Oil Pollution Emergency Arrangