					C	C	C			
In situ Burning of Shorelines❖♦										
Nutrient Enhancement❖♦			C	C	C	C	C			c
Microbial Addition❖♦					C	C	C			

Countermeasures Codes
R -- Recommended - may be preferred alternative.
F -- Feasible - If logistically possible, may not be the preferred alternative.
C -- Conditional - Possibly useful but may result in adverse effects to environment.
If empty, countermeasure is Not Recommended

Special Codes
❖ -- Dispersant and *In-Situ* Burning Operations require ORRT Approval.
♦ -- May require Territory Approval.
⭘ -- Cutting will depend on time of year. Consider only if reoiling birds is possible.

3203.5 Heavy Oils (Heavy Crude Oils, No. 6, Bunker C) Matirx

- Heavy oils with little or no evaporation or dissolution
- Water-soluble fraction likely to be <10 ppm
- Heavy contamination of intertidal areas likely
- Severe impacts to waterfowl and fur-bearing mammals (coating and ingestion)
- Long-term contamination of sediments possible
- Weathers very slowly
- Dispersion seldom effective
- Shoreline cleanup difficult under all conditions

1	Exposed rocky shores and sea-cliffs	6	Boulder beaches and rip-rap structures
2	Exposed wave-cut platforms	7	Exposed tidal/reef flats
3	Fine-grained sand beaches	8	Sheltered rocky shores/reef flats
4	Coarse-grained sand beaches (including gravel)	9	Sheltered tidal flats
5	Gravel and mixed sand/coral beaches	10	Wetlands, marshes, mangroves

COUNTERMEASURE	SHORELINE TYPES									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
No Action						C				
Manual Removal	C	C	C	C	R	R		R		C
Passive Collection (Sorbents)	C	F	F	F	R	R	R	R	C	C
Debris Removal	C	R	R	R	R	R	C		C	C
Trenching ♦			C	C	F	C				
Sediment Removal ♦		C	C	C	C					
Sand Berming/Defense Measures ♦			C	C						
Ambient Water Flooding (Deluge)	R	R		C	F	C	R	R	C	C
Washing (<50PSI)	R	C		C	F	C	C	C	C	C
Washing (<100PSI)	R	C			F	C	C	C		
Warm Water Washing/Mod.-High Pres	R	C			F	C	C	C		
Hot Water Washing/High Pres	C	C			F	C	C	C		
Slurry Sand Blasting								C		
Vacuum			C		R			F	F	F
Sediment Reworking			C	C	C	C				
Excavation, Cleaning and Replacement		C	C	C	C	C				
Cutting Vegetation ⭘♦	C	C			C	C	C	C	C	C
Chemical Treatment						C				
Oil Stabilization with Elastomers❖♦										
Protection of Beaches❖♦							C	C		
Cleaning of Beaches❖♦					C	C	C	C		
In situ Burning of Shorelines❖♦										
Nutrient Enhancement❖♦				C	C	C	C	C	C	C
Microbial Addition❖♦					C	C	C	C		C

Countermeasures Codes

R -- Recommended - may be preferred alternative.
F -- Feasible - If logistically possible, may not be the preferred alternative.
C -- Conditional - Possibly useful but may result in adverse effects to environment.
If empty, countermeasure is Not Recommended

Special Codes

❖ -- Dispersant and *In-Situ* Burning Operations require ORRT Approval.
♦ -- May require Territory Approval.
⭘ -- Cutting will depend on time of year. Consider only if reoiling birds is possible.

3204 Oil Discharge Classification

The following classifications of oil discharges serve as guidance for the pre-designated Federal OSC as specified under 40 CFR 300.5:

COASTAL WATERS (Coast Guard)	INLAND WATERS (EPA)
Minor: <10,000 gals	Minor: <1,000 gals
Medium: 10,000-100,000 gals	Medium: 1,000-10,000 gals
Major: >100,000 gals	Major: >10,000 gals

NOTE: Any discharge that poses a substantial threat to public health or welfare, or results in a critical public concern shall be classified as a "major discharge."

3205 Hazardous Materials Release Classification

The classification of hazardous substance releases under 40 CFR 300.6 is as follows:

Minor: Any release that causes minimal threat to public health or welfare and/or the environment.

Medium: All releases other than a minor or major release.

Major: Any release that causes a substantial threat to public health or welfare, a substantial threat to the environment and/or significant public concern.

3210 Protection

3211 Protection Group

The Protection Group is responsible for the deployment of containment, diversion and absorbing boom in designated locations including fire boom.

Responsibilities include:

- Deploy and maintain booms, dikes, or other protection devices as directed to accomplish protection, diversion, or containment strategies, and modify planned strategies as required by actual field conditions.
- Provide estimates of protection completion times.
- Report on the effectiveness of booming to the Operations Section Chief.
- Maintain booms and mooring systems and ensure that product which has been contained, diverted, or captured is recovered.
- Identify protection resource and logistics needs, including boom types, lengths, mooring systems, and vessel support requirements.
- Propose alternative protection strategies based on field results and environmental conditions.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3212 Containment and Protection Options

Refer to basic booming strategies in the Mariana Islands Geographic Response Plan for information concerning specific locations for containment and protection:

- Diversion Booming
- Containment Booming
- Exclusion Booming
- Cascading Booming
- Chevron Booming

A number of advanced response mechanisms are available for controlling oil spills and minimizing their impacts on human health and the environment. The key to effectively combating spills is careful selection and proper use of the equipment and materials best suited to the type of oil and the conditions at the spill site. Most spill response equipment and materials are greatly affected by such factors as conditions at sea, water currents, and wind.

The three principles of mechanical protection are containment, deflection, and exclusion. Containment consists of deploying a boom or other barrier to hold the oil in place, with oil recovery the main objective. Deflection consists of diverting moving oil either away from a sensitive area without any attempt to recover the oil at that site, or toward a containment site where recovery of the oil is more feasible. Exclusion consists of placing either temporary or permanent barriers to prevent oil from reaching an area; usually there is no attempt to recover the oil.

3212.1 Mechanical Containment or Recovery

Mechanical containment of recovery is the primary line of defense against oil spills in the United States. Containment and recovery equipment includes a variety of Booms, (Oil Program, US EPA)**,** barriers, and Skimmers, (Oil Program, US EPA), as well as natural and synthetic Sorbents, (Oil Program, US EPA). Mechanical containment is used to capture and store the spilled oil until it can be disposed of properly.

3212.11 Booms

Booms are essentially devices placed on the water surface to form a floating barrier to oil slicks. All booms are manufactured using five elements: flotation, skirt, ballast, longitudinal strength member, and connector/anchoring points.

Containment booms are used to control the spread of oil to reduce the possibility of polluting shorelines and other resources, as well as to concentrate oil in thicker surface layers, making recovery easier. In addition, booms may be used to divert and channel oil slicks along desired paths, making them easier to remove from the surface of the water. Although there is a great deal of variation in the design and construction of booms, all generally share the following four basic elements:

- An above-water "freeboard" to contain the oil and to help prevent waves from splashing oil over the top of the boom.
- A flotation device.
- A below-water "skirt" to contain the oil and help reduce the amount of oil lost under the boom.

- A "longitudinal support," usually a chain or cable running along the bottom of the skirt, that strengthens the boom against wind and wave action; the support may also serve as a weight or ballast to add stability and help keep the boom upright.

Booms can be divided into several basic types.

- **Fence booms** have a high freeboard and a flat flotation device, making them least effective in rough water, where wave and wind action can cause the boom to twist.
- **Round or curtain booms** have a more circular flotation device and a continuous skirt. They perform well in rough water, but are more difficult to clean and store than fence booms.
- **Non-rigid or inflatable booms** come in many shapes. They are easy to clean and store, and they perform well in rough seas. However, they tend to be expensive, more complicated to use, and puncture and deflate easily.
- **Fire Resistant Boom** is a specialized type of boom used in-situ burning of oil at sea. Several factors are involved with the employment/use of this boom such as approval for in-situ burning, age of collected oil, thickness of oil during burning, and specialized safety precautions.

All boom types are greatly affected by the conditions on the water; the higher the waves swell, the less effective booms become. While most booms perform well in gentle seas with smooth, long waves, rough and choppy water is likely to contribute to boom failure.

Generally, booms will not operate properly when waves are higher than one meter or currents are moving faster than one knot per hour.

3212.12 Teardrop or Donut

Often used in areas with very strong currents and deep water, which make holding the oil in place nearly impossible.

- Thick slicks are collected and enclosed in boom, which drifts with the currents.
- Skimmers go to the contained oil to recover the oil as it drifts.
- To collect the oil in shallow water, it may be necessary to corral the oil and bring it to deeper water or low-current areas with better skimmer access.

3212.13 Ship Containment

- When anchoring boom around the ship, leave space between the two for oil accumulation.
- Multiple anchors improve the holding capacity and the configuration of the boom; boom pushed against the hull will be completely ineffective.
- The bow of an anchored ship will face into the prevailing wind or current and shift accordingly. Booming must account for vessel swing.
- Large lengths of boom (2,000-5,000 feet) are often required for ship containment.
- Boat/manpower-intensive; requires highly skilled personnel. Access/egress to ship must be coordinated.

3220 On-Water Recovery

3221 On-Water Recovery Group

The On-Water Recovery Group is responsible for managing water recovery operations per the Incident Action Plan.

Responsibilities include:

- Direct the delivery, deployment, and operation of skimmers.
- Provide a field status of skimming operations to the Operations Section Chief.
- Maintain estimates of product recovered.
- Identify field conditions related to the effectiveness of skimming operations.
- Identify logistics support needs for skimming operations.
- Ensure recovery and holding containers operate efficiently.

Open-water recovery includes using skimmers on oil slicks and netting systems for tar balls and highly viscous oils. Skimming of uncontained slicks can consist of either self-propelled skimming vessels or towed skimmer units. Storage capability and time needed to offload are very important considerations in determining the effectiveness of oil recovery by skimmers.

Frequently, skimming is the only option in areas with very strong currents and water too deep to anchor booms. Skimmers are most effective on thick slicks or areas such as convergence zones where the oil tends to accumulate in thicker concentrations. If the spilled oil emulsifies, skimmer performance usually decreases significantly.

In areas of shallow water or strong currents, it may be possible to collect or corral the oil and bring it to deeper water or low-current areas that have better skimmer access and higher recovery rates.

For spills where the oil is highly viscous or has formed tar balls, netting systems may enhance oil recovery. Using technology adapted from the fishing industry, a net is either moored or towed, allowing the oil to be collected and recovered.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3220.1 On-Water Recovery Options

Many mechanical options exist for on-water recovery of oil, including but not limited to, skimming, dispersants, in-situ burn, skimming, and absorbent use.

NOAA Office of Response and Restoration website is an excellent starting point for understanding the various mechanical options. The "**Response Options Calculator**" application can assist in selecting and staging response equipment, deploying equipment as effectively as possible and a calculator to assist in comparing the performance from different kinds of equipment or deployment strategies

http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/response-tools/spill-tools.html

3230 Shoreside Recovery Group

The Shoreline Recovery Group is responsible for managing shoreline cleanup operations as per the Incident Action Plan.

Responsibilities include:

- Manage the personnel and equipment necessary to accomplish shore side recovery and cleanup objectives established in the Incident Action Plan.
- Report on the efficiency of shore side recovery and cleanup methods.
- Identify resource and logistics support needs.
- Project cleanup completion dates.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3230.1 Shoreline Cleanup Options

Based on the type of impact or anticipated impact, several approaches may be used.

- Manual removal with small numbers of personnel, rakes, shovels, etc.
- Semi mechanical: removal-using trimmers to cut oiled grass and raking up debris.
- Mechanical: removal includes the use of ATV's towing debris rakes and front-end loaders or road graders for use in removal of larger area of contamination.

See Section 4730.1 Shoreline Clean-up Assessment for Target Endpoints and Hierarchy of Clean-up Points.

3230.2 Pre-Beach Cleanup

Pre-beach cleanup may include removal of debris, trash, and cutting back grasses where permissible to limit the amount of possible contamination.

This type of activity is one that can be conducted through the Volunteer Coordinator (see Section 2450 Volunteer Management for details on utilizing volunteers).

3230.3 Storage

Ample storage is necessary to enable oily debris to be collected safely and securely at the spill location(s). Storage can be limited to a few 55-gallon drums or can include tanks, bladders, or tank trucks for large operations. Small barges can also be anchored just offshore or beached at low tide. When selecting a medium for storage, it is essential that the selected container is compatible with the material being recovered and stored.

Roll-on/roll-off dumpsters can be used to collect large amounts of oily debris, while salvage drums can be used for smaller quantities. In either case, it is essential that the drum be capable of decontamination for re-use or in the case of a dumpster or a similar large container, that it be lined with a suitable plastic material to prevent further contamination.

See Section 5220.8 Temporary Storage and Disposal Facilities (TSD's)

3240 Disposal

The Disposal Group is responsible for coordinating the on-site activities of personnel engaged in collecting, storing, transporting, monitoring, temporary storage, recycling, and disposal of all response wastes.

It is the responsibility of the FOSC to ensure that any recovered oil or hazardous substance is disposed of properly once cleanup has occurred. The Resource, Conservation and Recovery Act (RCRA) and its implementing regulations contained in Title 40, Code of Federal Regulations are quite specific in defining what is hazardous waste and how it should be handled and disposed. Also, Territory permit(s) for disposal of any solid waste will need to be granted / issued prior to removal from collection points. 40 CFR 261, Subpart C lists the characteristics a substance must exhibit to be considered hazardous.

See Section 9240.1 Cleanup Companies.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3240.1 Waste Management and Temporary Storage Options

Several factors must be taken into account when oily debris/waste begins to accumulate at a spill site:

- Amount of room to store waste containers;
- Proximity to waterway in the event a container leaks;
- Accessibility to roads and highways;
- Proximity to spill site to minimize travel for responders.

Also, when a waste storage location is established, particularly during a lengthy incident response, extra steps may need to be taken. There must be routine monitoring to ensure that the container size is appropriate, that the containers are leak free, that the plastic liners are secure, and that materials are removed promptly on a regular basis.

A waste management plan is required for all oil spill / hazardous materials spill responses in which the Oil Spill Liability Trust Fund is opened. As a help in writing an incident waste management plan, two sets of forms have been developed – (1) Enclosure A of this section, "Waste Management and Disposal Plan and (2) Enclosure B of this section, "Waste Management and Disposal Plan Update". Enclosure A is for the initial submission and Enclosure B is used to make changes to the original plan.

3240.2 Decanting Policy

The Unified Command must approve any request for decanting that arises during a response. Large quantities of oily fluids are typically generated during an oil spill response. These fluids include the products of skimming and vacuuming operations, and are usually mostly water. Oil recovery operations can continue only as long as there is some place to store the recovered fluids. Once the field storage capacity is reached, skimming operations must terminate until additional storage is provided.

Recovered oil and water mixtures will typically separate into distinct phases when left in a quiescent state. When separation occurs the relatively clean water phase can be siphoned or decanted back to the recovery point with minimal, if any impact. Decanting therefore increases the effective on-site storage capacity and equipment operating time.

Because this process risks discharge of oil already recovered, it must be done carefully. Typically decanting water is discharged into a secondary storage container or into a boomed area where any accidentally discharged oil can be contained and recovered.

In addition to vacuum trucks, recovered oil may be temporarily stored and decanted in the field using other containers including:

- Tank trucks
- Portable tanks
- Portable bladders
- Oil field fractionation tanks
- Lined pits
- Rail Cars

See also Section 4736 Contact Water

3240.3 Disposal Unit

The disposal unit is responsible for:

- Direct the collection, temporary storage, transportation, recycling, and disposal of recovered wastes.
- Estimate the volume of waste that may be recovered and ensure adequate resources and logistics support are provided.
- Manage temporary storage sites and prevent secondary discharges or cross contamination.
- Confirm the laboratory results characterizing the wastes as hazardous or nonhazardous and prepare required RCRA manifests as required.
- Confirm the capacities of recycling or disposal sites.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3240.4 Disposal Procedure

Disposal procedures should take the following into consideration:

- Federal, Territory 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.

3240.5 Disposal Guidance

In addition to the value of the product, liability for damage caused by spilled product, and the cost of cleanup, the cost of disposal is good reason to attempt to prevent spills. Such factors also give good reason to quickly eliminate the source of an accidental release and to contain and recover for use as much as possible of the spilled product.

The Resource Conservation and Recovery Act (RCRA), found in 40 CFR 260-266 & 270, is intended to promote the protection of health and the environment, and to conserve valuable material and energy resources by providing guidelines for solid waste collection, transportation, separation, recovery, and disposal practices and systems.

See Section 3240.7 Waste Disposal Plan Template for initial development of a waste disposal plan.

3240.6 General Disposal Guidelines:

- Liquid waste petroleum product - recycle or reuse.
- Liquid waste petroleum product and water mixture - oil and water separator, then:
  - Oil to recycler or re-refiner / water to POTW.
- Oil contaminated organic debris (sorbents, wood, plant material) - Refuse to Energy or Thermal Treatment Facilities.
- Oil contaminated sand, (saturated) - Thermal Treatment Facility or soil washing technology.
- Disposal options are described by the "Guidelines for Assessment and Remediation of Petroleum Contaminated Soil."
- Oil contaminated sand, (not saturated) - Designated Landfill to be used as cover material. Also should follow "Guidelines for Assessment and Remediation of Petroleum Contaminated Soil."

3240.7 Waste Management and Disposal Plan

Waste Management and Disposal Plan	
Incident Name:	
Date Prepared (MMM/DD/YYYY):	
Time Prepared (24 Hour Clock):	
Location/Division Covered by Plan:	
ACP/Other References Consulted:	
General Information	
Source of Spill:	
Amount Spill: (Gal or BBLS – Designate)	
Additional Volume at Risk of Being Spilled: (Gal or BBLS – Designate)	
Type of Material Spilled:	
Agency Information	
Lead Agency:	
Agency Representative:	
Contact Number:	
Comments	
Variances	
Individuals Contacted for Variances:	
Contact Number:	
Inquiry Made to Obtain Variances On:	
Comments:	

Samples	
Medium (A)/Date(s) Sampled:	
Samples Sent Via:	
Laboratory Name:	
Sampling/Analysis Plan(s) Attached:	**YES [ ] NO [ ]**
Chain-of-Custody Forms Attached:	**YES [ ] NO [ ]**
Comments	

Wastes Covered By Plan

Solids

Type	Description	Estimated Volume
[ ] Oiled Natural Inorganic (Sand, Pebbles, ETC.)		
[ ] Oiled Natural Organic (Driftwood,Seaweed, ETC.)		
[ ] Man-Made Materials (PPE, Sorbents, ETC.)		
[ ] Unoiled Wastes		
[ ] Other		

Suspected Hazardous Waste?	**YES [ ] NO [ ]**
Determination by Generator Knowledge?	**YES [ ] NO [ ]**
Hazardous Waste Codes:	
Comments:	

Liquids:

Type	Description	Estimated Volume
[ ] Oil/Water Mixtures		
[ ] Uncontaminated Petroleum Product		
[ ] Waste Water		
[ ] Spent Solvents / Dispersants and Fuels		
[ ] Other		

Suspected Hazardous Waste?	**YES [ ] NO [ ]**
Determination by Generator Knowledge?	**YES [ ] NO [ ]**

Hazardous Waste Codes:

Comments:

Waste Covered by Plan

Storage Type	Estimated Capacity/Number Required

Preferred Locations:

Permits Required for Temporary Storage:

Ground/Runoff Protection Required for Storage Area?	**YES [ ] NO [ ]**
Liners/Cover Protection Required for Storage Area ?	**YES [ ] NO [ ]**

Comments:

Waste Transport:

Waste Type / Description	Proposed Transport Method

Permit Required for Temporary Transportation:

Liners/Cover Protection Required for Storage?	**YES [ ] NO [ ]**

Comments:

Disposal Method:

Method	Waste Type/Description	Available	Selected
Natural Degradation/Dispersion		**[ ]**	**[ ]**
Wastewater Treatment Plant		**[ ]**	**[ ]**
Landfill		**[ ]**	**[ ]**
In-Situ Burning			
Open Pit Burning			
Potable Incineration			
Process Incineration			
Reprocessing			
Reclaiming			
Recycling			
Well Injection			
Other			

Comments:

Disposal Resources:

Disposal Method	Resources

Permits Required for Disposal:

Comments:

Health and Safety Procedures:

Health and Safety Plan Attached?	**YES [ ] NO [ ]**

Comments:

Additional Comments:	
Contacts and Approvals:	
Contact for Further Information:	
Approved By:	
Time / Date:	
Comments:	

3240.8 Waste Management and Disposal Plan Update

Waste Management and Disposal Plan Update	
Incident Name:	
Date Prepared (MMM/DD/YYYY):	
Time Prepared (24 Hour Clock):	
Location/Division Covered by Plan:	
Changes to Agency Information	
Lead Agency:	
Agency Representative:	
Contact Number:	
Comments	
Variances	
Variances Obtained?	**YES [ ] NO [ ]**
Date Received/Expected:	
Copies Attached?	**YES [ ] NO [ ]**
Comments:	

Samples	
Sample(s) Analysis Received:	**YES [ ] NO [ ]**
Date Received/Expected:	
Copy of Analysis Attached?	**YES [ ] NO [ ]**
Chain-of-Custody Forms Attached?	**YES [ ] NO [ ]**

Comments

Additional Comments:

Temporary Storage

Storage Facility Used	Storage Type/ Capacity and Number	Location

Necessary Permits Recieved?	**YES [ ] NO [ ]**
Date Received/Expected:	
Copy Attached?	**YES [ ] NO [ ]**
Ground/Runoff Protection Required for Storage Area?	**YES [ ] NO [ ]**
Liners/Cover Protection Required for Storage Area?	**YES [ ] NO [ ]**

Comments:

Waste Transportation

Transportation Methods:

Waste Type Description	Transportation Method Selected	Resource / Contractor Selected

Map/Diagram of Storage and Pickup Sites Attached?	**YES [ ] NO [ ]**
Necessary Permits/Licenses Recieved?	**YES [ ] NO [ ]**
Date Received/Expected?	
Liners/Covers Protection Required for Transportation?	**YES [ ] NO [ ]**

Comments:

Changes to Disposal Methods:

Disposal Resources Selected:

Disposal Method	Resources	Location

Disposal Permit Application Submitted?	**YES [ ] NO [ ]**
Applications Approved?	**YES [ ] NO [ ]**
Date Received/Expected?	
Copy Attached?	**YES [ ] NO [ ]**

Comments

Changes to health and Safety Procedures:

Updates to Health and Safety Plan Submitted?	**YES [ ] NO [ ]**

Comments:

Additional Comments:	
Contacts and Approvals:	
Contact for Further Information:	
Approved By:	
Time / Date:	
Comments:	

3250 Decontamination

This section identifies general guidance procedures to be followed for vessels and equipment involved with oil spill response operations. Because these operations may involve operating within oiled waters or recovery operations, we may assume that vessels, equipment, machinery, and other gear will be impacted with oil. This plan will be used for all vessels and equipment either contaminated or suspected of being contaminated with oil to return to a non-oiled state. Note: Plan should identify decontamination location or site.

3250.1 Concept Overview

In view of the extensive equipment inventory involved in a response effort, the On Scene Coordinator will establish decontamination zones.

All contaminated items will be cleaned to a condition of cleanliness mutually agreed upon by the Unified Command and the equipment owner.

The primary focus of this operation will be to expedite cleanup of oiled vessels and response equipment in a safe, organized and efficient manner while minimizing further damage to the environment and waste generation.

3250.2 Equipment Decontamination

Equipment decontamination will occur in three phases:

1 Decontamination of equipment for immediate re-utilization or relocation.
2 Recovered oil is to be off-loaded from OSRV's, barges, tow-able storage bladders and cargo tanks to portable storage tanks pending disposal in accordance with Section 3240 - Disposal.
3 Full decontamination prior to demobilization.

3251 Decontamination Group

The Decontamination Group is responsible for decontamination of personnel and response equipment in compliance with approved statutes. Each incident may require different decontamination operations. The nature of the incident, the type of oil, the weather, the temperature, the number of people to be decontaminated, and the number of trained personnel available are a few of the factors which dictate the size, method, and type of decontamination operation required. Responsibilities include:

- Identify decontamination needs and provide resources to accomplish required cleaning and decontamination of personnel and equipment.
- Identify resource and logistics needs to accomplish decontamination requirements

Basic decontamination guidelines include:

- Establish and clearly identify the Decontamination Corridor. The best location for a decon station would be uphill from the hot zone, and upwind so that airborne contaminants blow back toward the hot zone. If the wind changes, the decon station may have to be relocated.
- The Decontamination Zone should be accessible to emergency medical units.
- Clearly identify the Decontamination Corridor using barrier tape, delineator posts and traffic cones.

- Establish and clearly identify the point of entry from the Hot Zone into the Warm Zone and the exit corridor into the Cold zone.
- Weather conditions will be a significant factor during decon operations. Suitableshelter (tents) should be utilized for inclement weather conditions.
- Water used during decon procedures must be carefully controlled and kept to a minimum.
- Specific decon of oiled vessels and monitoring of vessels transiting through oiled waters offshore bound for ports in the Mariana Islands can be found in the Section 9321 Template Vessel Decontamination Plan.

Water generated from decontamination procedures will always be treated as hazardous waste.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3252 Decontamination Methods

Equipment decontamination will be done as follows:

- The Unified Command will approve the on water decontamination of vessels.
- On water decontamination of large oil spill response vessels (OSRVs) to be conducted at berth and/or other satellite locations, as needed.
- Decontamination of portable equipment and small vessels less than 32', to be conducted in bermed areas as identified on the decontamination site layout diagram.

3253 Oil Spill Response Vessel (OSRV)

Decontamination of large OSRVs is to occur on site. Each vessel will be placed inside standard contractor containment boom (8x12) during decontamination process. These decontamination zone areas will utilize a boom anchoring system to prevent the collapse of the perimeter protection during tidal changes and surges.

Decontamination plan will be created for each OSRV. These plans will be added as appendices to this document. Preplanning for protection of adjacent areas shall be accomplished in order to minimize cross contamination. Floating oil from sheen-emanating vessels will be minimized with sorbents as necessary to reduce potential loss outside the containment boom. Floating sorbent materials shall be utilized in natural collection points as needed to retain free floating oil. These sorbents will be tended daily.

Mobile decontamination teams will be assigned on an as needed basis. A mobile decon team will be comprised of one supervisor, six laborers, and a designated representative. A vessel specific plan will be developed for each OSRV to ensure that skimming equipment, storage tanks, piping systems, deck gear and the vessel hull are cleaned to agreed upon standards. A marine chemist may be utilized to determine tank entry safety.

3254 Portable Equipment and Containment Boom

A paved area and warehouse with appropriate space shall be identified as the final decontamination area. A support zone will be established nearby to be used for consumable supplies.

Using the Equipment Decontamination Form, Enclosure (A) of this section, either complete each section or indicate where the required information is located. Useadditional sheets if more space is needed for any item.

As equipment enters the decon area through an established security checkpoint it will be recorded and tracked using the Equipment Decontamination Form.

At the beachside retrieval point, Geo-cloth or PVC (like) will be used to protect the shoreline material to prevent secondary contamination. In addition, abrasion pads will be used across the beach to prevent boom drag and secondary contamination. Large ocean boom (>30") will be retrieved by a portable crane to avoid shoreline abrasion.

A priority assessment will be attached to each piece of equipment to ensure a timely flow of equipment through the cleaning process. Logistics section will assign prioritization of equipment to be cleaned. Depending upon priority, equipment will be directed to either a bermed holding area or to immediate cleaning into one of the two decontamination pools. A Hypalon liner or like (secondary containment) will be placed under each pool with the perimeter sufficiently bermed to allow for waste water and rain water evacuation. All waste water will be pumped to a poly portable storage tank for disposal. All pumps, hoses and piping will be left in place to facilitate speedy evacuation of retain. The final disposal of wash water, oiled sorbents and materials will be pursuant to the responsible party's disposal plan.

3255 Cleaning Solutions

A citrus based cleaning solution (Simple Green, CitrusSolve, PES51 or like) will be utilized as a degreaser and will be applied by either an airless sprayer or hudson sprayer as applicable.

Like Decanting, before cleaning on-water equipment, **permission must be obtained from the Federal or State On-Scene Coordinator**.

Actual cleaning will utilize a Landa (or like) hot/cold pressure washer with a temperature range to 220F and a pressure rating up to 3000 psi. Every attempt will be exercised to mitigate noise generating equipment by placing it in insulated areas.

Oily waste/wash water will be transferred to poly storage tanks by means of a Wilden M15 pneumatic diaphragm pump (or like model).

By utilizing the PES51 product, which will not emulsify the oily water, it is possible to re-circulate rinsates back into the cleaning cycle. As each piece of equipment is cleaned, its progress is updated in the equipment resource database.

Once the piece has been determined clean by the responsible party equipment owner, the equipment is transferred to the designated "clean" holding area.

As the cleaned equipment exits the decon site it is logged out on the database. A status report will be printed daily as needed.

3256 Equipment and Supplies

The following list of equipment and supplies will be needed for the Decontamination Group operations.

3256.1 Machinery and Equipment

4	Pressure Washers w/200' hose
10	Hose, Suction 3" x 25'
25	Hose, Discharge 3" x 25'
4	Wilden M15 Air Diaphragm Pumps
4	Portable Air Compressors, Diesel
20	Fire Hose, 1 1/2" x 50'
1500	Containment Boom, (8"x12"), feet
2	Generator, Diesel, 7.5kw
4	6500 Gallon Poly Storage Tanks
2	Airless Sprayer, Paint Type
5	Hudson Sprayer, Metal Can
2	Shop Vac, Industrial
2	Coppus Blower
2	25 Ton Mobile Cranes with Straps & Spreader Bars
2	10K LB Forklifts
	Refueling Vehicle
	Transportation Equipment (Flatbeds, Trucks, etc)
	Personnel Transportation
	Vessel Platforms for Hull Cleaning
	Vacuum Trucks

3256.2 Tools

Small Tool Kits
Shovels, Plastic, NonSparking
Scrapers
Ladders
Squeegees
Plastic Hand Scoops
Push Brooms
Hand Carts
Ice Coolers, 20-30 Gallon
Water Coolers
Extension Cords
Utility Knives
Assorted Fire Hose Fitting and Wash Nozzles
Barrel Grapple
Fuel Cans, 5 Gallon
Caution Tape
Barrel Pumps

3256.3 Sorbents

Sorbent Pads, Bales
Sorbent Sweep, Bales
Sorbent Role, Spc Sxt 638
Oil Snare, on Rope

3256.4 Consumables

Ice
Water
Rope, 3/8 Poly
Hand Cleaner
PES 51, Citrus Based Cleaner
Duct Tape
Motor Oil
Diesel Fuel
Gatorade (or similar)

3256.5 Office Supplies

Calculator
Cellular Phones
Radios, VHF
Portable Computer w/Printer & Modem
Fax Machine]
Tables
Folding Chairs, Metal

3257 Site Demobilization

Upon final breakdown and closure of the decontamination operation, a joint operation survey of the facility will be conducted by the responsible party, USCG and other participating agencies. Any signs of oil escapement past the secondary containment will be thoroughly cleaned, by hot water pressure washing or other appropriate methods, to a mutually agreed condition of cleanliness.

3258 Equipment Decontamination Form

Equipment Decontamination Form						
Company						
Contact Person				By		
Phone				Contract		
Item	**Quantity**	**Unit**	**Location**	**Date Started**	**Date Released**	**FOSC**

3270 Dispersants

Dispersant use has not been preapproved for Guam or CNMI. The Oceania Regional Response Team (ORRT) will need to be consulted and will have to review each dispersant use proposal on a case-by-case basis.

Near shore environment dispersant expedited approval process and checklist is contained in the Oceania Regional Contingency Plan (ORCP) (Appendix IV).

3280 In-Situ Burning (ISB)

As per the NCP, 40 C.F.R. Part 300.120, the authority to *in-situ* burning of oil discharges in accordance with this Agreement is vested in the predesignated USCG OSC. The predesignated FOSC within the territories of Guam and CNMI is the Captain of the Port, Guam.

The OSC may authorize the use of *in-situ* burning without obtaining the concurrence of the EPA representative or the State representative to the ORRT, when in the OSC's judgment human life is threatened or when all of the following three conditions are met:

1 *In-situ* burning is a viable option for oil removal; and
2 Winds are blowing offshore; or if winds are variable or blowing on-shore, DOH advises that the potential plume caused by the burn will not expose human populations to more than 150 ug/m3 of particulate less than 10 microns in diameter averaged over a one hour period as determined by the OSC; and
3 The plume or heat from the burn will not result in greater impact to sensitive wildlife resources than would the spilled oil.

Mechanical recovery equipment shall be mobilized on scene, when feasible, as a backup capability should *in-situ* burning prove partially or totally ineffective and to collect residue and dispose of in an appropriate land-based facility.

Monitors from the USCG and State will be on scene to observe the burn. If practical, but so as not to create an unnecessary delay, monitors from the DOI- Fish and Wildlife Service and DOC-NOAA may participate as part of the monitoring team. The monitoring team will record their observations. Any member of the monitoring team may make recommendations to the Unified Command regarding whether to continue or terminate the burn if conditions in paragraph 2 above are observed no longer to exist.

Whenever the OSC decides to conduct an *in-situ* burn, the *In-situ* Burning Plan in Tab I & II, the *In-situ* Burning Monitoring Plan in Tab III and, the results of the joint evaluation described in paragraph 3 of **Appendix V** (**CONCERNING THE USE OF IN-SITU BURNING AS A RESPONSE METHOD TO OIL POLLUTION**) of the ORCP shall be completed and submitted to the ORRT in the form of an *In-situ* Burn Evaluation Report as soon as possible following the burn.

3290 Bioremediation

3190.1 Background

Biodegradation is a natural process in which microorganisms chemically alter and breakdown organic molecules into other substances - such as fatty acids, carbon dioxide and water - in order to obtain energy and nutrients. The basis for this process is relatively simple: microorganisms require minerals and sources of carbon, as well as water and other elements, to survive and function. The process can involve one step or a series of steps that proceed through the formation of molecules with successively fewer carbons.

Generally, the extent to which a particular organic molecule is biodegradable and the rateof degradation depend on the molecule's structural characteristics (chain length, amount of branching, number and arrangement of rings, stereochemistry) and the environmental conditions (temperature, available oxygen, substrate).

Bioremediation is a treatment technology that utilizes biodegradation to reduce the concentration and/or toxicity of chemical substances such as petroleum products and other hydrocarbons. Because microbes capable of degrading hydrocarbons are commonly found in nature, most untreated hydrocarbon spills eventually are removed from the environment by microbial degradation and other processes. Enhanced bioremediation, however, seeks to accelerate natural biodegradation processes by applying specially chosen nutrients and/or microbes to spilled substances. Although microbes have been used extensively and successfully for many years to treat wastes and wastewater in controlled facilities, their potential as a tool for responding to spills of oil and hazardous substances in uncontrolled environments has only more recently received significant interest.

3290.2 Guidelines

The National Contingency Plan, §300.910, authorizes the FOSC, with the concurrence of the USEPA representative to the RRT and, as appropriate, the concurrence of the State, Commonwealth, or Territory representative to the RRT with jurisdiction over the navigable waters and shoreline threatened by the release or discharge (of oil), and in consultation with the DOC and DOI natural resource trustees, when practicable, may authorize the use of bioremediation on a case-by-case basis.

SECTION 3300

EMERGENCY RESPONSE

3300 Emergency Response

3301 Emergency Response Branch

The Emergency Response Branch is responsible for overseeing and implementing emergency measures to protect life, mitigate further damage to the environment, and stabilize the situation.

Refer to Appendices 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

3310 Search and Rescue (SAR) Group

Search and Rescue (SAR) efforts primarily focus finding and assisting persons in actual or apparent distress and are carried out within a well defined SAR response system.

Key response areas:

Operational Support / Coordination

- Search Planning &Operations Safety
- Rescue Planning & Operations Stress Management
- Medical / Triage Liaison with victims family
- Fire Fighting Security
- Shoreline Search and Rescue Investigations
- On-Water Search and Recovery Resources
- Political
- Assisting & Cooperating Agencies
- Public Information
- Command Post Needs

3320 Salvage Group

The Salvage Group is responsible for coordinating and directing salvage activities and source control related to the incident.

See the Mariana Islands Salvage Response Plan for Specific Salvage Guidance.

3330 Marine Fire Fighting Group

The response and organizational structure to a marine fire can vary widely depending on the location of the vessel and proximity to fire fighting resources, capabilities of the municipal and industrial fire departments, type of vessel, nature of the cargo, and source of the fire.

Although the Coast Guard does not directly conduct fire fighting, it does have a major role in coordination and support.

A marine fire can bring to the scene fire departments, law enforcement, public health, technical cargo experts, industrial fire departments, private fire fighting and salvage experts.

See section 8000 Marine Fire Fighting Plan

3340 Hazardous Materials Group

The Hazardous Material Group is responsible for coordinating and directing all hazardous material activities related to the incident.

See Section: 7000 Hazardous Material for further information.

3350 Medical Group

The Medical Group is responsible for coordinating and directing all emergency medical services related to the incident.

3360 Law Enforcement Group

The Law Enforcement Group is responsible for coordinating with federal/state/local law enforcement activities related to the incident, which include, but are not limited to isolating the incident, crowd control, traffic control, evacuations, beach closures, and/or perimeter security.

SECTION 3400

AIR OPERATIONS

3400 Air Operations Branch

The Air Operations Branch is responsible for preparing and implementing the air operations portion of the Incident Action Plan and providing logistical support to aircraft.

3410 Air Tactical Group

The Air Tactical Group Supervisor is primarily responsible for the coordination and scheduling of aircraft operations. Such operations may be intended to locate, observe, and track; support dispersant applications or other response application techniques; or report on the incident situation when fixed and/or rotary-wing aircraft are airborne at the site. The Air Tactical Group Supervisor performs these coordination activities while assets are airborne. The Air Tactical Group Supervisor reports to the Air Operations Branch Director and updates the Situation Unit Leader.

3420 Air Support Group

The Air Support Group Supervisor is responsible for supporting and managing Helibase and Helispot operations and maintaining liaison with Fixed- winged air bases. This includes:

- Providing fuel and other supplies.
- Providing maintenance and repair of helicopters.
- Keeping records of helicopter activity.
- Providing enforcement of safety regulations.

Helicopters during landing, takeoff, and while grounded, are under the control of the Air Support Group's Helibase or Helispot managers. The Air Support Group Supervisor reports to the Air Operations Branch Director.

SECTION 3500

STAGING AREA

3500 Staging Areas

Refer to the Mariana Islands Section 4600 (Geographic Response Plan) for staging areas.

3501 Staging Area Manager

Staging Areas are established by the Operations Section Chief. The Staging Area Manager is responsible for managing all activities within the designated staging areas and reports directly to the Operations Section Chief. Staging areas provide the ability to have tactical resources immediately available for deployment in the event that more resources are needed to manage the situation.

Some things to remember:

- Staging Areas are temporary locations where personnel and equipment are kept while awaiting tactical assignment.
- An incident may have more than one staging area.
- Resources in Staging must be immediately available for assignment.
- All resource status shall be relayed to the Resources Unit Leader to determine if they are in excess to what is needed and should be demobilized.
- Staging Areas are designed by the name that describes their general location (e.g. John Lloyd Park Staging)

3510 Pre-Identified Staging Areas

See the Mariana Islands Geographic Response Plan(s) for specific staging areas.

3520 Security

All Staging Areas should include perimeter security to prohibit un-authorized entry and safety to the workers. Security needs will be dependent on incident specific operations.

SECTION 3600

WILDLIFE

3600 Wildlife

This Section contains the oiled wildlife rehabilitation plan developed by the Oiled Wildlife Subcommittee of the Area Committee. Any wildlife rescue and rehabilitation will be directed or overseen by the FWS or the state/Territory, in consultation with FWS.

3601 Wildlife Defined

For the purpose of defining wildlife, it will include all marine mammals, turtles, and birds. Efforts to rehabilitate living coral, land animals, invertebrates, and microorganisms are not included in this definition of wildlife.

The Unified Command through consultation with the Wildlife Branch Director and the Natural Resource Trustees will decide the care of oiled land animals on a case-by-case basis.

3602 Response Elements

1 Notification
2 Surveillance and Evaluation
3 Capture (Search and Collection)
4 Stabilization
5 Rehabilitation/Cleaning
6 Release

3603 Notifications

Notification shall be made in the following instances:

- All chemical spills that meet the reportable quantity
- Any collision of sea going vessels
- Any grounding of sea going vessels
- Any petroleum release ≥ 100 gallons
- Any petroleum release when the volume is unknown
- Any situation resulting in a potential/impending petroleum release
- Observation of any oiled wildlife

The following list identifies agencies to be notified that represent the natural resource trustees. Calls will be made by the USCG and placed in the order listed until one representative from each agency is contacted.

3603.1 Federal Notifications

- USCG Sector Guam Command Center (671) 355-4824
- Commander, Joint Region Marianas (COMNAVMAR), Regional Operation Center (EOC) - (671) 349-4004/4003
- Naval Base Guam Port Control - (671) 339-6141
- U.S. Fish and Wildlife Service
  - Environmental Contaminants Biologist - (808) 221-0634 (cell), (808) 792-9461.
  - Marine Ecology Specialist - (808) 792-9400, (808) 779-6226 (cell)
  - Coastal Conservation Program Manager - (808) 792-9400, (808) 779-4202
  - Partners for Fish and Wildlife Program Coordinator - (808) 792-9400, (808) 349-3636 (cell)
  - Guam Office (ESA Consultation) - (671) 355-5096/7

- CNMI Office (ESA Consultation) – (670) 285-2831

- National Marine Fisheries Service (Pacific Islands Regional Office)
  - NOAA Office of Response and Restoration emergency Hotline (206) 526-4911
  - National Marine Fisheries Service - Pacific Islands Regional Office: 808-725-5000
  - NOAA Protected Resources: NOAA National Marine Fisheries Protected Resources Division (ESA): 808-725-5130 or 808-725-5140
  - Marine Mammals: (888) 256-9840
  - Coral and Habitat: NOAA Pacific Islands Regional Office, Habitat Conservation Division: (808) 725-5092, (808) 349-8618 (cell)
  - Guam Office (ESA Consultation) - (671) 646-1904, After Hours – (671) 488-4032
  - CNMI Office (ESA Consultation) – (670) 234-0004

3603.2 Guam Notifications

- DWAR - (671) 735-3955
- Bureau of Statistics Guam Coastline and Coral Reef Biology - (671) 475-4467 /(671) 300-9205

3603.3 CNMI Notifications

- BECQ - (670) 664-8500
- DFW - (670) 664-6000

In addition to reporting the incident details, the following information should be provided:

1 Name of incident commander;
2 Location of command center;
3 Telephone number of command center.

3604 Surveillance and Evaluation

When notification has been made, the natural resource trustees will assess the potential for wildlife impact and determine whether a surveillance team should be dispatched to evaluate the situation. Surveillance teams will be comprised of biologists trained to search for and recognize oiled wildlife. Surveillance team leaders will report to the situation unit within the planning section of the incident command.

3605 Wildlife Branch

The Wildlife Branch is responsible for minimizing wildlife losses during spill response, coordinating early ground and aerial reconnaissance of wildlife at the spill site, employing wildlife hazing measures per the IAP, and recovering and rehabilitating impacted wildlife. Rehabilitation activities shall be coordinated through the Unified Command (UC). The Territory and Federal OSC, working with the responsible party (if applicable), will provide guidance to the Operations section to ensure that all wildlife concerns of the public and appropriate trustees are addressed. Early initiation of wildlife rehabilitation activities within the Operations section will ensure adequate mobilization of staff, equipment and other applicable resources. The Wildlife Operations branch will be responsible for providing licensed, experienced rehabilitation personnel to coordinate and supervise all collection and rehabilitation activities. Untrained volunteers shall be trained and supervised by licensed rehabilitation personnel on the proper handling of wildlife as well as safety training including the use of personal protective equipment.

SECTION 3600

WILDLIFE

Refer to Sections 9200 Personnel and Services Directory and 9700 List of Response References for Response Guidance and Strategies.

See also any/all applicable Environmental Sensitivity Index(es) and Geographic Response Plan(s) for the region of impact.

The general public is normally highly sensitive to reports and pictures of oiled wildlife and large numbers of emergent volunteers should be expected.

Engage the Liaison Officer as soon as possible if any reports of impacted wildlife are received. See Section 2450 Volunteer Management for details on utilizing volunteers.

3606 Volunteers

In a spill response, the Unified Command may choose to utilize volunteers who have expressed a willingness to assist with wildlife response during an oil spill. These volunteers must be under the direction of a trained and experienced supervisor. Individuals working directly with wildlife will be given a short training course on proper handling and safety techniques. Those working with any wildlife that has not been cleaned of oil must also complete an additional four-hour HAZWOPER awareness level training course, at a minimum, plus additional on-the-job training. For a full description of the volunteer program and the required training and procedures for utilization of volunteers, see Section 2420 of the ACP.

3606.1 Training Requirements

All workers involved in the collection and stabilization of oiled wildlife outside the rehabilitation facility must have completed a minimum of 24 hours HAZWOPER training. All workers (including volunteers) conducting wildlife rehabilitation will have a minimum of 4 hours of awareness training in addition to job specific safety training in animal handling, animal care safety, and rehabilitation in order to insure the safest handling of animals.

3607 Protected Species

The hazing, capture, transportation and rehabilitation of wildlife species that are protected under the federal Migratory Bird Treaty Act, Endangered Species Act, Marine Mammal Protection Act and/or are protected under Territory laws, must be authorized by permit. These permits are held and issued by USFWS, NOAA, and Territories respectively. In an emergency response, agents working under the direction and authority of one of these agencies, or under the direction and authority of a wildlife rehabilitator who holds the appropriate permit(s), may be covered by that entity's permit. However, there may be required procedures for extending this authorization to agents acting on behalf of the permit holder, and the Unified Command should work with the trustee agencies to ensure that the proper permit authorities are in place.

Likewise, federal and state rehabilitation permits are required for wildlife covered by the above acts. Rehabilitation facilities should obtain and maintain permits in advance, but during a response a rehabilitator may be allowed to operate under an agencies' permit if the agency is part of the incident command structure and is directing the rehabilitation activities. Permits would have to be in place before the response was completed.

50 CFR Section 17.21 (c)(3) states:

"Any employee or agent of the Service, any other Federal land management agency, the National Marine Fisheries Service, or a State conservation agency, who is designated by his agency for

such purposes, may, when acting in the course of his official duties, take endangered wildlife without a permit if such action is necessary to:

(i) Aid a sick, injured or orphaned specimen; or

(ii) Dispose of a dead specimen; or

(iii) Salvage a dead specimen which may be useful for scientific study; or

(iv) Remove specimens which constitute a demonstrable but non-immediate threat to human safety, provide that the taking is done in a humane manner…

(4) Any taking pursuant to paragraphs (c)(2) and (3) of this section must be reported in writing to the U.S. Fish and Wildlife Service, Division of Law Enforcement, P.O. Box 19183, Washington DC 20036, within 5 days. The specimen may only be retained, disposed of, or salvaged in accordance with directions from the Service.

3610 Fish and Wildlife Protection Options

In addition to wildlife initially impacted after the release or spill, continued exposure should be considered in planning due to migrating wildlife re-entering areas during the clean-up activities.

Several options available to the FOSC include hazing and capture/re-release. Any such measures should be evaluated through the Environmental Unit with appropriate recommendations made in accordance with applicable laws and regulations.

Protective measures may include one or more of the following:

- preventing oil from reaching areas where migratory birds and other wildlife are located by either containing or recovering the oil, or
- deterring birds or other wildlife from entering areas affected by oil by using wildlife hazing devices or other methods.

3620 Recovery

3621 Wildlife Recovery Group

The Wildlife Recovery Group is responsible for coordinating the search, collection and field tagging of dead and live impacted wildlife and transporting them to the processing center.

Responsibilities include:

- Direct, coordinate, and conduct wildlife recovery and capture operations.
- Maintain a central clearing point to direct recovered wildlife to appropriate rehabilitation facilities.
- Maintain evidence, tagging, and storage procedures for all wildlife recovered.
- Manage the capture, triage, first aid, and transportation of recovered wildlife.
- Provide training and briefing on actions and notifications required when response workers or members of the public encounter distressed wildlife.
- Identify resources and logistics support requirements.
- Report on wildlife recovery operations.

3622 Recovery Processing

If exposure of birds and other wildlife to oil cannot be prevented, an immediate decision will need to be made about whether to capture and rehabilitate oiled birds and other wildlife. The

SECTION 3600

WILDLIFE

DOI has statutory responsibilities for protecting migratory birds and federally listed threatened and endangered species. These responsibilities are delegated to the FWS. If animals other than migratory birds or federally listed threatened or endangered species are found injured, the responsible agency would typically be the state / territory wildlife agency.

The decision to rescue and rehabilitate oiled wildlife must be made in consultation with the applicable state and federal natural resources management agencies, since state and federal permits are required by law. Any wildlife rescue and rehabilitation will be directed or overseen by the FWS or the state, in consultation with FWS.

Processing procedures will be specified as incident specific criteria dictates.

3630 Carcass Retrieval and Processing

The U.S. Fish and Wildlife Service is responsible for the disposition of all migratory birds, dead or alive.

3640 Wildlife Rehabilitation Group

The Wildlife Rehabilitation Group is responsible for receiving oiled wildlife at the processing center; recording essential information; collecting necessary samples; and conducting triage, stabilization, treatment, transport and rehabilitation of oiled animals.

Responsibilities include:

- Establish wildlife rehabilitation centers and conduct rehabilitation operations.
- Maintain documentation on wildlife delivered for rehabilitation.
- Store, document, coordinate laboratory analysis and necropsies, and properly handle deceased wildlife.
- Identify resources and logistics support requirements.

For Wildlife Rehabilitation points of contact, refer to the following sections: 9211 Trustees For Natural Resources , Sections 9200 Personnel and Services Directory and 9700 List of Response References

3641 Wildlife Rehabilitation Operations

Rehabilitation operations will be organized and coordinated as facility and incident specific criteria dictates.

3642 Rehabilitation Facilities

Rehabilitation facilities will be characterized as incident location dictates.

Refer to Section 9200 Personnel and Services Directory for available fixed sites.

3643 Rehabilitation Procedures

The U.S. Fish and Wildlife Service's policy titled Best Practices for Migratory Bird Care During Oil Spill Response (November 2003) are to be used in evaluating capture methods; making informed choices during spill responses; and evaluating oiled bird rehabilitation activities to improve field practices.

The following criteria will be used when considering and evaluating bird rehabilitators for conducting oiled-bird response.

- Hold all necessary permits for bird-related response activities;
- Experience in the capture, treatment, and care of oiled birds;
- Experience conducting bird-related response activities within the Incident Command System structure;
- Ability to quickly mobilize to perform bird capture, field evaluation, stabilization and transport, including remote locations if necessary;
- Access to appropriate facilities adequate for treating and housing oiled birds;
- Ability to establish and operate bird intake, holding, and isolation areas within 12-24 hours of wildlife response activation; and
- Ability to establish and operate bird cleaning and pre-release areas within 48 hours of wildlife response activation.
- Agreement with a licensed veterinarian, experienced in the treatment of oiled birds, to provide any necessary veterinary medical care.

SECTION 3700

RESERVED

3700 RESERVED

SECTION 3800

RESERVED

3800 RESERVED

SECTION 3900

RESERVED

3900 RESERVED for AREA / DISTRICT

4000 PLANNING

4010 INTRODUCTION

The Planning Section is responsible for the collection, evaluation, and dissemination of strategic information related to the incident and for the preparation and development of Incident Action Plans (IAPs). This Section also maintains information on the current and projected situation and on the status of resources assigned to the incident. Some organizational elements of the Planning Section includes the Situation, Resource, Documentation, and Demobilization Units and Technical Specialists (e.g., salvors).

Refer to Planning Section of IMH.

4020 PLANNING SECTION

Refer to Planning Section of IMH.

4100 PLANNING SECTION ORGANIZATION

4110 PLAN REVIEW

In accordance with OPA 90, ACPs will be updated every five years.

Refer to Annex D, Section D.1.2 of the ORCP.

4120 EXERCISES AND DRILLS

Refer to National Preparedness for Response Exercise Program Guidelines (PREP) 2002.

4200 SITUATION

Refer to IAPs in the specific area appendices of the MIACP and the Guam, Saipan, Tinian and Rota Annexes of MIACP.

4300 RESOURCES

Refer to the Appendix Section of the MIACP.

4310 RESOURCE MANAGEMENT PROCEDURES

Refer to Planning Section of IMH.

4320 SAFETY ASSISTANCE

Refer to Annex F, Section F.1 of the ORCP.

4330 SPECIAL FORCES

Refer to the Appendix Section of the MIACP.

4340 VOLUNTEERS

4340.1 Federal Agency Volunteer Management Policy

The three primary federal regulations governing oil spill response, 40 CFR 300 (National Contingency Plan), 29 CFR 1910.120 (Occupational Safety and Health Standards / Hazardous Waste Operations and Emergency Response) and 40 CFR 311 (Worker Protection) do not exclude the use of volunteer organizations. However, all spill response operations must comply with these regulations. 29 CFR 1910.120 outlines various health and safety requirements for different on-site activities. In addition, various federal property owners (e.g. Department of Defense and Department of Energy) may have specific regulations, policies or national security concerns regarding the use of volunteers. The Coast Guard does require a “hold harmless” clause to be signed by each volunteer. The legal representatives of volunteer organizations must be consulted prior to employing volunteers.

4340.2 MIACP Volunteer Management Policy

When appropriate, Sector Guam and the maritime community support the use of volunteer organizations subject to the policy constraints of Section 4340.1. Volunteers may be used provided they are sponsored and managed by a recognized organization; they must also be trained and qualified for the positions which they will fill. For safety, liability and management reasons, individual volunteers will not be used during oil, hazardous material (HAZMAT) or WMD incidents. Volunteers are subject to the following:

- Volunteer organizations must be structured (complete with an appropriate number of managers and supervisors) and be self-sustaining, such as the Red Cross or Salvation Army.

- The FOSC will require all volunteers to receive Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training prior to conducting any activity near oil spill / HAZMAT response, transportation or storage operations.

- Due to the logistical requirements of managing volunteers, the response organization must be large enough to support volunteer participation. The likely spill / release scenario in which volunteer organizations will be employed is a Maximum Most Probable incident.

- Volunteer assignments will generally be low-risk, e.g., assistance in the command post, logistics, staging areas and check-in locations. In certain circumstances, volunteers may be used for higher risk activities such as wildlife cleaning or pre-cleaning beaches. These activities however, require specialized training and in some cases licensing.

- When the RP is responsible for the funding of the spill / release response, his / her concerns and limitations on using volunteer organizations are considered heavily. However, the advantages and disadvantages of using volunteers will be discussed and decided upon by the UC with advice from legal representatives.

4340.3 Volunteer Training and Organizational Use

The Liaison Officer will coordinate volunteer activity. The Liaison Officer will require a Volunteer Coordinator to work with the manager or supervisor of the volunteer organizations. The Volunteer Coordinator is part of the Planning Section and reports to the Resource Unit Leader. Volunteer organizations must provide the Volunteer Coordinator with a roster and list verifying any certified training or qualifications held by their volunteers. This information will be collected and volunteers will be called upon for assistance as needed. The volunteer organization's representative will be responsible for their scheduling and filling of positions in cooperation with the Volunteer Coordinator. Once accepted by the UC, the volunteer organization will be assigned to a specific response organization branch or unit.

Note: The Commonwealth of the Northern Mariana Islands, the Territory of Guam, the Coast Guard and other agencies may provide limited training to volunteers, but have no resources to directly manage them.

4340.4 Support

The availability and logistics of all required support services will be examined prior to employing volunteers. Generally, it is expected that the volunteer organization will provide for, or at a minimum coordinate, the provision of these services for their volunteers. Subject to the approval of UC, volunteers may be provided or reimbursed for meals, lodging, mileage and other expenses.

4400 DOCUMENTATION

Refer to Annex C, Section C.2.1 of the ORCP. Also, refer to the IMH.

4500 DEMOBILIZATION

Refer to ICS form 221. Also, refer to the IMH.

4510 EQUIPMENT

Refer to the Appendix Section of the MIACP.

4600 ENVIRONMENTAL

Refer to the Appendix Section of the MIACP.

4610 FISH AND WILDLIFE RESPONSE PLAN

TBD.

4700 TECHNICAL SUPPORT

Refer to the Appendix Section of the MIACP.

4800 REQUIRED CORRESPONDENCE, PERMITS & CONSULTATION

This is section and the following subsections underscore the use of formal correspondence, permits, or consultation for activities that could impact spill prevention or response operations.

4810 ADMINISTRATIVE ORDERS

An administrative / directive order is used by the FOSC to ensure appropriate actions are being taken by a RP in a potential threat or actual spill or Federal Water Pollution Control Act (FWPCA) hazardous material release. The Oil Pollution Act (OPA) of 1990 amended the FWPCA and provided more authority to FOSC's to direct the removal actions in response to discharges of oil or FWPCA hazardous substances. Under 33 USC 1321 (c) and (e), an FOSC may now issue orders to responsible parties to ensure effective and immediate removal of a discharge or the mitigation or prevention of a substantial threat of a discharge of oil or FWPCA hazardous substance. An FOSC may

also issue administrative orders "that maybe necessary to protect public health and welfare". FOSC's who need to issue an administrative order under the FWPCA can review COMDTINST M16000.11, Coast Guard Marine Safety Manual, Volume VI, Chapter 7, Figure 7-11, or contact the Assistant Commandant for Marine Safety, Security, and Stewardship (CG-5) http://www.uscg.mil/hq/cg5/default.asp for more guidance.

Reference Comprehensive Environmental response, Compensation, and Liability Act (CERCLA) of 1980, Section 106a.

4820 NOTICE OF FEDERAL INTEREST

The Notice of Federal Interest (NOFI) is used to designate and notify (in writing) the owners, operators or persons potentially involved in an oil pollution incident that an oil pollution incident occurred or threatens to occur and that specified personnel may be financially responsible for that incident. In addition, the RP will be liable for costs to include, but are not limited to removal costs and damages resulting from the incident. The NOFI notifies the RP that the failure or refusal to provide all reasonable cooperation and assistance requested by the FOSC will eliminate any defense or entitlement to limited liability. The NOFI also notifies the RP that failure to properly carry out the removal of the discharge or to comply with any administrative order of the FOSC may result in civil penalties up to three times the cost incurred by the Oil Spill Liability Trust Fund (OSLTF).

Reference COMDTINST M16000.11, Coast Guard Marine Safety Manual, Volume VI, Chapter 7.B.3.a.

4830 NOTICE OF FEDERAL ASSUMPTION

The Notice of Federal Assumption (NOFA) is used to notify the RP of an oil pollution discharge and to advise that he / she is financially responsible. The NOFA also advises that their actions to abate the threat or removal of oil from the waters, or adjacent shoreline have been evaluated as being unsatisfactory by the FOSC and that the U.S. Coast Guard will conduct oil response / removal activities as outlined under federal statues.

Reference COMDTINST M16000.11, Coast Guard Marine Safety Manual, Volume VI, Chapter 7.B.3.d.

4840 LETTER OF DESIGNATION

The Letter of Designation is used to disseminate information about an oil pollution discharge incident so that potential claimants will be aware of the opportunity and

procedures for submitting claims for uncompensated removal costs or damages. Exact specification and types of advertisement required are provided in the Letter of Desgination issued by the National Pollution Funds Center. Section 1014 (b) of OPA 90 provides that designation of source is done where "possible and appropriate."

Reference COMDTINST M16000.11, Coast Guard Marine Safety Manual, Volume VI, Chapter 7.

5000 LOGISTICS

Note: refer to the Resource Appendix Section of the MIACP for additional information.

5010 INTRODUCTION

The Logistics Section is responsible for providing facilities and all services and materials needed to sustain the response operations of an incident. The FOSC, acting as the Incident Commander, will determine the need to establish a Logistics Section for the incident. This is usually determined by the size of the incident, complexity of support, and how long the incident may last. Some organizational elements of the Logistics Section include the Communications, Medical, Food, and Supply Units.

Refer to Logistics Section of IMH.

5100 LOGISTICS SECTION ORGANIZATION ROLES AND RESPONSIBILITIES

Refer to Logistics Section of IMH.

5200 SUPPORT

Refer to the Resource Appendix Section of the MIACP for additional information.

5210.1 Oil Response Equipment

Refer to the Resource Appendix Section of the MIACP for additional information.

5210.2 Hazardous Substance Response Equipment

Refer to the Resource Appendix Section of the MIACP for additional information.

5220 FACILITIES

5220.2 Berthing / Accommodations / Lodging

Refer to the Resource Appendix Section of the MIACP for additional information.

5220.3 Port / Dock Facilities / Capacities

Refer to the Resource Appendix Section and Specific Sections of the MIACP for additional information.

5220.4 Staging Areas

Refer to the IAPs in the Appendix Section of the MIACP for additional information.

5220.5 Airports / Heliports

TBD.

5220.6 Temporary Storage And Disposal Facilities (TSDs).

TBD.

5230 VESSEL SUPPORT

Refer to the Resource Appendix Section of the MIACP for additional information.

5240 GROUND SUPPORT

Refer to the Resource Appendix Section of the MIACP for additional information.

5300 SERVICES

5300.1 Food

Refer to Resource Appendix Section of the MIACP for additional information.

5300.2 Medical

Refer to the Resource Appendix Section of the MIACP for additional information.

5400 COMMUNICATIONS

5400.1 Communications Plan

Refer to the Resource Appendix Section of the MIACP for additional information.

5400.2 Telephones

Refer to the Resource Appendix Section of the MIACP for additional information.

5400.3 Cellular Telephones

Refer to the Resource Appendix Section of the MIACP for additional information.

5400.4 Portable Radios

Refer to the Resource Appendix Section of the MIACP for additional information.

5400.5 Portable Communication Trailers

Refer to the Resource Appendix Section of the MIACP for additional information.

5410 Websites

The Emergency Notification Service (ENS) is a 24/7 service to notify critical government personnel during emergencies using multiple communication channels, including telephone, Short Message Service (SMS), pager, and e-mail. http://ens.ncs.gov. Currently, Sector Guam primarily uses the Coast Guard HOMEPORT web portal and its Alert Warning System (AWS) to notify the maritime community and homeland security partners of all-hazards emergency incidents. Refer to the HOMEPORT web portal http://homeport.uscg.mil.

5420 MEDIA

Refer to the Resource Appendix Section of the MIACP for additional information.

5420.1 Newspapers

Refer to the Resource Appendix Section of the MIACP for additional information.

5420.2 Television

Refer to the Resource Appendix Section of the MIACP for additional information.

5420.3 Radio

Refer to the Resource Appendix Section of the MIACP for additional information.

5430 RESPONSE PERSONNEL COMMUNICATIONS

Refer to Annex L, Section L.1 of the ORCP.

5440 PUBLIC INFORMATION AND COMMUNITY RELATIONS

Refer to Annex L, Section L.2 of the ORCP.

The following summarizes the Public Affairs Policy of the U.S. Coast Guard:
1. It is the policy of the Coast Guard to make available to the public all information concerning the activities of the service except that information which is restricted by law. This is to be done in a forthright, expeditious manner. In a nutshell, the general rule is "Maximum disclosure with minimum delay."

2. Public affairs is a command responsibility. Commanding officers and officers-in-charge have the authority to release information pertaining to their commands according to the provisions of references (a) and (b) of the Letter of Promulgation for this Manual. Commanding Officers are responsible for ensuring that their unit's public affairs program is conducted in accordance with the guidance contained in this Manual.

3. The Coast Guard's Public Affairs Program is assertive, not passive. We do not wait for the public or media to ask what we are doing. We provide accurate, timely information by the most efficient means possible. All Coast Guard personnel are encouraged to exercise initiative and creativity in the accomplishment of our public affairs missions.

4. Complete guidance on the types of information that may be withheld is contained in Chapter 2 of the Coast Guard Public Affairs Manual. Generally, information should be withheld only if it is:

a. Classified.
b. Specifically required to be withheld by a federal statute, such as the Privacy Act.
c. A trade secret or commercial or financial information considered privileged or confidential.
d. Contained in inter- or intra-agency documents that would not be available by law to a party other than one in litigation with the agency.
e. A clearly unwarranted invasion of personal privacy.
f. Information which could jeopardize or interfere with a judicial proceeding or law enforcement official or activity.

The five primary objectives of the Coast Guard's Public Affairs Program are:

a. Keeping the American public informed about the Coast Guard's ongoing operations and programs, thereby fostering understanding and support for all our missions.
b. Making our world a better place to serve and live by taking an active role in community activities and challenges.
c. Helping Coast Guard leadership attract, motivate and retain highly professional people to continue our tradition of dedicated quality service to the country.
d. Helping save lives by educating and informing the American public, thus reducing accidents and casualties.
e. Educating elected and public officials of the Coast Guard's role in their community and nation for continued healthy fiscal support for our service.

6000 FINANCE AND ADMINISTRATION

6010 INTRODUCTION

The Finance/Administration Section is responsible for the purchase and procurement of equipment, goods, and services of items / people needed to finance the support to an incident. The Finance/Administrative Section must fiscally account for an incident during the pre-incident / actual incident / and recovery incident phases. Some organizational elements of the Finance/Administration Section include the Procurement, Cost, Compensations Claims, and Time Units.

Refer to Section 2000 of the General Section of the MIACP and the Finance/ Administrative Section of IMH.

6100 FINANCE / ADMINISTRATIVE SECTION ORGANIZATION ROLES AND RESPONSIBILITIES

Refer to Finance/Administrative Section of IMH. Also, refer to the Finance and Resource Management (FARM) Field Guide.

6200 FUND ACCESS

In order for a State to access to the OPA 90 Superfund, the Governor of a State must file a letter at the National Pollution Funds Center (NPFC) designating the applicant to be a State official authorized to make a request. The application must establish: (1) the incident is eligible for immediate removal under the Clean Water Act (CWA), as amended by OPA 90, (2) the substance discharged or threatening discharge is oil, (3) the incident occurred after August 18, 1990, (4) the aggregate amount of the request is equal to or less than $250,000 (5) the proposed removal actions are consistent with the NCP (including the requirements of 40 CFR 300 and 40 CFR, 305(c) which emphasize that the discharger makes a reasonable effort to voluntarily and promptly perform removal actions), (6) the proposed level of response, proposed actions, and money requested are appropriate for the circumstances, and (7) the State has the means to complete the immediate removal.

Refer to the Technical Operating Procedures for State Access under Section 1012(d) of OPA 90 (NPFCINST 16451.1).

6300 COST

Refer to Finance/Administrative Section of IMH; the Finance and Resource Management Field (FARM) Guide; and the NPFC website at http://www.uscg.mil/npfc/.

6400 TIME UNIT

Refer to Finance/Administrative Section of IMH.

6500 COMPENSATION/CLAIMS

Refer to Finance/Administrative Section of IMH.

6600 PROCUREMENT

Refer to Finance/Administrative Section of IMH.

6610 OPERATIONAL ADMINISTRATION

Refer to Annex C of the ORCP.

7000 RESERVED

SECTION 8000

MARINE FIREFIGHTING

TABLE OF CONTENTS

SECTION 8000

MARINE FIREFIGHTING

SECTION 8000

MARINE FIREFIGHTING

8100 Introduction

8110 Purpose and Objectives

Major marine firefighting incidents will likely require the coordinated efforts of federal, state, and local resources to carry out the level of response required. The purpose of this plan is to provide guidance to the Captain of the Port (COTP) and local fire agencies concerning fighting fires on vessels to ensure coordinated response to marine fires occurring throughout the Mariana Islands.

This regional contingency plan has the following major objectives:

(1) To promote safety for first responders, protect lives and property within the Mariana Islands' ports;
(2) Identify jurisdiction and clarify lines of authority and response during a response;
(3) To secure a relationship among responsible federal, state, and local municipalities and commercial facilities so that resources may be employed to affect a swift, well coordinated response to vessel and waterfront fire emergencies.

8120 Scope

The Marine Firefighting (MFF) Plan is prepared and maintained by USCG Sector Guam. The data recorded in this Plan reflects input from the MFF Subcommittee of the Mariana Islands Area Contingency Plan (MIACP) Committee and encompasses all areas within the COTP Guam Zone.

8130 Definitions

CAPTAIN OF THE PORT (COTP): The Coast Guard officer designated by Commandant, USCG, to exercise federal responsibility for the safety and security of ports and waterways in a specific geographic area. For purposes of this Plan, COTP means COTP Sector Guam.

DANGEROUS CARGO MANIFEST: The Dangerous Cargo Manifest (DCM) is a listing of all hazardous material cargo on a vessel and contains a great deal of information of interest to emergency response teams. Vessel information includes name, call sign, flag, port of loading/discharge, and date. Cargo information includes proper shipping name, gross weight of cargo, hazard class, types of package, storage locations, and emergency response telephone number. Only hazardous materials subject to 49 CFR or the International Maritime Dangerous Goods (IMDG) code may be listed on the DCM.

EMERGENCY OPERATIONS CENTER: Facilities with extensive inter-agency communications and coordination capabilities. It will be activated during significant emergencies such as a Level II fire as defined in this Plan.

FIRE CONTROL PLAN: A copy of this plan is prominently displayed in a weather tight enclosure, located outside the deckhouse (usually near the brow) for the assistance of shoreside firefighting personnel. It contains a set of general arrangement plans showing, for each deck, the fire control stations, fire resistant and fire retardant bulkheads. It also contains particulars of the fire detection, manual alarm, fire extinguishing systems, fire doors, means of access to different compartments, and ventilating systems including locations of dampers and fan controls.

HAZARDOUS MATERIALS: These are materials which, when commercially transported, are designated by the US Dept of Transportation (DOT) as presenting an unacceptable risk to health, safety, and property. These materials are carried by vessel in accordance with US DOT or USCG regulations. Regulations applicable to the transportation of hazardous materials by vessel include:

- Title 49 CFR, Subchapter C (Packaged Materials)
- Title 46 CFR, Subchapter D (Tank Vessels)
- Title 46 CFR Subchapter O (Certain Bulk Dangerous Cargoes)

INTERNATIONAL SHORE CONNECTION: This device is used to connect the water system piping of the vessel with the water supply on the shore. International Code requires that the ship have a connection with the ship's fire system threads on one end and the international bolted flange on the other end. National Fire Code (NFPA 1405) requires the shoreside fire department must have a connection with the shoreside fire department's threads on one end and the international bolted flange on the other end.

MARINE CHEMIST: A person who is certified through the National Fire Protection Association (NFPA) to determine if enclosed spaces are safe for workers, hotwork, or other operational restrictions for overhaul after the fire has been extinguished. The Marine Chemist should also be consulted for any fires involving hazardous materials.

MARINE FIRE FIGHTING SUBCOMMITTEE: A subcommittee of the Guam and CNMI MIACP Committee which examines local policy issues and concerns regarding fire fighting in the COTP area. This group will be comprised of USCG, Department of Defense and local/Territory fire fighting agencies to enhance inter-agency coordination.

MATERIAL SAFETY DATA SHEET (MSDS): The MSDS is a chemical product information guide to be used if the product becomes a hazard because of a release, fire, or other unknown reaction. The MSDS contains information as to the fire problems, health hazards, toxicity, and reactivity of the chemical or product for which the MSDS was written. All chemicals and products for which chemicals were used in its manufacture must have an MSDS sheet.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA): An international non-profit organization of technical experts established in 1896 to reduce the worldwide burden of fire hazards by providing codes and standards, research and education. Many of theses codes and standards have been incorporated by reference into federal and local regulations. *NFPA 1405 – Guide for Land-based Fire Fighters Who Respond to Marine Vessel Fires* is referenced in this plan as the accepted practices to be followed when responding to marine fires in COTP Guam zone.

REGIONAL RESPONSE TEAM (RRT): Each RRT maintains a Regional Contingency

Plan (RCP) and has state/Territory, as well as federal government, representation. EPA and the

Coast Guard co-chair the RRTs. RRTs are planning, policy and coordinating bodies and do not respond directly to the scene. The RRT provides assistance as requested by the

On-Scene Coordinator during an incident. Guam and CNMI resides in Oceania Regional Response Team zone. (See also http://www.rrt4.nrt.org/)

SAFETY ZONE: A safety zone is a water area or a water/shore side area to which, for safety or environmental protection purposes, access is limited to authorized persons, vehicles or vessels. The safety zone is established by the COTP to protect vessels, structures, and shore areas. The safety zone can be fixed or mobile around a moving vessel. The COTP may direct who and what may operate within the safety zone.

SALVAGE COMPANY REPRESENTATIVE: A person or company who has been contracted to either assist in the firefighting effort or stabilize/recover the vessel following the fire for final disposition. The salvage representative may be contracted by the owner/operator of a vessel or a regulatory agency (local, state, federal) when the owner/operator has not responded in a timely manner. The agency decision to contract a salvor should be the function of a unified command.

SECURITY ZONE: Security zones are designated areas of land, water, or land and water established for such time as is necessary to prevent damage or injury to any vessel or waterfront facility to safeguard ports, harbors, territories, or waters of the United States, or to secure the observance of rights and obligations of the United States. The security zone is established by the COTP or CG District Commander. The designation of a security zone may only be made for areas within the territorial limits of the United States.

STRIKE TEAM: A Coast Guard component comprised of highly trained professional cadre who maintain and deploy with specialized equipment and expertise to support Federal responses to pollution and salvage incidents. Sector Guam resides in the Pacific Strike Team zone home ported in Novato, CA.

SECTION 8000

MARINE FIREFIGHTING

8200 Authorities, Policy and Responsibility

8210 Authorities

The Captain of the Port (COTP) has the authority, under Title 14, United States Code (USC) 88 (b), to render aid, save life and property in the event of a marine related emergency (including fire), within the capabilities of available United States Coast Guard (USCG) resources. The COTP has the power under the Ports and Waterway Safety Act (33 USC 1221-1236) to direct the anchoring, mooring, or movement of a vessel. Under the Clean Water Act (33 USC 1251 et seq.), the Commandant of the USCG, acting under the authority delegated to him for pollution discharge response and removal, may, whenever a marine disaster in the navigable waters of the United States has created a substantial threat of pollution, coordinate and direct all public and private efforts directed at the removal of such threat and summarily remove and, if necessary, destroy such a vessel. This would occur in the instance of a discharge or an imminent threat of a discharge of large quantities of oil or a hazardous substance from a vessel.

The Intervention on the High Seas Act (33 USC 1471, et seq.) extends USCG authority to take similar preemptive or corrective action upon the high seas (i.e. beyond the twelve mile territorial sea). Specifically, it authorizes the Commandant of the USCG to take such measures on the high seas as may be necessary to prevent, mitigate, or eliminate grave and imminent danger to the coastline or related interests from pollution or threat of pollution of the sea by oil, following a maritime casualty, or acts related to such a casualty which may reasonably be expected to result in major harmful consequences. This authority rests with the Commandant of the Coast Guard. The COTP should relay any recommendation to take such action through his or her District Commander to the Commandant.

42 USC 1856a provides that an agency charged with providing fire protection for any property of the United States may enter into reciprocal agreements with state and local fire-fighting organizations to provide for mutual aid. Additionally, emergency assistance may be rendered in the absence of a reciprocal agreement, when it is determined by the head of that agency to be in the best interest of the United States. Mutual Aid Agreements exist between many local municipal fire departments and industrial entities.

8220 Policy

8221 Federal Policy

The USCG fire-fighting policy is set forth in the Marine Safety Manual, Vol. VI, Chapter 8. Although the USCG clearly has an interest in fighting fires involving vessels or waterfront facilities, local authorities are principally responsible for maintaining necessary fire-fighting capabilities in U.S. ports and harbors. The involvement of USCG forces in actual fire-fighting shall be to a degree commensurate with our personnel training and equipment levels. The USCG intends to maintain its historic “assistance as available” posture without conveying the impression that we stand ready to relieve local jurisdictions of their responsibilities. Additionally, the response actions taken shall pose no unwarranted risk to USCG personnel or equipment.

SECTION 8000

MARINE FIREFIGHTING

The Marine Safety Manual specifically addresses both USCG and non-USCG supervised fire-fighting activities. "Generally, USCG personnel shall not actively engage in fire-fighting except in support of a regular fire-fighting agency under the supervision of a qualified fire officer. USCG personnel shall not engage in independent fire-fighting operations, except to save a life or in the early stages of a fire to avert a significant threat without undue risk."

Paramount in preparing for vessel or waterfront fires is the need to integrate USCG planning and training efforts with those of other emergency response agencies in Guam and the Commonwealth of the Northern Mariana Islands (CNMI). These agencies include: Guam Fire Department (GFD); Port Authority of Guam (PAG); Guam Homeland Security (GHS)/Office of Civil Defense (OCD); CNMI Homeland Security / Emergency Management Office (HSEM); CNMI Department of Public Safety (DPS); Commonwealth Ports Authority (CPA); and Department of Defense (DOD). The COTP will work closely with the foregoing agencies as well as facility owners and operators; mutual aid groups; and other interested organizations.

8222 Local Policy

Although the Coast Guard clearly has an interest in fires involving vessels or waterfront facilities, local authorities are principally responsible for maintaining the necessary fire fighting capabilities within U.S. ports and harbors and up to 3 NM from the coastline boundary as directed by the Governor or applicable Emergency Operations Center (EOC).

The owner/operator of a waterfront facility and the master of a vessel moored at a facility have a vested interest in the protection of the crew, facility, vessel and cargo. In the event of a fire, prompt notification must be given to local response agencies. The vessel/facility should contact the local fire department by calling 911. It is essential that both territory emergency management officials and COTP be notified immediately of any marine fire. Notifications should be conducted in accordance with section 8410 of this Plan for rapid, efficient dissemination of information. Local standard operating procedures may dictate additional notifications.

8223 COTP Policy

The COTP is responsible for providing commercial vessel expertise, knowledge in shipboard fire-fighting systems, stability, vessel damage control, vessel design and structure, and pollution response. Also, the COTP is tasked with contingency planning for marine fire-fighting. During an incident, the Incident Command System (ICS) will be activated to coordinate response to the fire. In general terms, USCG Sector Guam is responsible for overseeing the operations of Coast Guard vessels. This includes, but is not limited to, assisting in fire-fighting activities, conducting search and rescue missions and enforcing COTP safety zones.

SECTION 8000

MARINE FIREFIGHTING

8230 Responsibilities

8231 COTP Responsibility

COTP Guam is tasked with the following responsibilities during a vessel or waterfront facility fire in the COTP Guam AOR:

- Assist in providing technical assistance to the IC regarding vessel design, structure, and stability;
- Assist with procuring all available data and information on the vessel and its cargo, which may be of use to the IC in fire-fighting and/or salvage operations;
- Provide coordination for any requested USCG assistance such as vessel traffic control, oil pollution response and hazardous material response;
- For a shipboard fire, the formal establishment of Unified Command (UC) sections as required.

The COTP shall also be responsible for fire prevention on board vessels and waterfront facilities. To meet these goals, the COTP shall:

- Inspect foreign and U.S. flagged vessels in accordance with applicable USCG policy to ensure that vessels making port calls within the COTP Guam AOR meet minimum Safety of Life at Sea (SOLAS) and U.S. regulatory requirements;
- Inspect all waterfront facilities over which the USCG has jurisdiction in order to minimize fire hazards;
- Collaborate, where applicable and appropriate, with Guam Fire Department (GFD) and CNMI Fire and Emergency Medical Services regarding the results of these inspections and in taking action to rectify any potential issues. Collaboration will occur primarily via the Mariana Islands MFF Subcommittee meetings; and
- Designate a Marine Fire-fighting Coordinator (MFC) from within the Sector Guam staff to serve as a liaison between the responding firefighters and the vessel master, and to assist with terminology differences. The Prevention Department Head is designated as the MFC. This designation may be delegated down to a qualified individual within the Prevention and Compliance Department.

Finally, the COTP is tasked with contingency planning. Planning must be a multi-agency, multi-jurisdictional activity. Cooperation among the response agencies during the planning stages is paramount for a successful incident response. Therefore, the COTP shall:

- Provide a forum for members of the emergency response community and the maritime industry to improve the Port's readiness to respond to an actual or threatened emergency. For Guam and the CNMI, this forum will be the MFF Subcommittee meetings;
- Identify and clarify agency roles under the ICS;
- Identify command, control and communications procedures among the local fire departments, state and federal agencies and other concerned response parties;

- Develop a wide range of information and data such as anchorage information; pier data; points of contact for local salvage companies, naval architects, etc to assist Incident Commanders in the decision making process during an incident;

8232 Local Fire Department Responsibilities

The fire department within whose jurisdiction the vessel/facility lies or moored is the responsible fire suppression agency and is in charge of all firefighting efforts. The fire department which has jurisdiction shall:

- Act as a member of the Unified Command (UC);
- Establish a command post when acting in the UC;
- Request necessary personnel and equipment including fire boats and appropriate medical aid;
- Determine the need for, and request mutual aid;
- Make all requests for Coast Guard/federal personnel, equipment, and waterside security through the COTP;
- Establish liaison with police departments for landside traffic and crowd control, scene security, and evacuation; and
- Provide portable communications equipment or common use frequency to response personnel from outside agencies.

8233 Owner/Operator Responsibilities

8233.1 Facilities shall designate an employee who shall:

- Act as a member of the UC as required;
- Be responsible for ensuring that all standpipe, fire hose, sprinkler equipment, portable fire extinguishers, and other protection devices and equipment are maintained;
- Be familiar with the location of all telephones, valves, alarm boxes, fire hose stations, portable fire extinguishers, and other firefighting equipment;
- Have ready access to information concerning the fire hazard characteristics of the cargos in the terminal and the location of all cargo that is exceptionally hazardous.
- Enforce all fire safety regulations and instruct employees in the proper use of alarm boxes.

8233.2 Vessel Masters (or in the absence of the master, the senior deck officer) shall:

- Act as a member of the UC as required;
- Implement the initial response based on the fire control plan of the vessel;
  Establish communications, both internal and external. Ensure that proper notifications are made to the appropriate fire department or contractor, the Port Authority of Guam (PAG), Commonwealth Port Authority (CPA), and the USCG as applicable. If appropriate, notify the facility to which the vessel is docked, the port authority, and any nearby vessels;
- Control the operation and use of all fixed fire-fighting systems aboard the vessel;
- Coordinate the efforts of shipboard or fire teams responding to the fire; and

- Decide if it is necessary to abandon ship. If the crew is ordered to abandon ship, the master will ensure that the proper procedures are carried out and that the USCG is immediately notified. The IC will direct the fire-fighting operations of all responding agencies.

8233.3 Vessel Agents shall:

- Coordinate this plan with the vessel master; and
- Serve as the Vessel Liaison in the UC.

8234 Non-Federal Responsibility

Non-Federal Responsibility: There are numerous other agencies, parties and individuals whose assistance and expertise will be invaluable in any major maritime incident. The following is a partial listing of the parties who will likely play an important role in an incident:

Facility/Vessel owner/operator
Port Authority Guam (PAG)
Guam Fire Department (GFD)
Guam Police Department (GPD)
GHS/OCD
CNMI Department of Public Safety
CNMI Emergency Management Office
Vessel Agent
Division of Environmental Quality(DEQ)
Fish and Wildlife Division
Pilots
Foreign Consulate
Tug Operators – Cabras Marine
Naval Base Guam
Marine Chemists
Naval Architects
Pollution Cleanup Contractors
CNMI Commonwealth Ports Authority
CNMI Coastal Resources Management
Occupational Safety & Health Administration (OSHA)
Guam Port Authority Police

Refer to applicable Facility Response Plans (FRP) and PAG/CPA Emergency Response Plan (ERP) for specific guidance and information on individual agency responses.

SECTION 8000

MARINE FIREFIGHTING

8300 PLANNING AND RESPONSE CONSIDERATIONS

8310 Levels of Response

Not all marine disasters require the full response set forth within this plan. The following parameters may be used as a guide in determining the scale and size of response organization required given the prevailing emergency conditions:

Level I Response – Local command structure – A marine casualty involving vessel of facility that does not pose a major threat to the port. Examples include pleasure craft, small vessels in boatyards, houseboats, etc. This level of disaster can usually be handled by one fire department on the local level with minimal waterside support. Minimal territory and federal assistance will be required.

Sector Guam shall be notified in accordance with section 8410 and will send a pollution investigation representative to the scene who will provide direct liaison to the COTP.

Level II Response – Unified Command structure – A marine casualty on a vessel or facility that has the potential to be a significant risk to the port. Examples include small freight vessels in Apra Harbor, container fires aboard container ships, tug fires, any ship/barge fires, etc. This level of disaster may involve the extra alarm response of two or more fire departments with mutual aid and waterside support requiring the coordination of county EOCs and dispatch centers.

A unified command post will be established by the jurisdictional fire department and notifications coordinated through the county EOCs and Sector Guam command center.

Sector Guam will dispatch a on-scene coordinator and additional personnel (as required) who will supplement the unified command staff to coordinate any support and resources outside the existing mutual aid agreements. Examples include stability calculations, obtaining salvage consultation, networking with port officials to move the affected or adjoining vessels, etc. Responses of this complexity will necessitate a NIMS compliant Incident Command structure of appropriate size only to manage the response.

8320 High Risk Areas and Cargoes

The following areas within the Guam COTP region store or off/on load regulated liquids in bulk and other hazardous cargo:

8321 Port of Guam (PAG)

8321.1 Petroleum Transfer Wharfs/Hazmat Off-loading/On-loading Wharfs

Wharfs	Latitude	Longitude	Hazardous Cargo	Contact Number
Delta Wharf	13°27’30”N	144°40’07”E	Petroleum	(671) 339-6141
Echo Wharf	13°27’28”N	144°39’59”E	Petroleum	(671) 339-6141
F1 Wharf	13°27’34”N	144°39’43”E	Petroleum	(671) 565-2300
G Wharf	13°27’48”N	144°39’31”E	Petroleum	(671) 479-3275
F4-F6 – Location is center of F5	13°27’38”N	144°40’09”E	Hazardous Cargo in Shipping Containers – See manifest/PLACARD	(671) 472-2703

8321.2 Petroleum Terminals/Storage Facilities

Facility/Operator	Latitude	Longitude	Hazardous Cargo	Contact Number
Vital Energy	13°27’40”N	144°41’10”E	Petroleum	
IP&E	13°27’44”N	144°39’57”E	Petroleum	
SPPC	13°27’49”N	144°39’51”E	Petroleum	(671) 482-5344
SPPC LPG	13°27’48”N	144°39’31”E	LPG	(671) 482-5344
Mobil	13°27’50”N	144°39’47”E	Petroleum	(671) 479-3275
PAG HAZMAT Storage	13°27’44”N	144°40’33”E	Hazardous Cargo in Shipping Containers – See manifest/PLACARD	(671) 472-2703
Kilo Wharf	13°26’45”N	144°37’49”E	Explosives	(671) 339-6141

8322 Commonwealth Port Authority (CPA)

8322.1 Saipan Facilities/Wharf

Facilities/Wharf	Latitude	Longitude	Hazardous Cargo	Contact Number
Mobil Terminal/Storage	15°13’27”N	145°44’05”E	Petroleum	
IP&E Terminal/Storage	15°13’24”N	145°44’01”E	Petroleum	
Saipan CPA Fuel Transfer Wharf	15°13’31”N	145°43’58”E	Petroleum	
Saipan CUC Storage Tanks	15°13’53”N	145°44’27”E	Petroleum	
CPA Saipan Hazmat Storage	15°13’30”N	145°44’02”E	Hazardous Cargo in Shipping Containers – See manifest/PLACARD	

8322.2 Tinian Petroleum Facilities/Wharf

Facilities/Wharf	Latitude	Longitude	Hazardous Cargo	Contact Number
Mobil Terminal/Storage	14°57’59”N	145°37’13”E	Petroleum	
Tinian CPA Fuel Transfer Wharf	14°57’57”N	145°37’11”E	Petroleum	
Tinian CUC Storage Tanks	14°58’27”N	145°36’52”E	Petroleum	
CPA Tinian Hazardous Cargo	14°57’59”N	145°37’08”E	Hazardous Cargo in Shipping Containers – See manifest/PLACARD	

8322.3 Rota Petroleum Facilities/Wharf

Facilities/Wharf	Latitude	Longitude	Hazardous Cargo	Contact Number
Mobil Terminal/Storage	14°08’23”N	145°08’42”E	Petroleum	
Rota CUC Storage Tanks	14°08’12”N	145°08’09”E	Petroleum	
Mobil Mooring Transfer Buoy	14°08’05”N	145°08’36”E	Petroleum	
CPA Rota Hazardous Cargo	14°08’12”N	145°08’09”E	Hazardous Cargo in Shipping Containers – See manifest/PLACARD	

Note: LPG is shipped from in ISO Tanks from Guam to the Outer Islands (Saipan, Tinian and Rota).

8330 Minimum Notification Information Required

The following is the minimum notification information required for a fire:

- Location;
- Type of fire (petroleum, cargo, containers, etc);
- Description (vessel description, facility description); and
- Vessel or facility name.

8340 Response Time Frames for Marine Firefighting Services

In accordance with Title 33 Code of Federal Regulations (CFR) Part 155, subpart l (Salvage and marine fire-fighting); specific response timeframes must be met for tank vessels and other vessels requiring vessel response plan (VRPs). The following response timeframe requirements from Title 33 CFR Part 155, Table 155.4030(b) are applicable to Guam and the CNMI:

Service	At-Pier	Near-shore	Off-shore
Remote Assessment / Consultation	1 Hour	1 Hour	1 Hour
On-site Fire Assessment	2 Hours	6 Hours	12 Hours
Arrival of External Firefighting Teams	4 Hours	8 Hours	12 Hours
Arrival of External Firefighting Systems	4 Hours	12 Hours	18 Hours

For clarity, the following definitions apply to the above tables:

At-Pier: Includes ships moored at any commercial pier facility in Guam and the CNMI.

Near-shore: Includes all waters less than or equal to 12-miles from the response origination point.

Off-shore: Includes all waters in excess of 12-miles and up to 50-miles from the response origination point.

8350 Offshore Firefighting Considerations

If a fire is on an off-shore vessel and the crew is unable to contain the fire, the USCG may be designated as the Incident Commander to protect U. S. interests under authority of the Ports and Waterways Safety Act (PWSA). As local jurisdiction does not extend past three miles off-shore and local agencies have limited water firefighting capabilities, the USCG will utilize available Guam or CNMI government, DOD, and commercial resources.

The primary concern with off-shore fires is rescue and safety of life. Subsequent will be the prevention of pollution to U. S. waters and fouling of sensitive fishing areas, wildlife habitats, shorelines, economically sensitive areas, and obstructions to navigation.

8360 Decision to Allow a Burning Vessel to Enter Port

Due to limited resources available, the COTP may be forced deny permission for a burning vessel to enter port. Information concerning mooring, anchorage and grounding sites should be reviewed and considered as part of this decision. A burning vessel is only a small part of the resources that must be protected.

Entry into port or movement within the port may be denied when:

- Fire could spread to other port facilities or vessels;
- Vessel carrying hazardous cargo (chemicals, explosives, or gasoline);
- Vessel may sink or capsize within a channel, creating obstruction to navigation;
- Vessel may become derelict; or
- Unfavorable weather conditions preclude safe movement or hamper fire-fighting.

Additional considerations in the decision process are in Chapter 8, Volume VI of the Marine Safety Manual.

8370 Movement of a Burning Vessel

There are numerous factors that the COTP must consider when faced with the decision to allow a burning vessel to move within a port. When a commercial vessel moored pier-side in Guam or the CNMI is ablaze and the fire is deemed uncontrollable, the COTP may give the order to move the vessel. Oftentimes, in order to protect adjacent property, assets and facilities, a burning vessel is less of a threat if it is moved rather than remaining pier-side. In these instances, the COTP may give the order to move the burning vessel. The following information should be gathered and considered prior to making such a decision:

- Location and extent of fire;
- Status of shipboard fire-fighting equipment; Vessel traffic in the port;
- Class and nature of cargo (HAZMAT); Possibility of explosion;
- Possibility of vessel sinking/capsizing;
- Hazard to crew or other resources where vessel is present;
- Forecasted weather (including bar conditions if applicable);
- Maneuverability of the vessel (i.e. is it a dead ship, etc);
- Availability of assist tugs;

- Potential for the fire to spread to the pier or pier structures;
- Fire-fighting resources available ashore and off-shore;
- Consequences/alternatives if the vessel is not allowed to enter or move; and
- Potential for pollution.

Upon COTP approval for moving a burning vessel to protect adjacent assets, tug operators will tow the vessel to a pre-designated emergency scuttling site, or a specific site as directed by the COTP. At the time of this plan revision, pre-designated emergency scuttling sites for Guam and the CNMI have not been developed.

8380 Area Resource List

Resource	Capabilities	Qty	Owner/POC	Location	Emergency Phone	Comments
USCGC WASHINGTON	Installed Fire Pump - 250 GPM	1	Sector Guam	Inner Apra Harbor	(671) 355-4834	55 Gal AFFF (installed)
USCGC ASSATEAGUE	Installed Fire Pump - 250 GPM	1	Sector Guam	Inner Apra Harbor	(671) 355-4834	55 Gal AFFF (installed)
USCGC SEQUOIA	Installed Fire Pump - 470 GPM 1000 GPM	1	U.S. COAST GUARD District 14	Inner Apra Harbor	(671) 355-4834	150 Gal AFFF (installed)
USCG Station Apra Harbor	P-6 Dewatering Pumps 250 GPM	3	Sector Guam	Inner Apra Harbor	(671) 355-4834	Dewatering Only
Navy Base Guam Fire Department*	Not Listed	1	US Navy	Navy Base Guam	(671)339-7760	N/A
Guam Fire Department (GFD)	1 Engine 1250 GPM Can direct draft up to 15 ft	1	GFD	Piti Fire Station	911	40 Gal Type 1 Foam 40 Gal Type 2 Foam
Port Authority of Guam (PAG)	50’ of 1 ½” Fire Hose	8	PAG	Cabras Island	(671) 477-5931	Hoses stationed throughout Port

SECTION 8000

MARINE FIREFIGHTING

Resource	Capabilities	Qty	Owner/POC	Location	Emergency Phone	Comments
Port Authority of Guam (PAG)	International Hose Connections	4	PAG	Cabras Island	(671) 477-5931	2 at Safety Office 2 at Port Police
Port Authority of Guam (PAG)	Fire Hydrants	25	PAG	Cabras Island	(671) 477-5931	2 above ground All are on city water supply
Port Authority of Guam (PAG)	Mobile Fire Suppression Pumps	3	PAG	Cabras Island	(671) 477-5931	Seawater suction
Port Authority of Guam (PAG)	5-Person Fire Suppression Team	1	PAG	Cabras Island	(671) 477-5931	Additional personnel in training
Port Authority of Guam (PAG)	HAZMAT Technicians	15	PAG	Cabras Island	(671) 477-5931	Additional personnel in training
Port Authority of Guam (PAG)	4000 gal. Diesel Tank	1	PAG	Cabras Island	(671) 477-5931	
Port Authority of Guam (PAG)	Generator 110v & 220v output	2	PAG	Cabras Island	(671) 477-5931	
Port Authority of Guam (PAG)	Stationary Generator 500kv	2	PAG	Cabras Island	(671) 477-5931	
Port Authority of Guam (PAG)	Stationary Generator 275kv	2	PAG	Cabras Island	(671) 477-5931	
Exxon Mobil	Fire water pump, diesel engine1500gpm, 2100rpm	1	Exxon Mobile	Cabras Island D-lot area “C”	(671) 479-3275	Seawater suction
Exxon Mobil	Fire water pump, diesel engine 2500gpm, 2100rpm	1	Exxon Mobile	Cabras Island Area “A”	(671) 479-3275	City Water Supply

Resource	Capabilities	Qty	Owner/POC	Location	Emergency Phone	Comments
Exxon Mobil	Fire water pump, electric, 1500gpm, 1780rpm	1	Exxon Mobile	Cabras Island D-lot area "C"	(671) 479-3275	Seawater suction
Exxon Mobil	AFFF 3%	58	Exxon Mobile	Cabras Island Facility Wide	(671) 479-3275	38 designated & 20 stored. *qty on stock varies.
Cabras Marine	Tugs w/ Fire Monitors	6	Cabras Marine	Inner and Outer Harbor	(671) 479-4042	
Tristar Guam	AFFF 3%	11	Tristar Guam	Cabras Island	(671) 565-2300	5 Gal containers
Southern Pacific Petroleum Corp (SPPC)	Fire water pump (120 psi), electric, 1280 GPM	1	SPPC	Cabras Island	(671) 482-5344	Seawater suction
Southern Pacific Petroleum Corp (SPPC)	Fire water pump, Diesel, 1280 GPM 120psi	1	SPPC	Cabras Island	(671) 482-5344	Seawater suction
Andersen Air Force Base (AFB) Fire**	Crash Truck and foam trailer	1	Andersen AFB Fire	Andersen AFB	(671) 366-6201	1000 Gals of AFFF 3%
Andersen AFB*	AFFF 3%	1	Andersen AFB Fire/SMSGT Lien	Andersen AFB	(671) 366-6201	10,000 Gals of AFFF stored in Warehouse
Commonwealth Port	Electric fire pump.	1	CPA	Saipan	(670) 664-3553/4	Seawater suction

Resource	Capabilities	Qty	Owner/POC	Location	Emergency Phone	Comments
Authority	125gpm@178 rpm					
Commonwealth Ports Authority	Manual fire pump 140 gpm@ 2,350 rpm	1	CPA	Saipan	(670) 664-3553/4	Seawater suction
Commonwealth Ports Authority	Wheeled portable fire extinguishers - filled powder	11	CPA	Saipan	(670) 664-3553/4	Located throughout the CPA (Port of Saipan) facility
Commonwealth Ports Authority	Fire hydrants	5	CPA	Saipan	(670) 664-3553/4	Located throughout the CPA (Port of Saipan) facility
CNMI Fire and Emergency Medical Services	Tanker truck; 3,000 gallon water	1	CNMI Fire and Emergency Medical Services	Saipan	911 / (670) 664-9137/9136 (671)898-3543	N/A
CNMI CNMI Fire and Emergency Medical Services	Pumper truck; 750 gallon water	1	CNMI Fire and Emergency Medical Services	Saipan	911 / (670) 664-9137/9136 (671) 898-3543	N/A
Saipan Stevedores	Universal connection device	1	Saipan Stevedore	Saipan	(670) 322-9240 (670) 888-4827	N/A
IP&E	DUTY 1500 USPG fire pump; 2100 RPM @ 207hp	1	IP&E	Saipan	(670) 323-5009 (670) 287 4380	HP brand Clark Model-JU6H-UFMO
IP&E	Fire extinguisher; ABC rated	2	IP&E	Saipan	(670) 323-5009 (670) 287-4380	150lb
IP&E	Fire trailer;	1	IP&E	Saipan	(670) 323-	Includes

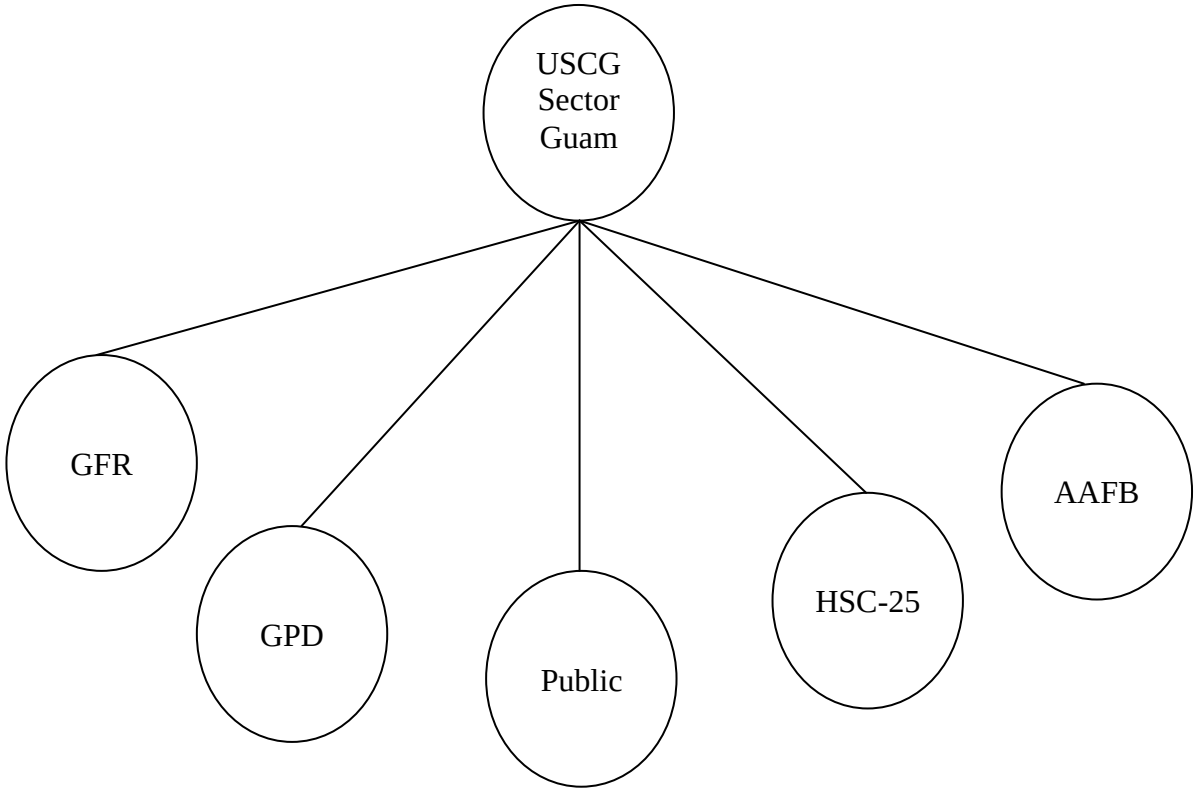
Resource	Capabilities	Qty	Owner/POC	Location	Emergency Phone	Comments
	foam				5009 (670) 287-4380	hoses
Tug	3750 BHP, 112,000 bollard pull	1	T&T Marine	Guam	(671) 479-4042	

* All requests for assets from DOD must be made through the Defense Coordinating Officer (DCO). Contact the Navy Regional Operations Center at (671) 339-5060.

** If operations allow, may be able to provide more than 1 Crash Truck.

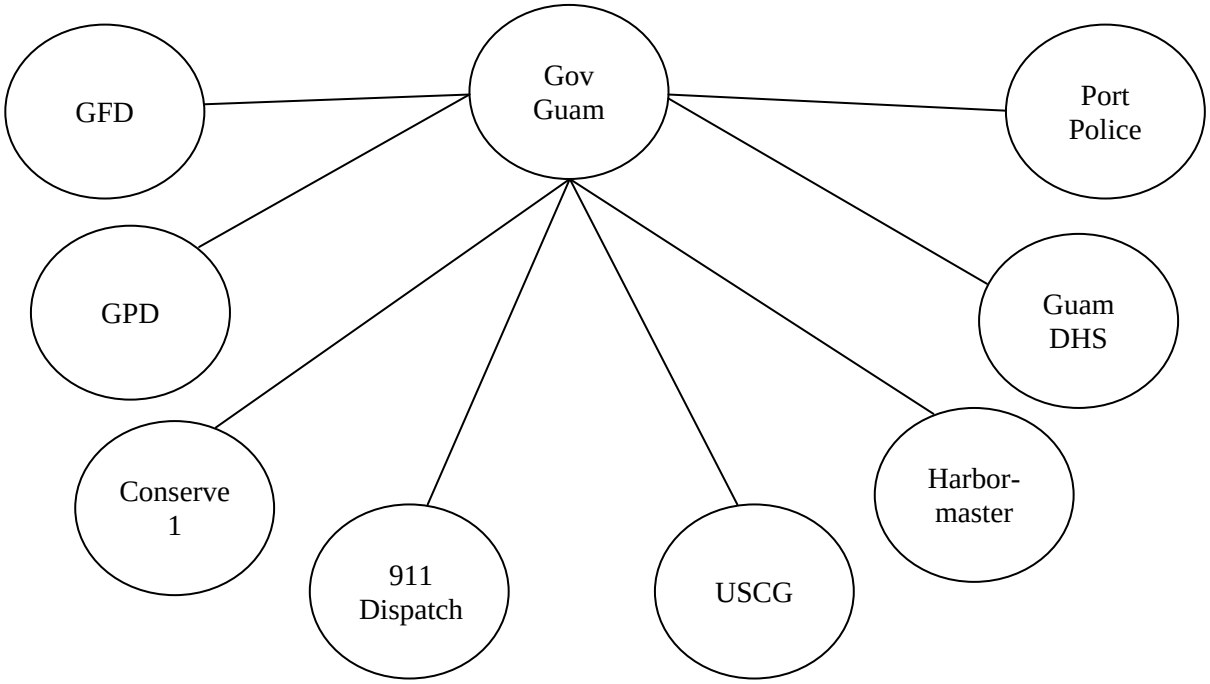
8390 Communications

8391 System: Coast Guard Rescue 21 (Marine VHF)



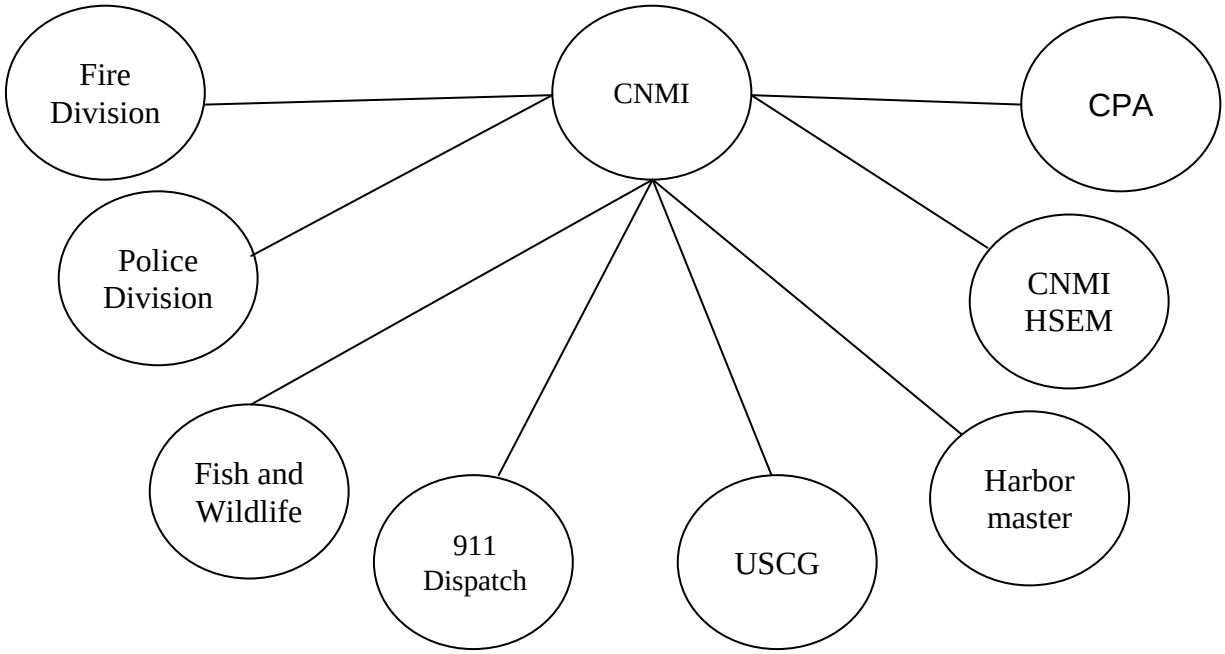
Channel/Talk Group/Freq	Purpose	Who is on this
Guard (Marine Channel 16)	Hailing and Distress	Public
VHF-1 (21,22,23A,81A,83A)	CG Working Frequencies	CG, GFR, GPD, HSC-25
UHF (410-414)	Interoperability	AAFB

8392 System: Guam 800 MHZ



Channel/Talk Group/Freq	Purpose	Who is on this
Dispatch	Command & Control	911 Dispatch
GFD	Fire/Marine/Hiker Incidents	GFR
GPD	Police/Marine/Hiker Incidents	GPD
Conserve 1	Wildlife Incidents	DAWR
Port Police	Port Response	Port Police, Port Facility Security Officers
Harbormaster	Vessel Movements, Security Alerts	Harbormaster, Facility Security Officers
Intercom 1-10	Talk-around	As assigned
USCG-GU	Marine Incidents	USCG
GHS	Coordination	GHS, others

8393 System: CNMI – 800 MHZ



Channel/Talk Group/Freq	Purpose	Who is on this
Dispatch	Command & Control	911 Dispatch
Fire Division	Fire/Marine/Hiker Incidents	Fire Division
Police Division	Police/Marine	Police Division
Fish & Wildlife	Wildlife Incidents	Department of Land and Natural Resources
Port Police	Port Response	Port Police
Harbormaster	Vessel Movements	Harbormaster, Port Facility Security Officers
Intercom 1-10	Talk-around	As assigned
USCG-Rescue 21	Marine Incidents	USCG, Fire, Police, HSEM
CNMI HSEM	Coordination	HSEM

SECTION 8000

MARINE FIREFIGHTING

8400 MARINE FIREFIGHTING RESPONSE

8401 Marine Firefighting Guidance

Land based fire fighters will normally fight fires at waterfront facilities using structural tactics. Vessel fires require entirely different strategy and tactics.

Fire departments are strongly encouraged to use the extensive information and advice in NFPA Standard 1405, *Guide for Land-Based Fire fighters Who Respond to Marine Fires*.

Coast Guard activities are in accordance with Chapter 8, CG Marine Safety Manual, Volume VI, COMDTINST 16000.11(series).

8402 Operational Firefighting Priorities

Operational fire-fighting priorities for marine fire incidents, as identified in the Marine Safety Manual, are listed below in order of priority:

Rescue- Safety of life must always be the first consideration in any fire or emergency situation. When lives are in danger, the Incident Commander must quickly assess whether the situation necessitates immediate removal of personnel, the number of persons that need to be extracted, and the hazards to the rescue team.

Exposures- The fire should be fought so as to prevent the spread of fire on or off the vessel. Typical exposures include flammable liquid or gas tanks, open stairways, explosives, or any other substance that would accelerate or aid the spread of the fire. Provided there is no danger of water reactivity, exposures are best cooled by application of a fog pattern until no visible steam is generated. For some two-dimensional surfaces, foam may be an appropriate agent for exposure protection.

Confinement- Control over the fire must be established by impeding the fire's extension to noninvolved areas and limiting the fire to the area of origin. To accomplish proper containment, all closures and generally all ventilation (unless personnel are trapped inside the space) should be secured. Monitor and cool boundaries, as necessary, on all six sides of the fire (fore, aft, port, starboard, above, and below).

Extinguishment- The main body of the fire should be attacked and suppressed. The goal is to cease combustion by disrupting the cycle of the fire. Tactics and agents to be used will be determined by the IC considering the fuel source, amount of fuel/surface area, and the location of the fire.

Overhaul- Actions to complete the incident stabilization and begin the shift to property conservation should occur in any overhaul. Specific considerations include: hazards from structural conditions at the fire scene, atmospheric conditions (air packs should remain mandatory in the case of interior fire overhaul due to the likely presence of toxic vapors, carbon monoxide, and low oxygen levels), monitoring scene to ensure fire will not re-ignite, determination of fire's point of origin and source of ignition.

Ventilation- Ventilation tactics will vary depending upon the location and conditions of the fire. Generally, all ventilation on a vessel will initially be secured and all dampers shut upon receipt of a fire alarm. Utilization of ventilation to aid fire-fighting efforts should not begin until a coordinated firefighting response is underway.

Stability- The use of water for fire-fighting can significantly alter the center of gravity of a vessel. Experts from the Marine Safety Center, Pacific Strike Team, or Navy Supervisor of Salvage should be consulted for stability calculations and advice.

De-watering- Oil and hazardous materials may enter the water during fire-fighting and dewatering operations. Containment and recovery of these materials is an important consideration. Fire-fighting operations take precedence over environmental concerns. However, pollution response should be considered at this stage of the response.

8403 Response Sequence

Action in response to a fire incident is broken into five phases for this plan's purposes:

Phase I	Discovery and Notification
Phase II	Evaluation and Initiation of Action
Phase III	Response Rescue>>Exposure>>Confinement>>Extinguishment>>Overhaul
Phase IV	Demobilization
Phase V	Documentation and Cost Recovery (Collection of Lessons Learned)

8410 Notifications and Dispatch

Regardless of the agency first to discover the fire, the following agencies shall be notified if the incident is their jurisdictions:

USCG Sector Guam (All Ports)	USCG Sector Guam Command Center	(671) 355-4828/4933 or Marine Radio Channel 16
National Response Center	NRC	(800) 424-8802
Port Authority of Guam	Port Police Guam Dispatch	(671) 472-2703 911 (Guam Local) or (671) 475-9080
Commonwealth Ports Authority (CPA) Saipan	DPS Dispatch	911 (Saipan local) or (670) 322-8002
CPA Tinian	Dispatch	911 (Tinian local) or (670) 433-0911
CPA Rota	Dispatch	911 (Rota local) or (670) 532-0911.
Navy Base Guam	Dispatch	911 (NBG Telephone Exchange) (671) or 333-2092

SECTION 8000

MARINE FIREFIGHTING

8420 Area Specific Responsibilities and Procedures

8421 Guam Specific Responsibilities and Procedures

At-Pier: The responsibilities for pier-side fire-fighting rest primarily with the Guam Fire Department, with the Port Authority of Guam's Fire Brigade as a supporting agency. Additionally, GFD has a Memorandum of Agreement with the Anderson Air Force Base Fire Department, (36th CES/CEF) for aqueous film forming foam (AFFF) support on an as-available basis.

36th (CES/CEF)	(671) 366-5264
GFD	911 (Guam local) or (671) 475-9080

Near-shore/Off-Shore: Guam has near and off-shore marine firefighting capability through Cabras Marine. The point of contact number is (671) 477-1818.

8422 Rota Specific Responsibilities and Procedures

At-Pier: The responsibilities for pier-side fire-fighting rest primarily with the CNMI Fire and Emergency Medical Services, with support on an as-available basis being provided by the Commonwealth Ports Authority (CPA).

The emergency phone number to the Rota DPS is 911 (Rota local) or (670) 532-0911.

Near-shore/Off-Shore: Rota has limited has near and off-shore marine firefighting capability through Cabras Marine. The point of contact number is (671) 477-1818.

8423 Tinian Specific Responsibilities and Procedures

At-Pier: The responsibilities for pier-side fire-fighting rest primarily with the CNMI Fire and Emergency Medical Services, with support on an as-available basis being provided by the CPA.

The emergency phone number to the Tinian DPS is 911 (Tinian local) or (670) 433-0911.

Near-shore: Tinian has limited near-shore marine firefighting capability through the CNMI Fire and Emergency Medical Services. Addition marine firefighting capability is available through Cabras Marine Guam. The point of contact number is (671) 477-1818.

Off-shore: Tinian has limited off-shore marine firefighting capability through the Saipan/Cabras Marine tugs with installed fire monitors. Addition marine firefighting capability is available through Cabras Marine Guam. The point of contact number is (671) 477-1818.

8424 Saipan Specific Responsibilities and Procedures

At-Pier: The responsibilities for pier-side fire-fighting rest primarily with the CNMI Fire and Emergency Medical Services, with support on an as-available basis being provided by the CPA.

The emergency phone number to the Saipan DPS is 911 (Saipan local) or (670) 322-8002.

Near-shore: Tinian has limited near-shore marine firefighting capability through the CNMI Fire and Emergency Medical Services. Addition marine firefighting capability is available through Cabras Marine Guam. The point of contact number is (671) 477-1818.

Off-shore: Saipan has limited off-shore marine firefighting capability through the Saipan/Cabras Marine tugs with installed fire monitors. Addition marine firefighting capability is available through Cabras Marine Guam. The point of contact number is (671) 477-1818.

8430 Coordination of Special Forces

Requests for federal resources and special forces should be submitted through the COTP (Navy, Supervisor of Salvage, International Cargo Bureau, etc.). All resources and special forces made available will normally come under the direction and the control of the COTP unless otherwise agreed upon by the COTP and the Fire Dept IC. Territory agency resources and special forces made available during an incident will normally come under the direction and control of the Fire Dept IC unless otherwise agreed upon by the Fire Dept IC and COTP.

8440 Termination of Response Activities

This decision will be made by the Incident Commander (IC) after consulting with the COTP unless it is a Level II response where the Unified Command will determine cessation of activities.

Note: Although firefighting efforts may be terminated, the vessel/facility should maintain a fire watch for at least 48 hours after the fire is out.

SECTION 8000

MARINE FIREFIGHTING

8500 LOGISTICS

Responding agencies and resources will be responsible for their own administrative and logistical support until such time as a Logistics Section is established. The Logistics Section Chief will be appointed by the IC/UC.

8600 FINANCE

The Responsible Party of the source of fire, facility or vessel is liable for the financial costs associated with marine fire-fighting. During the initial phases of the fire response, each responding entity will maintain their own cost accounting using their established organizational procedures. In the event of a large incident which extends into a long period of response, the IC/UC may activate a unified Finance Section.

A marine fire may lead to the release of harmful quantities of oil or hazardous substances. Dependent on the severity of the fire, the Federal On-Scene Coordinator (FOSC) can access either the Oil Spill Liability Trust Fund (OSLTF) or the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Superfund to fund all appropriate measures of response to cleanup, mitigate, or prevent a release into the environment.

In the most severe of circumstances, it may be appropriate for the FOSC to fund fire-fighting resources if the Responsible Party has not taken adequate or appropriate actions. See Section 6000 of this plan for accessing either the OSLTF or CERCLA funds.

8700 PLAN ADMINISTRATION

8710 Annual MFF Risk Assessment

The MFF subcommittee for Guam and CNMI shall conduct an annual risk assessment not later than 31 December of each year and present the findings to the MIACP Committee at the next scheduled MIACP meetings for Guam and CNMI. The risk assessment findings report to the MIACP committees shall include current port marine firefighting capabilities and gaps.

8711 Risk Assessment Model

SPE Risk Assessment Model (i.e., Risk = Severity x Probability x Exposure) shall be used to prioritize potential sources of marine fire threats/hazards (i.e., from the highest to the lowest risk).

8711.1 Severity: Severity is an event's potential consequences measured in terms of degree of damage, injury, or impact on the environment. Should something go wrong, the results are likely to occur in one of these areas:

- Injury or Death
- Loss of Cargo
- Adverse Publicity
- Serious Environmental and/or economic impacts

Severity can vary from 1 to 5:

1 = None or slight
2 = Minimal
3 = Significant
4 = Major
5 = Catastrophic

8711.2 Probability: Probability is the likelihood that the potential consequences will occur. Probability can vary from 1 to 5:

1 = Impossible or remote under any conditions
2 = Unlikely under normal conditions
3 = About 50-50
4 = Greater than 50%
5 = Very likely to happen

8711.3 Exposure: Exposure is the amount of time, number of occurrences, number of people, and/or amount of equipment involved in an event, expressed in time, proximity, volume, or repetition. Exposure can vary from 1 to 4:

1 = None or below average
2 = Average
3 = Above average
4 = Great

8711.4 Risk: Compute the risk values using the formula Risk = S x P x E. The resulting scores will be between 1 and 100:

Values – Degree of Risk
80-100 – Very High
60-79 – High
40-59 – Substantial
20-39 – Possible
1-19 – Slight

8712 Risk Assessment Report

The annual MFF Risk Assessment Report shall be presented in the following format and shall be sorted highest risk to lowest risk:

Potential Source	Capabilities	Gaps
Example 1 (Shipboard Fire)	List Capabilities	List Gaps
Example 2 (Container Fire)	List Capabilities	List Gaps

8720 Exercises

Proper training and exercises are necessary to ensure smooth coordination in the event of an actual fire or incident. Realistic exercises also demonstrate the capabilities of the various organizations involved. These exercises also expose possible conflicts and create opportunities to improve the plan.

The MFF Subcommittees (Guam and CNMI) shall schedule periodic exercises with selected fire departments, port facilities and government agencies within the various ports of Mariana Islands. It is recommended that each fire department or response organization coordinate with the port

facilities and shippers in their respective jurisdictions and develop training and orientation on their own. The COTP will assist coordinating with other organizations if a larger exercise is required. Assistance can be arranged through the MIACP Committee.

A key component to exercises is the after action review with the participants capturing lessons learned: improving response tactics and techniques procedures; and recommendations for plan improvement. The MFF Subcommittee shall submit written after action review information to the MIACP Committee using the following format:

- Issues
- Discussion
- Recommendations

8730 Training

Training is the cornerstone of effective response. Effective training makes the difference between saving lives and property during a major port disaster. In addition to the numerous colleges offering advanced firefighting curricula, the MFF subcommittees should pursue training sessions periodically with local fire departments, facility owners/operators and shipping companies. Such training might discuss ship construction and basic stability, shipboard/facility firefighting, salvage and hazardous material response. Suggestions for other training, volunteer speakers and general comments concerning this program should be brought up by the MFF Subcommittee during MIACP meetings.

8740 Plan Maintenance

Plan changes shall be based on Risk Assessments, training, drills, exercise lessons learned and response tactics and techniques procedures. Plan changes shall be submitted to the MIACP Committee for discussion and approval.

SECTION 9000

APPENDICIES

TABLE OF CONTENTS

APPENDIX 9100

EMERGENCY NOTIFICATION

TABLE OF CONTENTS

APPENDIX 9100

EMERGENCY NOTIFICATION

9110 Required Emergency Notifications

☒	Date / Time	Initials	Entity Notified	Contact Numbers
☐			USCG Sector Guam	(671) 355-4833 (671) 355-4834
☐			National Response Center	(800) 424-8802
☐			Guam Environmental Protection Agency (GEPA) (Guam Spills)	(671) 300-4751 (671) 300-4752 (671) 300-4753
☐			Guam Homeland Security	(671) 475-9600
☐			CNMI Emergency Management Office (EMO) (CNMI Spills)	(670) 646-8507
☐			CNMI Coastal Resources Management (CRM)	(670) 664-8300
☐			Joint Region Mariana's (JRM) Regional Operations Center (ROC)	(671) 349-4000 (671) 349-4004

9111 Federal On-Scene Coordinators Notifications

☒	Date / Time	Initials	Entity Notified	Contact Numbers
☐			National Response Center	(800) 424-8802
☐			Guam Environmental Protection Agency (GEPA) (Guam Spills)	(671) 300-4751 (671) 300-4752 (671) 300-4753
☐			Guam Homeland Security	(671) 475-9600
☐			CNMI Emergency Management Office (EMO) (CNMI Spills)	(670) 646-8507
☐			CNMI Coastal Resources Management (CRM)	(670) 664-8300
☐			Joint Region Mariana's (JRM) Regional Operations Center (ROC)	(671) 349-4000 (671) 349-4004
☐			14th Coast Guard District Command Center	(800) 331-6176
☐			National Strike Force Coordination Center	(252) 331-6000
☐			National Strike Force Pacific Strike Team	(415) 883-3311
☐			Commander Pacific Area Command Center	(510) 437-3701

9112 Notifications to Resource Trustees

☒	Date / Time	Initials	Entity Notified	Contact Numbers
☐			NOAA Office of Response and Restoration Emergency Hotline	(808) 725-5000
☐			NOAA National Marine Fisheries Protected Resources Division	(808) 725-5130 (808) 725-5140 Marine Mammals: (888) 256-9840
☐			NOAA Pacific Islands Regional Office, Habitat Conservation Division: Damage Assessment Remediation and Restoration Program (DARRP)	Hawaii: (808) 725-5092 or (808) 349-8618 (cell) Guam Office (EFH Consultation) - (671) 646-1904, After Hours - (671) 488-4032 CNMI Office (EFH Consultation) - (670) 234-0004
☐			US Fish and Wildlife Pacific Islands Fish And Wildlife Office	(808) 792-9400
☐			Guam Resource Trustees	
☐			CNMI Resource Trustees	

APPENDIX 9100

EMERGENCY NOTIFICATION

9120 Initial Awareness, Assessment and Notification Sequence

9121 Initial Assessment Check-off List

To ensure that all required information is collected, Sector Guam has created a numbered local form titled **OIL DISCHARGE (QRC R-3)** (See paragraph 9123) that is used to record all initial report information. A sample of the report is enclosed for references. Ready reference lists are being developed to prompt the required actions and notifications expected in the event of oil discharges corresponding to the Most Probable Discharge, Maximum Most Probable Discharge and Worst Case Discharge. In general:

(1) _____Using the SPILL REPORT form as a guide, try to complete each information block in Part I of the form. While the reporting source may not have all the needed information, it is critical that the person taking the report try to get the most detailed information available.

(2) _____During normal working hours, immediately notify the Response Department Head. After normal working hours, contact the Sector Guam Command Center (SCC).

(3) _____The Response Dept Head or SCC will select appropriate response notification actions. Be prepared to recommend a response strategy based upon the available information.

(4) _____In all cases where Sector personnel are dispatched to conduct a field investigation, ensure the Response and Prevention Department Heads are notified.

(5) _____If the discharge creates a sheen on the water and within Guam Territory waters, notify the Guam Environmental Protection Agency (GEPA). Record this notification in Part 2 of the form.

(6) _____If the oil discharge creates a sheen on the water and within CNMI Territory waters, notify CNMI Emergency Management Office. Record this notification in Part 2 of the form.

(7) _____Notify agencies as needed from notification lists. Record this notification in the form.

(8) _____For all spills of nominal impact, notify the National Response Center if not already done by reporting source. Record this notification in the form.

9122 Initial Action Check-off List

(1) _____Evaluate spill report and select response strategy.

(2) _____Assess personnel safety/equipment requirements.

(3) _____Dispatch pollution response team.

(4) _____Assess critical factors.

(5) _____Assess threat to public health.

(6) _____Evaluate extent and duration of required response and determine if additional resources are required.

(7) _____In all cases where there is significant media interest or a discharge of l00 gallons or more of oil; a CDO qualified individual should be dispatched to the scene to represent the Coast Guard's interests.

(8) _____Issue Letter of Federal Interest to Responsible Party.

(9) _____Issue Letter of Designation of Source to Responsible Party.

(10) _____Issue Directive/Administrative Order to Responsible Party (if required).

(11) _____Issue Letter of Federal Assumption to Responsible Party (if required).

(12) _____Draft press statement or press release (if required).

(13) _____Response Equipment from Federal sources identified and activated IN-SITU Burning and Chemical Dispersant response).

(14) _____Emergency notifications/RRT notification.

(15) _____Assign sectors to critical factors identified.

APPENDIX 9100

EMERGENCY NOTIFICATION

9123 OIL DISCHARGE (QRC R-3)

MISLE Notification #: MISLE Activity #: MISLE Case #:

INITIAL INFORMATION

Date / Time of Incident: _____ Date / Time of Report: _____ NRC # _____

Reporting Source (R/S): _____ Phone: _____

R/S Address: _____

Responsible Party (R/P): _____ Phone: _____

R/P Address: _____

R/P Type: ❑ Vessel ❑ MODU ❑ 154 Facility ❑ 156 Facility ❑ 158 Facility ❑ DOT Pipeline

❑ Well-Head ❑ Flow Line ❑ Other _____

If R/P is a vessel, obtain contact info for Qualified Individual (QI) _____

_____

Discharge Location (MM, Lat/Long, body of water, MMS Block #, land / wildlife area affected): _____

_____

_____

_____

Name of Product: _____ Quantity Discharged: _____

Maximum Potential Discharge Quantity (i.e. total amount on board vessel): _____

Likely Potential for Discharge Quantity (i.e. total amount in breached tank): _____

Source of Discharge: _____ Source Secured: ❑ Yes ❑ No

Suspected Cause of Discharge: _____

Description of Discharge (i.e. sheen color / dimensions): _____

_____

Has a Command Post been established: ❑ Yes ❑ No Location: _____

_____

Contractor Hired For Clean-up: _____

Fire Department Notified / On Scene: _____

Other Agencies Notified / On Scene: _____

_____

_____

_____

_____

INITIAL INFORMATION (Continued)

Description of Response Efforts (equipment on-scene): _____

_____

Evacuation Anticipated / Underway by Local Authorities: _____

_____

Description of Personnel Casualties: _____

_____

Impact on Waterway: _____

Environmental Data

River Stage (rising / falling): _____ Seas (height / direction): _____ Winds (speed / direction): _____

Visibility: _____ Air Temp: _____ Water Temp: _____ ❑ Rain ❑ Fog

APPENDIX 9100

EMERGENCY NOTIFICATION

INITIAL ACTION CHECKLIST

TIME:

_____ If necessary, issue Broadcast Notice to Mariners (BNM).

_____ Ensure that the National Response Center (NRC) has been notified at 1-800-424-8802. If necessary, contact NRC on behalf of the Coast Guard.

_____ Notify Pollution Responder (PR), Duty Phone 671-688-2653.

_____ Depending upon the material characteristics, the size of the discharge, location of the discharge, and Duty PR recommendations, consider taking the following actions:

- _____ Establish a Safety Zone (notify Waterways Management and VTC Supervisor)
- _____ Issue COTP Orders as appropriate
- _____ Notify DOI / Fish and Wildlife 808-792-9400
- _____ Notify Guam EPA 671-475-1658
- _____ Notify local Fire Department / Hazmat Team 671-642-8801
- _____ Notify local Police Department 671-472-8911
- _____ Notify NOAA SSC 206-526-6081
- _____ Notify National Decontamination Team 202-564-2359
- _____ Notify Radiological Emergency Response Team 202-343-9360
- _____ Notify Sector Public Affairs Officer 671-688-3917
- _____ Notify Sector Commander and recommend ICS 671-355-4801
- _____ Notify DOI/RRT Ms. Patricia Port 415-773-8334

_____ Complete MISLE notification and log as a significant pollution incident if it meets briefing criteria.

ADDITIONAL REFERENCES:

a) 33 CFR 153.203 (Oil discharge reporting requirements)
b) MMS Database (http://pls.tsboffshore.com/mmsdata)

Name of Watchstander: _____

APPENDIX 9200

PERSONNEL AND SERVICES DIRECTORY

APPENDIX 9200

PERSONNEL AND SERVICES DIRECTORY

9210 Federal Resources / Agencies

9211 Trustees for Natural Resources

NAME	ADDRESS	PHONE NUMBER
Department of Agriculture (USDA)		(671) 635-4400
NOAA Office of Response and Restoration Emergency Hotline		(808) 725-5000
NOAA National Marine Fisheries Protected Resources Division		(808) 725-5130 (808) 725-5140 Marine Mammals: (888) 256-9840
NOAA Pacific Islands Regional Office, Habitat Conservation Division: Damage Assessment Remediation and Restoration Program (DARRP)		Hawaii: (808) 725-5092 or (808) 349-8618 (cell) Guam Office (EFH Consultation) - (671) 646-1904, After Hours - (671) 488-4032 CNMI Office (EFH Consultation) - (670) 234-0004
Department of Defense Joint Region Marianas		(671) 349-4000 (671) 349-4004
US Fish and Wildlife Pacific Islands Fish And Wildlife Office	300 Ala Moana Boulevard, Box 50088 Honolulu, HI 96850-5000	(808) 792-9400

9211.1 Department of Agriculture (USDA)

http://www.usda.gov/wps/portal/usda/usdahome

Examples of resources under the trusteeship of the Secretary of the Department of Agriculture (USDA) include:

- Federal rangeland;
- Federally-managed fisheries;
- Federally-owned or managed farmland;
- Land enrolled in the Wetlands Reserve Program; and
- National forest land.

9211.2 Department of Commerce (DOC) http://www.commerce.gov/

Examples of resources under the trusteeship of the Secretary of the Department of Commerce (DOC) include:

- Coastal environments, including salt marshes, tidal flats, estuaries, or other tidal wetlands;
- Designated Estuarine Research Reserves or Marine Sanctuaries;
- Endangered marine species;

- Marine mammals; and
- Rivers or tributaries to rivers which historically support or presently support anadromous fish (fish that spend a portion of their lifetime in both fresh and salt water; *e.g.*, salmon).

The DOC Secretary delegated Trustee responsibility to the Administrator of the National Oceanic and Atmospheric Administration (NOAA). The following offices or groups within NOAA have responsibilities which include the protection and management of natural resources: National Marine Fisheries Service; Office of Ocean and Coastal Resource Management; Office of Oceanography and Marine Services; and the General Counsel. For cases involving resources in coastal waters and anadromous fish streams, DOC acts as a co-Trustee with the Department of the Interior.

9211.3 Department of Defense (DoD) http://www.defenselink.mil/

The Secretary of the Department of Defense (DoD) has trusteeship over the Natural Resources on all lands owned by DOD or the Army, Navy, Air Force, and Defense Logistics Agency. These lands include military bases and training facilities, research and development facilities, and munitions plants.

9211.4 Department of Energy (DOE) http://www.doe.gov/

The Secretary of the Department of Energy (DOE) has trusteeship over natural resources under its jurisdiction, custody, or control. DOE's land-holdings include national research and development laboratories, facilities, and offices.

9211.5 Department of the Interior (DOI) http://www.doi.gov/

Examples of resources under the trusteeship of the Secretary of the Department of Interior (DOI) include:

- Certain anadromous fish;
- Certain endangered species;
- Certain marine mammals;
- Federally-owned minerals;
- Migratory birds;
- National Wildlife Refuges and Fish Hatcheries;
- National Parks and Monuments; and
- Tribal resources, in cases where the U.S. acts on behalf of the Indian Tribe.

The following offices within DOI are responsible for the management and protection of the resources listed above:

- Bureau of Indian Affairs;
- Bureau of Land Management;
- Bureau of Mines;
- Bureau of Reclamation;
- Fish & Wildlife Service;
- Minerals Management Service;
- National Park Service; and
- U.S. Geological Survey.

APPENDIX 9200

PERSONNEL AND SERVICES DIRECTORY

9212 Federal Agencies

NAME	ADDRESS	PHONE NUMBER
US EPA Region 9	Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105	(866) 372-9378
NOAA Scientific Support Coordinator Northwest and Pacific Islands	Office of Response and Restoration Emergency Response Division 7600 Sand Point Way NE Seattle, WA 98115	(206) 526-4911
US Navy Supervisor Salvage (SUPSALV)	Naval Sea Systems Command 1333 Isaac Hull Avenue S.E. Stop 1070 Washington Navy Yard, D.C. 20376-1070	Emergency Contact: (202) 781-3889 (202) 781-1731
US Army Corps of Engineers Honolulu District Emergency Management Office	US Army Corps of Engineers Honolulu District Bldg. 230, Room 302 Fort Shafter, HI 96858-5440	(808) 835-4017
NSF Coordination Center	1461 North Rd. St. Elizabeth City, N.C. 27909	(252) 331-6000 Fax: (252) 331-6012 / 13
USCG Pacific Strike Team	U.S. Coast Guard Pacific Strike Team Hangar 2, Hamilton Rd. Novato, CA 94949-5082	(415) 883-3311
USCG District Fourteen	Commander Fourteenth Coast Guard District 300 Ala Moana Blvd, Room 9-204 Honolulu, HI 96850-4982	(800) 535-3333
USCG District Fourteen Response Assist Team (DRAT)	Commander Fourteenth Coast Guard District 300 Ala Moana Blvd, Room 9-204 Honolulu, HI 96850-4982	(800) 535-3333
USCG Sector Guam	Commander PSC 455 Box 176 FPO AP 96540-1056	(671) 355-4824
USCG MSD Saipan	MSD Saipan P.O. Box 5644 CHRB Saipan, MP 96950-5000	(670) 236-2969

9212.1 US EPA Region 9

By statute, the U.S. EPA is the FOSC for inland spills of oil or hazardous substances. In most instances, U.S. EPA is not the first responder on scene. U.S. EPA works in cooperation with other responders, but has not delegated their responsibility as FOSC. In all spill situations, it is U.S. EPA's intent to contribute to the respone by working with Oceania's members, general public, federal, state, and territory agencies to ensure the information needed to maximize the effectiveness of the response is easily accessible.

9212.2 NOAA Scientific Support Coordinator, Northwest and Pacific Islands

Normally, the NOAA Scientific Support Coordinator (SSC) should be included in any response if only as notification to ensure all response issues are addressed. The SSC will be located within the Environmental Unit if not assigned as Unit Leader.

The SSC provides scientific support for response and contingency planning in coastal and marine areas. The SSC assists in:

- assessing the hazards that may be involved;
- build a diverse support team to provide expertise in environmental chemistry, oil slick tracking, pollutant transport modeling, environmental tradeoffs of countermeasures and cleanup, information management, contingency planning;
- provides information on the sensitivity of coastal environments to oil and hazardous substances, natural resources at risk, and associated cleanup and mitigation methods;
- provides expertise on living marine resources and their habitats, including endangered species, marine mammals and National Marine Sanctuary ecosystems;
- provides information on actual and predicted meteorological, hydrological, ice, and oceanographic conditions for marine, coastal, and inland waters, and tide and circulation data for coastal and territorial waters;
- liaison to the scientific community and the natural resource trustees.

9212.3 US Navy Supervisor Salvage (SUPSALV)

The US Navy (USN) is the federal agency most knowledgeable and experienced in ship salvage, shipboard damage control, and diving. The USN has specialized equipment and personnel available for use in these areas as well as containment, collection, and removal equipment specifically designed for the salvage of ocean pollution incidents. The Supervisor of Salvage (SUPSALV) provides salvage expertise. The SUPSALV maintains warehouses on each coast, Hawaii, Singapore, and Japan stockpiled with salvage and response gear. U.S. Navy assets in the Pacific fall under the command and control of different organizational elements of the Navy. Any request for a Navy asset has to be made to the command that controls the asset through a representative of the Federal On-Scene Coordinator.

The five divisions that support SUPSALV are:

- The Management Support Division prepares and tracks contractual and financial documents and provides logistic support to the other divisions;
- The Salvage Operations Division handles salvage and recovery and oil spill control operations;
- The Diving Program Division is responsible for setting diving policy and approving U.S. Navy Diving Equipment;

- The Diving Certification Division serves as the System Certification Authority for shipboard and portable hyperbaric systems;
- The Underwater Ship Husbandry Division (UWSH) develops techniques, procedures, and equipment to perform ship repairs waterborne.

The Responsible Party is liable for the cost of any Navy assets used in response operations. The total cost will be included in the federal cost recovery documents sent to the responsible party at the conclusion of the response from the National Pollution Funds Center.

9212.4 US Army Corps of Engineers Honolulu District

The Emergency Management Division provides essential and superior contingency planning and response services throughout the Pacific and Continental US to support civil emergencies and military contingencies. For local disasters, the US Army Corps of Engineers (USACE) serves as the primary Federal agency for public works, also referred to as emergency support function #3, in support of the Federal Emergency Management Agency (FEMA) and the State and local governments. The Honolulu District also provides teams and individual personnel to support USACE National disaster response capabilities. In addition, the District provides a Forward Engineering Support Team-Advance and a Base Development Team to support USACE military contingency operations.

9212.5 USCG National Strife Force (NSF) / NSF Coordination Center

The National Strike Force is a unique, highly trained group of Coast Guard professionals who maintain and rapidly deploy specialized equipment to support On- Scene Coordinators as they prepare for and respond to oil and hazardous substance incidents. The NSF plays an important role assisting the OSCs with such expertise as:

- Operating spill response equipment (barriers, skimmers, pumps, temporary storage containers, etc.);
- Supervising and monitoring of personnel at spill sites;
- Implementing site safety requirements at hazardous material/spill sites;
- Preparing cost documentation and reports; and
- Supplying command, control, and communications support.

The National Strike Force includes the National Strike Force Coordination Center (NSFCC); the Atlantic Strike Team; the Gulf Strike Team; the Pacific Strike Team; and the Public Information Assist Team (PIAT) located at the NSFCC.

9212.6 USCG District Fourteen / USCG District Fourteen DRAT

The District Response Group (DRG) is a framework within each Coast Guard District to organize district resources and assets to support USCG OSCs during response to a pollution incident. Coast Guard DRGs assist the OSC by providing technical assistance, personnel, and the Coast Guard's pre-positioned equipment. Each DRG consists of all Coast Guard personnel and equipment, including fire-fighting equipment, additional prepositioned equipment, and a District Response Advisory Team (DRAT) that is available to provide support to the OSC in the event that a spill exceeds local response capabilities.

9212.7 USCG Sector Guam / MSD Saipan

USCG Sector Guam / MSD Saipan provides immediate federal on-scene coordination to spills located in Guam and CNMI. USCG Sector Guam / MSD Saipan response shall be consistent with the policies outlined in the National Contingency Plan, Oceanic Regional Contingency Plan, and the Mariana Islands Area Contingency plan. By statue, USCG Sector Guam is the FOSC for coastline and coastal spills of oil or hazardous substances.

APPENDIX 9200

PERSONNEL AND SERVICES DIRECTORY

9220 Territory Agencies

9221 Guam Territory Agencies

NAME	ADDRESS	PHONE NUMBER
Guam Environmental Protection Agency (GEPA)		(671) 300-4751 (671) 300-4752 (671) 300-4753
Guam Fire Department		911
Guam Police Department		911
Guam Homeland Security		(671) 475-9600
Port Authority of Guam		(671) 477-5931
Guam Power Authority		(671) 648-3000

9222 Northern Mariana Islands Territory Agencies

NAME	ADDRESS	PHONE NUMBER
CNMI Coastal Resource Management		(670) 664-8300
CNMI Homeland Security / Emergency Management Office		(670) 646-8507
CNMI Fire and Emergency Medical Services		911
CNMI Department of Public Safety		911
CNMI Port Authority		(670) 664-3553/4

9230 Private Resources

9231 Basic Ordering Agreement (BOA)

NAME	ADDRESS	PHONE NUMBER
UNITEK Environmental		(671) 565-3151
GRESCO		(671) 565-7473
Cabras Marine (Tugs/Crews)		(671) 477-7345
Titan Maritime, LLC (Salvage Only		(954) 929-5200

9232 Oil Spill Response Organizations

NAME	ADDRESS	PHONE NUMBER
OSROCO (Guam) Ken McDonald		(671) 477-1813
OSROCO (Saipan)		(670) 322-7345
UNITEK		(671) 565-3151
GRESCO		(671) 565-7473

APPENDIX 9200

PERSONNEL AND SERVICES DIRECTORY

9240 Stakeholders

9240.1 Guam

NAME	ADDRESS	PHONE NUMBER
Mobil Marianas	1189 Cabras Highway Piti, GU 96915	(671) 687-3230
South Pacific Petroleum CORP	816 N. Marine Dr. EVA Bldg Ste 200 Tamuning, GU 96913	(671)482-5344
IP&E	643 Chalan San Antonio Suite 100 Tamuning, GU 96913	(671) 647-0123
Tristar	P.O. Box 8210 Agat, GU 96928	(671) 727-3338
Vital Energy	ITC Building 590 S. Marine Corps Dr. Ste 212 Tamuning, GU 96913	(671) 649-3366 C: (671) 482-3788

9240.2 Rota

NAME	ADDRESS	PHONE NUMBER
Mobil Marianas	1189 Cabras Highway Piti, GU 96915	(671) 687-3230

9240.3 Saipan

NAME	ADDRESS	PHONE NUMBER
Mobil Marianas		(670) 483-2515
IP&E		(670) 323-1002

9240.4 Tinian

NAME	ADDRESS	PHONE NUMBER
Mobil Marianas		(670) 483-2515

APPENDIX 9300

DRAFT INCIDENT ACTION PLAN

TBP

APPENDIX 9400

AREA PLAN DOCUMENTATION

APPENDIX 9400

AREA PLAN DOCUMENTATION

9401 Overview

Appendix 9400 is intended to address one of the major preparedness gaps associated with planning assumptions and scenarios that was identified in the joint USCG-BSEE WCD Contingency Plan Analysis Report and the Incident Specific Preparedness Review (ISPR) for the Deepwater Horizon incident.

Appendix 9400 provides essential information that guides all oil spill planning efforts at the Area Committee level. It provides the planning assumptions, spill scenarios, and discharge release history that allows for risk-based decision-making through a systematic risk assessment process. It also provides a record of past planning efforts that should be built upon when updating and refining planning assumptions and scenarios.

9402 Area Committee Coordination

Members of Area Committee and stakeholders with special knowledge of the local Area and potential sources of a WCD from vessels, or onshore or offshore facilities are instrumental in the development and maintenance of a comprehensive Discharge and Release History for the local Area, the potential threats to those sources of a WCD, and the development of WCD Planning Assumptions and Planning Scenarios.

9403 Key Elements of Appendix 9400

The key elements of Appendix 9400 are:

- Oil spill discharge and hazardous substance release history for the local Area;
- A risk assessment that evaluates the potential sources of discharges within the local Area, including WCDs from vessels and facilities;
- A description of planning assumptions describing an assessment of the nature and size of a possible threat, including WCD, and the resources at risk from such an incident; and
- Scenarios that provide for a possible WCD from a vessel, offshore facility, or onshore facility operating in the local Area, as applicable.

The preceding elements captured in Appendix 9400 will assist the Mariana Islands Area Committee(s) in developing and maintaining an Area Contingency Plan that provides guidance for preparing for future incidents while improving the capability to respond to those incidents. A planning process that emphasizes risk-based decision-making ensures focused efforts on the types of incidents that pose the greatest risk without ignoring the possibility of and planning for other lesser risk events.

APPENDIX 9400

AREA PLAN DOCUMENTATION

9410 Spill History and Potential Spill Size

9411 Local Area Spill History

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
02/23/2014	Vessel	Oil, fuel: No. 4	200	200	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.446667	144.630000
02/13/2014	Vessel	Oil: Diesel	3,912	7,606	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
12/02/2013	Vessel	Oil: Diesel	250	250	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
01/15/2013	Facility	Oil, misc: Residual	80	80	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.455833	144.657000

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
11/26/2012	Facility	Oil: Diesel	300	300	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
09/27/2012	Vessel	Oil: Diesel	10	10	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
06/29/2012	Vessel	Oil: Diesel	10	2,000	Waterway surrounding Guam and the CNMI	13.461667	144.665000
05/02/2012	Vessel	Oil: Diesel	50	5,942	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.461667	144.665000
04/15/2012	Facility	Oil, misc: Residual	40	0		13.450833	144.650830
07/31/2011	Vessel	Oil: Diesel	50	100	Waterway surrounding Guam and the CNMI	13.660400	144.769683

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
10/21/2010	Vessel	Oil: Diesel	15	15	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
09/27/2010	Other	Jet fuel: JP-8	20	55	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
03/18/2010	Mystery Spill	Unknown material, Oil or Oil-like	28	0	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
10/28/2009	Vessel	Garbage (Annex V, MARPOL 73/78) Ref: 33 CFR 151.05, Definitions.	50	50	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
08/10/2009	Vessel	Oil: Diesel	25	25	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
05/18/2009	Vessel	Sewage, treated	20	20	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
11/05/2008	Vessel	Hydraulic fluid or oil	10	10	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
09/25/2008	Facility	Oil: Diesel	20	20		13.450833	144.650830
08/27/2008	Facility	Oil: Diesel	1,500	1,500		13.450833	144.650830
07/28/2008	Vessel	Water	41,715	41,715	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
04/27/2008	Vessel	Oil: Diesel	30	30	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
04/21/2008	Facility	Oil, fuel: No. 2-D	90	90	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
04/15/2008	Mystery Spill	Tar balls	100	0	Waterway surrounding Guam and the CNMI	13.654167	144.863333
03/25/2008	Vessel	Oil: Diesel	10	160		13.983333	144.833333
01/07/2008	Vessel	Oil, waste/lubricants - possible contaminant	188,190	188,190	UNSPECIFIED, Philippine Sea, Saipan		
11/27/2007	Vessel	Oil, fuel: No. 1-D	20	20	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667

APPENDIX 9400

AREA PLAN DOCUMENTATION

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
10/02/2007	Mystery Spill	Oil, misc: Lubricating	10	0	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
05/09/2007	Facility	Oil, fuel: No. 2-D	20	50		13.000000	144.000000
04/04/2007	Vessel	Oil, fuel: No. 4	100	100	LARGE VESSEL HARBOR	15.225000	145.738889
01/24/2007	Other	Liquefied petroleum gas	2,230	68,280		13.460000	144.670000
11/13/2006	Facility	Oil: Diesel	10	10		15.633333	145.516667
10/25/2006	Facility	Oil: Diesel	10	10		15.633333	145.516667
10/17/2006	Vessel	Oil, fuel: No. 5	100	100	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.451933	144.652500
10/14/2006	Vessel	Oil: Diesel	50	50	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
08/09/2006	Mystery Spill	Oil: Diesel	10	0		15.633333	145.516667

APPENDIX 9400

AREA PLAN DOCUMENTATION

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
03/16/2006	Mystery Spill	Unknown material, Oil or Oil-like	20	0		15.633333	145.516667
02/27/2006	Mystery Spill	Unknown material, Oil or Oil-like	10	0	Open ocean	30.313056	129.146389
02/02/2006	Vessel	Oil: Diesel	15	15	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
12/30/2005	Vessel	Oil: Diesel	10	10	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
12/11/2005	Vessel	Gasoline: Automotive (Unleaded)	10	80	Small Vessel Harbor	15.216667	145.716667
11/10/2005	Facility	Jet fuel: Jet A-1	966	966		13.461667	144.658333
10/10/2005	Vessel	Oil, fuel: No. 2-D	100	1,000		15.030000	145.586667

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
09/20/2005	Vessel	Oil: Crude	10	10	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.365667	144.646167
08/21/2005	Vessel	Oil: Crude	20	20	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
08/18/2005	Mystery Spill	Unknown material, Oil or Oil-like	50	0	Waterway surrounding Guam and the CNMI	13.650000	144.883333
07/27/2005	Vessel	Oil: Diesel	15	15		15.633333	145.516667
05/01/2005	Vessel	Oil: Diesel	25	400	Small boat marina on Commander , Naval Forces Marianas base.	13.441667	144.655000
04/06/2005	Mystery Spill	Unknown material, Oil or Oil-like	10	0	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
03/19/2005	Vessel	Oil: Diesel	10	5,000	OUTER HARBOR, CORAL REEF HABITAT	13.450000	144.654167
02/07/2005	Vessel	Hydraulic fluid or oil	20	20	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
01/20/2005	Mystery Spill	Unknown material, Oil or Oil-like	60	0	LARGE VESSEL HARBOR	32.983333	123.983333
08/18/2004	Vessel	Oil: Diesel	15	43,000	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
07/19/2004	Vessel	Jet fuel: JP-5 (Kerosene, heavy)	20	20	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
07/14/2004	Vessel	Oil, fuel: No. 2-D	25	25	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
06/29/2004	Vessel	Asphalt	165	165		15.083333	145.150000
06/29/2004	Vessel	Hydraulic fluid or oil	1,500	1,500		15.083333	145.150000
06/29/2004	Vessel	Oil, waste/lubricants - possible contaminant	10,000	10,000		15.083333	145.150000
06/29/2004	Vessel	Oil: Diesel	1,000	15,500		15.083333	145.150000
05/24/2004	Facility	Oil, fuel: No. 1	504	2,478,000	Port Authority of Guam	13.461667	144.663333
05/10/2004	Vessel	Oil: Diesel	10	7,000	Port Authority of Guam	13.460000	144.670000
03/23/2004	Facility	Jet fuel: JP-8	84	126,000	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
12/03/2003	Facility	Other oil, oil with no CHRIS Code	540	540	Port Authority of Guam	13.461667	144.663333

Date	Source	Product	Discharge Amount	Potential Discharge Amount	Waterway Detail	Latitude	Longitude
10/16/2002	Mystery Spill	Unknown material, Oil or Oil-like	10	0	APRA HARBOR, GUAM; mouth of the harbor leads into the Philippine Sea.	13.433333	144.616667
07/05/2002	Vessel	Oil, waste/lubricants - possible contaminant	105,000	270,000		13.450000	144.633300
11/06/1997	Vessel	Oil, fuel: No. 2-D	3,665	209,895		13.760000	144.421666

9412 Analysis of Spill History

Utilizing the spill information available through the Coast Guard's spill databases, all reported oil spills in Guam COTP area were analyzed to meet the requirements for this section. We removed reports that would tend to skew the analysis and make this database more manageable. All reports meeting the below criteria were removed from the analysis:

- All oil spill of less than 10 gallons because of the large number oil spills involved relatively small quantities of oil (267 cases). The quantities involved usually dissipate before any response action can begin. These spills were deleted from the above data.
- Oil spills 10,000 gallons or greater (4 cases) were also removed from the analytical data when determining average spill size. These spills were not removed from the above listed data.

9413 Summary Area Spill History

Source of Largest Spill	Product Released during the Largest Spill	Amount of Largest Spill (GAL)	Source of Most Frequently Spilled Product	Most Frequently Spilled Product	Location of Most Frequently Spilled Product	Average Spill Size (GAL)
M/V (Saipan)	Waste Oil / lubricants, Possible Contaminants	188,190	M/V	Oil, Diesel	Apra Harbor	5,587

9414 Largest Potential Spill Size

9414.1 Tank Ship/Tank Barge

Name of Vessel	Cargo Capacity	Cargo Type
Guam:	500,000 BBLS	Fuel Oil No 6
Saipan: M/T Baizo	329,643 BBLS	Diesel, Jet Fuel A, Gasoline
Tinian: M/T Akri	43,273 BBLS	Diesel, Jet Fuel A, Gasoline
Rota: M/T Akri	43,273 BBLS BBLS	Diesel, Jet Fuel A, Gasoline

9414.2 Non-tank Vessel

Name of Vessel	Oil Carrying Capacity	Oil Type
Guam: Matson Shipping	23,810 BBLS	Fuel Oil No 6, Lubricants
Saipan: Asuka II	20,715 BBLS	Fuel Oil No. 6, Lubricants
Tinian: MSC Thunder & Lighting	3,558 BBLS	Diesel, Lubricants
Rota: Chomorro	1100 BBLS	Diesel Lube Oil Hydraulic Oil

9414.3 Onshore Facility (Including Pipelines) Guam

Name of Facility	Location	Storage Capacity or Pipeline Volume	Cargo Type
Wharf G (to include pipelines to Mobil Terminal & Storage Tanks) (Guam)	13°27’48”N 144°39’31”E	10,079 Gal 10,022 Gal 7,534 Gal.	Diesel Jet Fuel A Gasoline
Mobil Terminal (Guam)	13°27’49”N 144°39’46”E	67,901 BBL 78,510 BBL 105,168 BBL	Diesel Jet Fuel A Gasoline
SPPC Terminal (Guam)	13°27’48”N 144°39’51”E	8,056 BBL 53,971 BBL 103,124 BBL	Diesel Jet Fuel A Gasoline
IP&E Storage Tanks (Guam)	13°27’48”N 144°39’51”E	8,000BBL	Diesel
Wharf F1 (pipelines to SPPC)	13°27’34”N 144°39’43”E	110 BBL 348 BBL 348 BBl	Jet A-1 Mogas ULSD
Wharf F1 Pipeline to Tristar	13°27’34”N 144°39’43”E	A Line – 16,000 BBL B Line – 16,000BBL	Jet Fuel Bunker
Tristar Pipeline to Vital Energy Tristar Pipeline to Tristar Storage	13°27’27”N 144°41’00”E To 13°27’36”N 144°41’05”E	21,000 BBL 59,000 BBL	Bunker C White Fuel (Jet A-1, ULSD, Mogas)
Vital Energy	13°27’40”N 144°41’10”E	534,929 BBL	Bunker
Wharf D	13°27’30”N		Diesel

Name of Facility	Location	Storage Capacity or Pipeline Volume	Cargo Type
	144°40’07”E		
Wharf E	13°27’28”N 144°39’59”E		Diesel

9414.4 Onshore Facility (Including Pipelines) Rota

Name of Facility	Location	Storage Capacity or Pipeline Volume	Cargo Type
Mobil Terminal	14°08’23”N 145°08’41”E	191,895 Gal 83,574 Gal	Diesel (ADO) MOGAS
Pipeline length form terminal to Wharf ---------- Hose length from buoy Pier	14°08’23”N 145°08’41”E To ---------- 14°08’05”N 145°08’36”E	Pipeline: 297 Gal 347 Gal ---------- Hose: 1,224 Gal	Mogas Diesel (ADO) ---------- Diesel (ADO) and/or MOGAS
CUC (220’ from shoreline)	14°08’12”N 145°08’09”E	253,000 Gal	Diesel (ADO)

9414.5 Onshore Facility (Including Pipelines) Saipan

Name of Facility	Location	Storage Capacity or Pipeline Volume	Cargo Type
Mobil Terminal	15°13’26”N 145°44’04”E	23,000 BBL 24,000 BBL 75,000 BBL	MOGAS Jet A1 Diesel (ADO)
IP&E Terminal	15°13’25”N 145°44’02”E	20,000 BBL 45,000 BBL	MOGAS Diesel (ADO)
Pipeline From Fueling Wharf to Terminals	15°13’31”N 145°43’58”E to 15°13’27”N 145°44’01”E	8” line – 1,681 Gal 10” line – 2,599 Gal 10” line – 2,596 Gal	MOGAS Jet A-1 Diesel (ADO)
CUC Plants 1 & 2 (200’ from shoreline) ---------- CUC Plants 4 (920’ from shoreline)	15°13’52”N 145°44’27”E ---------- 15°13’10”N 145°44’03”E	889,000 Gal ---------- 86,000 Gal	Diesel (ADO) ---------- Diesel (ADO) – Truck delivery
Mobil to CUC Pipeline	15°13’26”N 145°44’04”E to 15°13’52”N 145°44’27”E	12,000Gal	Diesel (ADO)

9414.6 Onshore Facility (Including Pipelines) Tinian

Name of Facility	**Location**	**Storage Capacity or Pipeline Volume**	**Cargo Type**
Mobil Terminal	14°57’59”N 145°37’13”E	57,167 Gal 471,783 Gal	MOGAS Diesel (ADO)
Pipeline From Fueling Wharf to Mobil Terminal	14°57’59”N 145°37’13”E	642 Gal 921 Gal	MOGAS Diesel (ADO)
Pipeline From Mobil Terminal to CUC	14°57’59”N 145°37’13”E To 14°58’27”N 145°36’52”E	7,643 Gal	Diesel (ADO)
CUC	14°58’27”N 145°36’52”E	450,000 Gal	Diesel (ADO)

APPENDIX 9400

AREA PLAN DOCUMENTATION

9420 Risk Assessment

The SPE Risk Assessment Model (Risk = Severity X Probability X Exposure) shall be use to conduct the MIACP Risk Assessment. Risks shall be prioritized from the highest to lowest risk. The MIACP Risk Assessment shall be conducted / validated annually.

9420.1 Severity: Severity is an event's potential consequences measured in terms of degree of damage, injury, or impact on the environment. Should something go wrong, the results are likely to occur in one of these areas:

- Injury or Death
- Loss of Cargo
- Uncontrolled Well Blowout
- Adverse Publicity
- Serious Environmental and/or economic impacts

Severity can vary from 1 to 5:

1 = None or slight
2 = Minimal
3 = Significant
4 = Major
5 = Catastrophic

9420.2 Probability: Probability is the likelihood that the potential consequences will occur.

Probability can vary from 1 to 5:

1 = Impossible or remote under any conditions
2 = Unlikely under normal conditions
3 = About 50-50
4 = Greater than 50%
5 = Very likely to happen

9420.3 Exposure: Exposure is the amount of time, number of occurrences, number of people, and/or amount of equipment involved in an event, expressed in time, proximity, volume, or repetition.

Exposure can vary from 1 to 4:

1 = None or below average
2 = Average
3 = Above average
4 = Great

9420.4 Risk: Compute the risk values using the formula Risk (R) = S x P x E. The resulting scores will be between 1 and 100:

Values – Degree of Risk

80-100 – Very High
60-79 – High
40-59 – Substantial
20-39 – Possible
1-19 – Slight

9420.5 NOTE: The numerical values below are site specific. The risk assessment didn't rack the different sites. The input for each site was compiled by site personnel.

9421 Guam Spill Risks

Threat / Hazard	Risk
Pipeline Leak	**41.07**
Ship Groundings (M/V Paul Russ)	**37.36**
Collision	**37.21**
Shipboard Fire	**35.14**
Terrorist Attack	**30.86**
Barge <-> Ship Fuel Transfers	**30.62**
Ship <-> Shore Fuel Transfers	**27.86**
Barge <-> Shore Fuel Transfers	**24.85**
Sabotage (External Threat)	**24.36**
Sabotage (Internal Threat – Disgruntle Employee)	**18.50**
Terminal to Truck Transfers	**14.14**

9422 Rota Spill Risks

Threat / Hazard	Risk
Ship Groundings (M/V Paul Russ)	**53.67**
Dockside Fuel Transfers	**49.67**
Shipboard Fire	**45.67**
Sabotage (External Threat)	**42.67**
Terrorist Attack	**40.33**
Sabotage (Internal Threat – Disgruntle Employee)	**39.67**
Terminal to Truck Transfers	**39.00**
Collision	**35.00**

9423 Saipan Spill Risks

Threat / Hazard	Risk
Ship Groundings (M/V Paul Russ Type)	26.68
MSC Ship Fuel Transfers	23.40
Dockside Fuel Transfers	23.35
Shipboard Fire	23.18
Collision	22.91
Terrorist Attack	19.00
Sabotage (Internal Threat – Disgruntle Employee)	18.22
Terminal to Truck Transfers	17.28
Pipeline Bunkering	16.07
Sabotage (External Threat)	15.97

9424 Tinian Spill Risks

Threat / Hazard	Risk
Ship Groundings (M/V Paul Russ)	53.67
Dockside Fuel Transfers	49.67
Shipboard Fire	45.67
Sabotage (External Threat)	42.67
Terrorist Attack	40.33
Sabotage (Internal Threat – Disgruntle Employee)	39.67
Terminal to Truck Transfers	39.00
Collision	35.00

9430 Planning Factors and Assumptions

The following planning factors and assumptions are made concerning the resources needed to respond to a worst case discharge of oil in the Sector Guam AOR.

(1) Equipment: Not enough boom has been identified to adequately protect the entire length of the shorelines within the AOR. If a large spill would occur the Logistics Section of the Unified Command organization will be directed to begin immediate research into obtaining more from locations in other parts of the world. Obtaining enough boats to deploy and maintain the boom and to provide logistics support will require the contracting of most of the local small passenger and commercial fishing boats located throughout the area. This will also increase the amount of safety training needed to comply with the law.

(2) Personnel: There will not be enough personnel to deploy boom as soon as it arrives. There may also be a shortfall in the number of personnel available to monitor the cleanup sites. The Coast Guard will utilize personnel from outside of the Mariana Islands. It is anticipated that the Responsible Party/Unified Command will have to subcontract many outside labor providers. The spill impact area may not have adequate lodging facilities.

(3) Funds: No funding shortfalls are expected.

(4) Locations exist within the port(s) that can be used as U/C posts as well as the various Territory Emergency Operations Centers. These locations are preferred because access can be controlled to those entities possessing “official” ID cards or other proof of access to the impacted areas.

(5) Significant delays are anticipated for aircraft responses.

(6) Obtaining the total number of feet of standard boom required will occur over several days. As more companies stockpile boom, this response time should decrease.

(7) There may be significant delays in contracting for vessels required to support the response.

(8) Location and identification of additional resources: The Sector does not have sufficient personnel to assign to the tasks of locating additional equipment during an incident. The National Strike Force Coordination Center (NSFCC) or District Response Advisory Teams (DRAT) would be requested to provide this assistance to FOSCs.

9440 Planning Scenarios

9441 Guam Planning Scenarios

9441.1 Guam Onshore Facility/Marine Terminal WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Failure of Vital Energy Storage Tank	Bunker C (Fuel Oil Number 6)	250,000	13°27'40"N 144°41'10"E

Summary: The WCD Onshore Facility scenario is a catastrophic failure of a 250,000 barrel tank of Bunker C (Fuel Oil Number (No.) 6) and the containment at Vital Energy. Bunker C (MSDS No. 9907) is a petroleum distillate fraction with a boiling point >400 degrees F. Fuel Oil No. 6 is the highest boiling fraction of the heavy distillates from petroleum. No. 6 oils represent approximately 5 to 8% of the original crude petroleum, but the exact yield depends on the source, refinery design and operations, and product requirements. Fuel Oil No. 6 is persistent in environment, has low evaporation rate, is a remote fire hazard, and is a personnel exposure hazard as the product is heated.

A catastrophic spill at Vital Energy would impact virtually all of Apra Harbor, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Apra Harbor beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: A total structural failure of a storage tank, product breaches the containment berm and enters Apra Harbor via Piti Channel. Although the probability for the structural failure of storage tank and containment berm is low, the potential exists for the majority of the product to leave the bermed area if this scenario happens.

Type and amount of spill: 250,000 barrels of Fuel Oil No. 6 escape into Apra Harbor.

Can pollution source be secured? No, however the Oil Spill Response Organization will be mobilized to contain and protect in order to lessen the quantity of oil entering Outer Apra Harbor, Inner Apra Harbor and Sasa Bay.

Sensitive areas at risk: Outer Apra Harbor, Inner Apra Harbor, and Sasa Bay.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9441.11 Guam Most Probable WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Failure of Tristar Pipeline	Bunker C (Fuel Oil Number 6)	21,000	13°27'40"N 144°41'10"E

Summary: The WCD Onshore Facility scenario is a catastrophic failure of the Tristar pipeline between the MRT and distribution facility. Bunker C (MSDS No. 9907) is a petroleum distillate fraction with a boiling point >400 degrees F. Fuel Oil No. 6 is the highest boiling fraction of the heavy distillates from petroleum. No. 6 oils represent approximately 5 to 8% of the original crude petroleum, but the exact yield depends on the source, refinery design and operations, and product requirements. Fuel Oil No. 6 is persistent in environment, has low evaporation rate, is a remote fire hazard, and is a personnel exposure hazard as the product is heated.

A catastrophic failure of the pipeline would potentially lead to a spill overland or water and impact Apra Harbor, Sasa Bay, and Inner Apra Harbor as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Apra Harbor beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: A catastrophic failure of the Tristar pipeline potentially could enters Apra Harbor via Piti Channel, Sasa Bay via the Sasa River, and Inner Apra Harbor via Apra Harbor. Due to the current age and shape of the pipeline, his has been identified as the risk to the marine environment on Guam.

Type and amount of spill: 21,000 barrels of Fuel Oil No. 6, 21,000 barrels escape into Apra Harbor before the values used for draining water out of the bermed containment area can be closed off.

Can pollution source be secured? No, however the Oil Spill Response Organization will be mobilized to contain and protect in order to lessen the quantity of oil entering Outer Apra Harbor, Inner Apra Harbor and Sasa Bay.

Sensitive areas at risk: Outer Apra Harbor, Inner Apra Harbor, and Sasa Bay.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9441.2 Guam Tank Vessel WCD

Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Tank Ship	Bunker C (No. 6 Fuel Oil)	500,000	13°27’34”N 144°39’43”E

Summary: The WCD tank vessel scenario is a 500,000 barrel tank ship carrying Fuel Oil No. 6 running aground on either Western Shoals (13°27’09”N, 144°39’19”E) or Jade Shoals (13°27’18”N, 144°39’47”E) resulting in a total loss of cargo (500,000 barrels) on board the tank ship. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill involving a tanker would impact virtually all of Sasa Bay, outer and inner Apra Harbor as the tide and wind dispersed the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Apra Harbor beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season. Due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential exists for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: An in-bound tank vessel runs aground on Western or Jade Shoal carrying 500,000 barrels of Fuel Oil No. 6 resulting in the total loss of cargo and bunkers.

Type and amount of spill: 500,000 barrels of Fuel Oil No. 6.

Can pollution source be secured? No.

Sensitive areas at risk: Outer Apra Harbor, Inner Apra Harbor, and Sasa Bay.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bring winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9441.3 Guam Non-tank Vessel WCD

Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Matson Container Ship	Bunker C (No. 6 Fuel Oil)	23,810 BBL	13°27'34"N 144°39'43"E

Summary: The WCD non-tank vessel scenario is container ship running aground on either Western Shoals (13°27'09"N, 144°39'19"E) or Jade Shoals (13°27'18"N, 144°39'47"E) resulting in a total loss of bunkers (23,810 barrels) on board the container ship. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill involving a non-tanker vessel would impact virtually all of Apra Harbor as the tide and wind dispersed the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Apra Harbor beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: A container ship out-bound from wharf(s) F-5/6 caught by heavy north winds loses propulsion and tug control.

Type and amount of spill: 23,810 barrels of Fuel Oil No. 6.

Can pollution source be secured? No.

Sensitive areas at risk: Apra Harbor.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bring winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9442 Rota Planning Scenarios

9442.1 Rota Onshore Facility/Marine Terminal WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Mobil Terminal	ULSD	4570	14.13978°N 145.14469°E

Summary: The WCD Onshore Facility scenario is a catastrophic failure of Mobil terminal ULSD storage tanks and containment walls resulting in 4,570 barrels being released in Sasanhaya Bay.

A catastrophic spill at Mobil Terminal would impact virtually all of Sasanhaya Bay, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as Sasanhaya Bay.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: A total structural failure of a storage tank, product breaches the containment walls and enters Sasanhaya Bay. Although the probability for the structural failure of storage tank and containment berm is low, the potential exists for the majority of the product to leave the walled area if this scenario happens.

Type and amount of spill: 4570 barrels of ULSD Fuel escape into Sasanhaya Bay.

Can pollution source be secured? No, however the Oil Spill Response Organization will be mobilized to contain and protect in order to lessen the quantity of oil entering Outer Apra Harbor, Inner Apra Harbor and Sasa Bay.

Sensitive areas at risk: All sensitive areas in Sasanhaya Bay.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9442.2 Rota Tank Vessel WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
M/V Akri	Light Petroleum Products IFO 380 (Bunker C) MDO/MGO	43,900 2100 403	14.13978°N 145.14469°E

Summary: The WCD tank vessel scenario is a 43,900 barrel tank ship carrying light oils running aground in vicinity of 14.14386°N, 145.18312°E resulting in a total loss of cargo (43,900 barrels) of light oil on board the tank ship and 2,100 barrels of Bunker C. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill would impact virtually all of Sasanhaya Bay, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: An in-bound tank vessel gets caught in a windy conditions and runs aground resulting in the total loss of cargo and bunkers.

Type and amount of spill: 43,900 barrels of light oil on board the tank ship and 2,100 barrels of Bunker C escape into Sasanhaya Bay.

Can pollution source be secured? No.

Sensitive areas at risk: All sensitive areas in Sasanhaya Bay.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9442.3 Rota Non-tank Vessel WCD

Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Chamorro	Diesel Lube Oil Hydraulic Oil	1076 20 8	13.722°N 145.13255°E

Summary: The WCD non-tank vessel scenario is the Tug Chamorro running aground as it is entering the commercial port channel, vicinity 14.13722°N, 145.13255°E resulting in a total loss of cargo 1104 Bbls non-persistent oils. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill would impact virtually all of the Rota Commercial Port area, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: The Chamorro caught by heavy north winds loses propulsion and control.

Type and amount of spill: 1104 Bbl of non-persistent oils.

Can pollution source be secured? No.

Sensitive areas at risk: Rota Commercial Port Area.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bring winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9443 Saipan Planning Scenarios

9443.1 Saipan Onshore Facility/Marine Terminal WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Mobil Terminal	ULSD	75,000	15.22377°N 145.73439°E

Summary: The WCD Onshore Facility scenario is a catastrophic failure of Mobil terminal ULSD storage tanks and containment walls resulting in 75,000 barrels being released in Saipan Lagoon.

A catastrophic spill at Mobil Terminal would impact virtually all of Saipan Lagoon, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Saipan Lagoon, Managaha Island, and Garapan Lagoon Beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: A total structural failure of a storage tank, product breaches the containment walls and enters Saipan Lagoon. Although the probability for the structural failure of storage tank and containment berm is low, the potential exists for the majority of the product to leave the walled area if this scenario happens.

Type and amount of spill: 75,000 barrels of ULSD Fuel escape into Saipan Lagoon.

Can pollution source be secured? No, however the Oil Spill Response Organization will be mobilized to contain and protect in order to lessen the quantity of oil entering the Saipan Lagoon, and Garapan Lagoon.

Sensitive areas at risk: All sensitive areas in the Saipan Lagoon, Managaha Island, and Garapan Lagoon Beaches.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9443.2 Saipan Tank Vessel WCD

Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Tank Ship	Bunker C (No. 6 Fuel Oil) Light Petroleum Products	10,900 350,000	15.22729°N, 145.70586°E to 15.22775°N, 145.71734°E

Summary: The WCD tank vessel scenario is a 350,000 barrel tank ship carrying light oils running aground in vicinity of midpoint between Buoy 3 and 5 to Buoy 7 (15.22729°N, 145.70586°E to 15.22775°N, 145.71734°E) resulting in a total loss of cargo (350,000 barrels) of light oil on board the tank ship and 10,900 barrels of Bunker C. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill between Buoy 3 and 5 to Buoy 7 would impact virtually all of Saipan Lagoon, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as Managaha Island, Saipan Lagoon and Garapan Lagoon Beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season. Due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential exists for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: An in-bound tank vessel runs aground midpoint between Buoy 3 and 5 to Buoy 7 (15.22729°N, 145.70586°E to 15.22775°N, 145.71734°E) carrying 350,000 barrels of light Oil and 10,900 barrels of Bunker C resulting in the total loss of cargo and bunkers.

Type and amount of spill: 350,000 barrels of Light Oil and 10,900 barrels of Bunker C.

Can pollution source be secured? No.

Sensitive areas at risk: All sensitive areas in Saipan Lagoon and Garapan Lagoon.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bring winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9443.3 Saipan Non-tank Vessel WCD

Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Asuka II	Bunker C – IFO 380	20,715	15.22729°N, 145.70586°E to 15.22775°N, 145.71734°E

Summary: The WCD non-tank vessel scenario is container ship running aground in vicinity of midpoint between Buoy 3 and 5 to Buoy 7 (15.22729°N, 145.70586°E to 15.22775°N, 145.71734°E) resulting in a total loss of cargo 20,715 Bbls Group I non-persistent oils, Group II persistent oils, Group III persistent oils and Group IV persistent oils. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill between Buoy 3 and 5 to Buoy 7 would impact virtually all of Saipan Lagoon, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as Managaha Island, Saipan Lagoon and Garapan Lagoon Beaches.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: An in-bound container ship runs aground midpoint between Buoy 3 and 5 to Buoy 7 (15.22729°N, 145.70586°E to 15.22775°N, 145.71734°E) carrying 350,000 barrels of light Oil and 10,900 barrels of Bunker C resulting in the total loss of cargo and bunkers.

Type and amount of spill: 20,715 Bbls Bunker C (IFO 380).

Can pollution source be secured? No.

Sensitive areas at risk: All sensitive areas in Saipan Lagoon and Garapan Lagoon.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bring winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9444 Tinian Planning Scenarios

9444.1 Tinian Onshore Facility/Marine Terminal WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
Mobil Terminal	ADO	11,232	14.9664°N 145.62014°E

Summary: The WCD Onshore Facility scenario is a catastrophic failure of Mobil terminal ULSD storage tanks and containment walls resulting in 11,232 barrels being released in the commercial port and surrounding area.

A catastrophic spill at Mobil Terminal would impact virtually all of the commercial port and surrounding area, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk in Tinian Harbor and adjacent areas.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: A total structural failure of a storage tank, product breaches the containment walls and enters the commercial port and surrounding area. Although the probability for the structural failure of storage tank and containment berm is low, the potential exists for the majority of the product to leave the walled area if this scenario happens.

Type and amount of spill: 11,232 barrels of ADO Fuel escape into the commercial port and surrounding area.

Can pollution source be secured? No.

Sensitive areas at risk: All sensitive areas in the commercial port and surrounding area.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9444.2 Tinian Tank Vessel WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
M/V Akri	Light Petroleum Products IFO 380 (Bunker C) MDO/MGO	43,900 2100 403	14.95471°N 145.62472°E

Summary: The WCD tank vessel scenario is a 43,900 barrel tank ship carrying light oils running aground in vicinity of 14.95471°N, 145.62472°E resulting in a total loss of cargo (43,900 barrels) of light oil on board the tank ship and 2,100 barrels of Bunker C. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill would impact virtually all of the commercial port, as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: An in-bound tank vessel gets caught in windy conditions and runs aground resulting in the total loss of cargo and bunkers.

Type and amount of spill: 43,900 barrels of light oil on board the tank ship and 2,100 barrels of Bunker C escape in commercial port and surrounding area.

Can pollution source be secured? No.

Sensitive areas at risk: All sensitive areas in the commercial port and surrounding area.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bringing winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

9444.3 Tinian Non-tank Vessel WCD

WCD Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD BBLS	Geographic Location of WCD (lat/long)
MSC Thunder & Lightning	Bunker C	3,558	14.13722°N 145.13255°E

Summary: The WCD non-tank vessel scenario is the ITB Thunder / Lightning running aground as it is entering the commercial port channel, vicinity 14.13722°N, 145.13255°E resulting in a total loss of cargo 3,558 BBLs non-persistent and persistent oils. This incident occurs at the onset of Port Heavy Weather Condition Yankee.

A catastrophic spill would impact virtually all of the Commercial Port area and surrounding area as the tide and wind disperses the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, marine reptiles, shellfish, benthic community, and aquatic preserves, etc.) would be at risk.

Seasonal considerations: The worst time of year for a spill in this area is during the typhoon season due to the Mariana Islands location in Western Pacific typhoon spawning area and the potential for a storm to move rapidly. Although the COTP issues port orders during the onset of typhoons, they pose a greater hazard because of the suddenness with which they can materialize; the extreme wind and rain conditions; and inaccurate storm projections.

Planning Scenario Specifics:

Situation: The Chamorro caught by heavy north winds loses propulsion and control.

Type and amount of spill: 3,558 BBLs non-persistent and persistent oils.

Can pollution source be secured? No.

Sensitive areas at risk: Commercial port and surrounding area.

Time of the year: June through December.

On-scene weather: During typhoon season, typhoons can develop in the Sector Guam AOR within 48 hours bring winds attaining speeds of 130 miles per hour and rainfall in excess of 20 inches. Once the storm passes, the winds go back to light and variable.

APPENDIX 9500

LIST OF AGREEMENTS

APPENDIX 9500

LIST OF AGREEMENTS

9510 Federal MOU / MOA / Service Support Agreements

9510.1 MOU between Environmental Protection Agency and The United States Coast Guard Signed 4 January 1982

This MOU between the U.S. Coast Guard and the Environmental Protection Agency is a Letter of Agreement to provide pre-consultation and concurrence for the authorization of limited use of dispersants and other chemicals on oil spills by pre-designation USCG On-Scene Coordinators.

9510.2 MOU between Environmental Protection Agency and The United States Coast Guard Signed 6 September 1979

This MOU between the U.S. Coast Guard and the Environmental Protection Agency states the agreement between the two services that the responsibility for the mitigation of damage to the public health and welfare caused by the discharge of hazardous substances shall be shared.

9510.3 MOU between Environmental Protection Agency, United States Coast Guard, and National Institute for Occupational Safety And Health Administration Signed 18 December 1980

This MOU between the U.S. Coast Guard, the Environmental Protection Agency and the National Institute for Occupational Safety and Health Administration provides guidance for the protection of workers who investigate and clean up hazardous waste sites and respond to hazardous substance emergencies.

9510.4 MOU between Department of the Interior and Department of Transportation Signed 16 August 1971

This MOU provides for the efficient use of resources under the National Oil and Hazardous Substances Pollution Contingency Plan, the Secretaries of the Department of the Interior and Transportation agree to share responsibilities in reference to Hazardous Substance Release Response.

9510.5 MOU between Environmental Protection Agency and United States Coast Guard Signed 01 January 82

The U.S. Coast Guard and the Environmental Protection Agency agree that a mechanism is required to fund USCG costs incurred during emergency response to releases, or the threats of releases of hazardous substances or pollutants or contaminants. This Memorandum of Understanding establishes the accounting, contracting, and fund management control policies and procedures for USCG response actions.

9510.6 MOA between U.S. Fish and Wildlife Service and United States Coast Guard Signed 24 July 1979

The purpose of this agreement is to specify the conditions and procedures under which the U.S. Fish and Wildlife Service will provide the U.S. Coast Guard Federal On-Scene Coordinators with appropriate technical expertise as well as services in support of the Federal Government's efforts to control and clean up oil and hazardous chemical discharges.

9510.7 MOU for United States Coast Guard Auxiliary in support of the Marine Environmental Protection Program Signed 23 May 1995

Through mutual involvement and commitment, a Coast Guard objective has been set to mobilize the Coast Guard Auxiliary in a dynamic "Team Coast Guard" approach, which actively engages Auxiliarists as "Full Partners" in aggressively promoting marine environmental protection and effectively reducing pollution in our nation's waterway.

9510.8 MOU between Director of Military Support (DOMS) and United States Coast Guard Signed 12 Aug 1996

This MOU specifies the procedures by which the U.S. Coast Guard can request the U.S. Air Force Reserve to provide aircraft, equipment and personnel for the application of oil dispersants during oil spill cleanup and removal operations and establish interagency cost reimbursement.

9510.9 MOU Between United States Coast Guard and Environmental Protection Agency Signed 09 October 1981

The MOU states the agreed upon functions for responses to releases from vessels and facilities. Functions related to immediate removal action concerning releases or threats of releases at facilities other than active or inactive "hazardous waste management facilities.

9510.10 MOU Between United States Geological Survey (DOI), Department of Transportation and the US Coast Guard Signed 18 December 1980

The MOU is to promote the safety of activities and facilities associated with the exploration, development, and production of mineral resources to avoid duplication of effort.

9510.11 MOA Between United States Navy and the US Coast Guard Signed 15 September 1980

The MOA specifies the conditions and procedures under which the USCG and USN can request other agency equipment and resources and how each agency will provide requested support.

9510.12 Inter-Agency MOA Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act’s National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act Signed July 2001

This MOA provides a general framework for cooperation and participation among the Parties in the exercise of the oil spill planning and response responsibilities.

9510.13 MOU Between United States Coast Guard and Environmental Protection Agency and the Corporation for National and Community Service (CNCS) Signed 03 March 2011

This MOU describes CNCS as a wholly-owned US government corporation and executive federal agency of the US. CNCS provides support to national, state and local voluntary organizations and public agencies that lead response, relief, and recovery efforts when an incident occurs.

9510.14 DECISION DOCUMENT - US Army Corps of Engineers Nationwide Permit Signed 13 February 2012

The Nationwide Permit pre-authorizes activities conducted in spill responses and spill response training exercises subject to 40 CFR part 300.

APPENDIX 9500

LIST OF AGREEMENTS

9510.15 MOU between General Services Administration (GSA) / EPA / USCG

The General Services Administration (GSA) has Realty, Communications, and Contracting specialists. They can assist the FOSC with a myriad of logistics services. In 1996 a Memorandum of Understanding (MOU) was completed between the EPA, USCG and GSA for logistical and telecommunications support for Federal response efforts.

The current GSA representative to the ORRT, who should be contacted for assistance, is:

Robert Brown, Regional Emergency Coordinator
General Services Administration, Management Services Division (9CA)
450 Golden Gate Ave
San Francisco, CA 94102-3434

-- Office (415) 522-2645
-- Cellular (415) 359-5886 (emergencies only)
-- Fax (415) 522-2640
-- Email bob.brown@gsa.gov

9510.16 MOU between COMSUBRON 15 and USCG Sector Guam.

Letter of Agreement Between Commander Submarine Squadron Fifteen (CSS-15) and Coast Guard Captain of the Port Guam for Radiological Emergency Response.

9520 Territory MOU / MOA / Service Support Agreements. None

APPENDIX 9600
CONVERSIONS

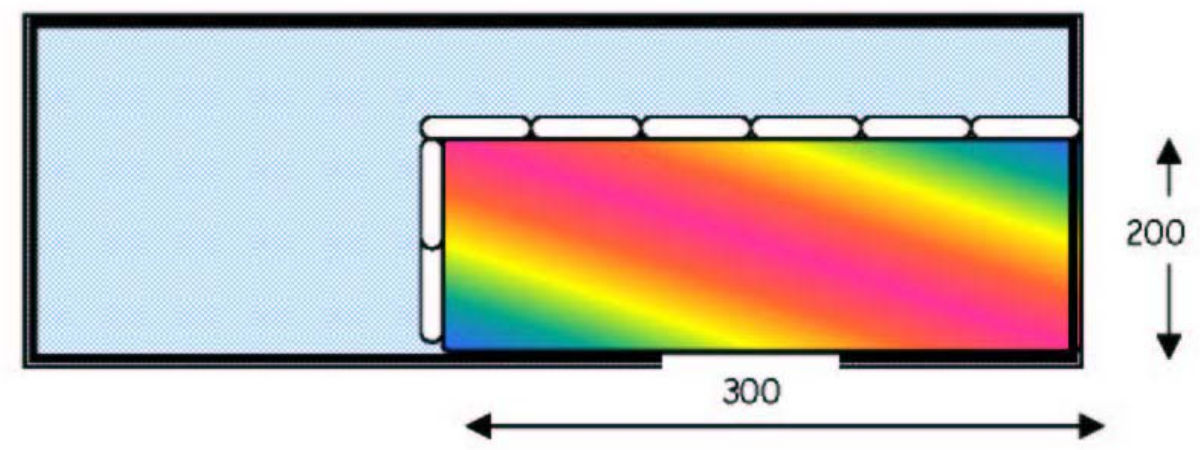
APPENDIX 9600

CONVERSIONS

9610 Sheens

Example: A boomed off diesel spill measures approximately 300 yards by 200 yards. The spill is bright rainbow sheen. Use the following calculation to estimate the amount spilled

FIGURE 9610-1: Estimating Oil Spill Amount



Spill Thickness Conversions:

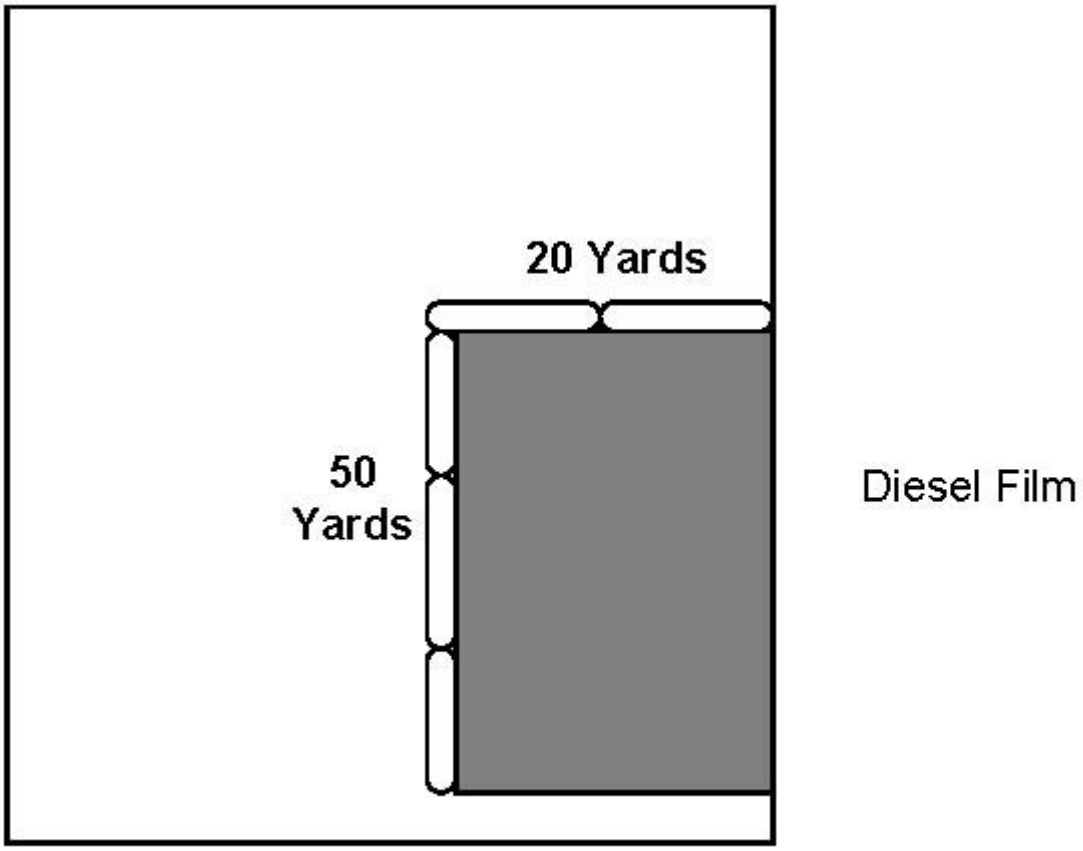
Silvery Sheen .0000315 Gals/ Sq Yard
First Colors .0000630 Gals/ Sq Yard
Bright Rainbow .000126 Gals/ Sq Yard
Dull Colors .000378 Gals/ Sq Yard
Dark Colors .001134 Gals/ Sq Yard

Multiply (spill thickness) x (length in yards) x (width in yards)
.000126 Gals/ Sq Yards x 300 yards x 200 yards = **7.56 gallons spilled**

9620 Film and Emulsions Conversions

Example: a boomed off spill measures 20 yards wide by 50 yards long. The spill has a 1/4" amber colored diesel film. This conversion assumes even coating of the spill across the surface of the water and should only be used as estimation.

FIGURE 9620-1: Estimating Oil Spill Amount



Cubic Inches to Gallons .004329, Yard to Inches 36, Multiply (spill thickness) x (length in inches) x (width in inches) .25" x 50 yards x 20 yards .25" x 1800 cu" x 720 cu" = 324,000 cu" 324,000 cu" x .004329 = **1,402 gallons spilled**

APPENDIX 9600

CONVERSIONS

9630 Celsius (°C) / Fahrenheit (°F) Conversion Temperature Conversion

Celsius (°C)	Fahrenheit (°F)	Celsius (°C)	Fahrenheit (°F)
0	32	105	221
5	41	110	230
10	50	115	239
15	59	120	248
20	68	125	257
25	77	130	266
30	86	135	275
35	95	140	284
40	104	145	293
45	113	150	302
50	122	155	311
55	131	160	320
60	140	165	329
65	149	170	338
70	158	175	347
75	167	180	356
80	176	185	365
85	185	190	374
90	194	195	383
95	203	200	392
100	212		

APPENDIX 9600
CONVERSIONS

9640 Chemistry Conversion

9640.1 DOT Hazard Class

http://hazmat.dot.gov/guidebook.htm

9640.2 Specific Gravity

Water = 1

Specific Gravity >1 = Sink

Specific Gravity <1 = Float

9640.3 Vapor Density

Air = 1

Vapor Density >1 = Sink

Vapor Density <1 = Rise

9640.4 PH

pH >7 = Base (Alkalin)

pH <7 = Acid

9640.5 Oil and Gas Conversion Calculator

http://www.rigzone.com/calculator/default.asp

Convert hundreds of different oilfield units of measurement.

APPENDIX 9700

RESPONSE REFERENCES

APPENDIX 9700

RESPONSE REFERENCES

9710 Relevant Statute / Regulations Authorities List

9710.1 Federal Water Pollution Control Act (FWPCA)

- 33 USC 1321
- Passed in 1972 and designed to eliminate all water pollution by 1985.
- Established the National Contingency Plan (NCP), 40 CFR 300-provided a national action plan for pollution containment, dispersal, and removal.
- Created the National Strike Force.
- Provisions which made spiller obligated to respond to a spill.
- Established Civil and Criminal Penalties.

9710.2 Clean Water Act (CWA)

- 46 CFR 31, 35, 112
- Amended FWPCA.
- Allowed USCG to clean up a spill and recover costs incurred by spiller.
- 311-K revolving pollution fund with $35 million ceiling (33 USC 1321, sec.311, paragraph. K).
- Pollution Prevention Requirements (PPR) (33 CFR 151. 154-156).
- Created National Response Center.
- Defined “harmful quantity” and “reportable quantity” (RQ).

9710.3 Oil Pollution Act of 1990 (OPA 90)

- Amended FWPCA/CWA.
- $1 Billion Oil Spill Liability Trust Fund (OSLTF) which combined 311-K and additional Congressional appropriations- controlled by National Pollution Fund Center (NPFC).
- Taxes on crude oil, which along with recovered penalties, maintains the OSLTF (6 cents a barrel).
- Established authority for Federal On Scene Coordinator (FOSC) to designate Responsible Parties (RP).
- Established National Strike Force Coordinator Center and reestablished the Atlantic Strike Team.
- Increased RP liabilities and responsibilities.
- Increased penalties for a violation of the FWPCA (“The Act”).
- Allows states access to the Oil Spill Liability Trust Fund.
- Allows for third party claims for personal property and environmental damaged caused by an accident.

9710.4 Refuse Act of 1899

- Applies to trash: tires, refrigerators, trees, cars, etc.
- Anything that creates a “Hazard to Navigation.”
- Fines of $500-$2,500 and imprisonment for 30 days to a year.
- Army Corps of Engineers (ACOE) enforcement.
- The main purpose of the law is to maintain clear navigation channels.

APPENDIX 9700

RESPONSE REFERENCES

9710.5 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- 40 CFR 302
- Requires RP to report any release of HAZ substances if meets or exceeds the RQ.
- Created $1.6 Billion Superfund.
- Violations: Civil-$32,500 per violation; $32,500 per day if continuous… depending on the situation (reference: Civil Penalty Guide).
- Criminal: up to 3 years imprisonment and maximum fine of $50,000.
- Before On Scene Coordinator (OSC) can initiate a response, 3 jurisdiction elements must be present:
  1. Material must be a hazardous substance or it is a pollutant or contaminant that may present an imminent and substantial danger to the public health or welfare.
  2. There has been a release, or there is a substantial threat of a release, into the environment. Release at RQ must be within 24hr period.
  3. The RP is not taking proper removal actions.

9710.6 Superfund Amendment and Reauthorization Act (SARA)

- Amended CERCLA.
- Created $8.5 Billion Superfund.
- Redefined release to include abandonment or discarding barrels, drums, enclosed container, etc.
- Reimbursement of expenses incurred by local govt. by carrying out responses (up to $32,500 a day).
- Redefined response to include enforcement activities.
- Extended liability to foreign ships in areas under U.S. control, whether or not such vessels were otherwise subject to U.S. jurisdiction.

9710.7 Resource Conservation and Recovery Act (RCRA)

- Protects human health and environment by reducing waste and conserving energy and natural resources.
- Reduces or eliminates the generation of Hazardous Waste as expeditiously as possible.
- Covers waste from generation to disposal, “CRADLE TO GRAVE”.

APPENDIX 9700

RESPONSE REFERENCES

9720 Relevant Instructions / Guidelines / Standard Procedures and Practices List

9720.1 Incident Management Handbook (IMH). The most recent copy can be found in the "Library" Section on http://homeport.uscg.mil/ics.

9720.2 ICS Forms and Job Aids. Go to Homeport "Incident Command System" sub-section then look under "Job Aides" and "Forms" http://homeport.uscg.mil/ics.

9720.3 U.S. Coast Guard Marine Environmental Response and Preparedness Manual (COMDTINST M16000.14A) Draft

APPENDIX 9700

RESPONSE REFERENCES

9730 Geographic Response Plans (GRP)

Geographic Response Plans (GRPs) are site-specific response plans for protecting identified sensitive coastal and inner waterways from oil spills. They include response strategies tailored to a specific beach, shore, or waterway and meant to minimize impact on sensitive areas threatened by the spill. The GRPs were developed through a collaborative effort between the Guam, Commonwealth of Northern Mariana Islands and federal government agencies of the USCG Sector Guam Captain of the Port Area Committee.

Each GRP has two priorities:

- Identify sensitive natural, cultural and significant economic resources; and
- Describe and prioritize response strategies.

USCG Sector Guam's GRP GIS Platforms are being developed in partnership with NOAA Office of Response & Restoration on Environmental Response Management Application Pacific Islands.

Booming Strategies/locations are located at:

https://erma.noaa.gov/pacific/erma.html#/x=145.73053&y=15.23306&z=14&layers=11+11355+3637+12697

Sector Guam GRPS are located on Homeport (https://homeport.uscg.mil/guam) in the Safety and Security section under the Area Contingency Plan.

APPENDIX 9700

RESPONSE REFERENCES

9740 Technical References

9740.1 National Contingency Plan (NCP) Product Schedule**:**
http://www.epa.gov/emergencies/content/ncp/

9740.2 Catalog of Crude Oil and Oil Product Properties:
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CB0QFjAAahUKEwj_-OLflKrIAhXDoogKHYuiCG4&url=http%3A%2F%2Fwww.bsee.gov%2FTechnology-and-Research%2FOil-Spill-Response-Research%2FReports%2F100-199%2F120BC%2F&usg=AFQjCNE0nzXWZDzwQ2WtCMxkML5WF8LJ8g

9740.3 CHRIS Manual

Chemical Hazards Response Information System (CHRIS) is designed to provide information needed for decision-making by responsible Coast Guard personnel during emergencies that occur during the water transport of hazardous chemicals. CHRIS also provides much information that can be used by the Coast Guard in its efforts to achieve better safety procedures and so prevent accidents.

https://www.uscg.mil/hq/nsfweb/foscr/ASTFOSCRSeminar/References/CHRISManualIntro.pdf

9740.4 NOAA Office of Response and Restoration Job Aids for Spill Response (URL: http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/job-aids-spill-response.html)

Trajectory Analysis Handbook

This 2002 guidebook explains the basic concepts involved in analyzing the trajectory of spilled oil, including an overview of the physical processes that affect oil movement and behavior in the marine environment. It can help the spill responder and planner understand physical processes and potential uncertainties as they incorporate trajectory analysis into the response.

Open Water Oil Identification Job Aid for Aerial Observation

An important step in spill response is to assess the character and extent of oil spilled on the water. This information is used by the Incident Command to prioritize response and direct cleanup resources. This job aid helps responders perform efficient assessments and use standard language to communicate their findings effectively.

Dispersant Application Observer Job Aid

This job aid was prepared as a companion field guide for individuals who have completed training in dispersant application observation. It is designed to be a refresher on observing and identifying dispersed and undispersed oil, describing their characteristics, and reporting this information to decision-makers. We recommend that this book be used with the *Open Water Oil Identification Job Aid for Aerial Observation* (above) to help describe both surface and dispersed oil.

Shoreline Assessment Job Aid

A supplement to the Shoreline Assessment Manual, this job aid provides visual examples of many of the terms that spill responders use during shoreline assessments. The color photos include surface oil distribution, oiling descriptors for thickness and type, sediment types,

shoreline types, and cleanup methods to aid in the shoreline cleanup and assessment (SCAT) process.

Characteristic Coastal Habitats: Choosing Spill Response Alternatives

This job aid illustrates typical attributes of North American coastal habitats at risk from oil spills. The text describes each habitat and discusses how oil is likely to behave there, as well as considerations for treating oil. This job aid is also useful for training people who will participate in cleanup assessment as part of an Environmental Unit within the Incident Command System.

Characteristics of Response Strategies: A Guide for Spill Response Planning in Marine Environments

This job aid was designed to help spill responders select appropriate response options to minimize environmental impacts when oil spills in coastal habitats. The response methods include natural recovery; mechanical, chemical, and biological treatments; and in situ burning. The job aid focuses on maximizing response effectiveness while minimizing resource impacts. It serves as a useful aid for people who will be participating in cleanup assessments as part of Operations and Planning Units within the Incident Command System.

9740.5 DOT Emergency Response Guidebook

http://phmsa.dot.gov/pv_obj_cache/pv_obj_id_7410989F4294AE44A2EBF6A80ADB640BCA8E4200/filename/ERG2012.pdf

9740.6 USFWS & NMFS Endangered Species Consultation Handbook

http://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf

APPENDIX 9800

RESERVED

APPENDIX 9900

RESERVED FOR DISTRICT/AREA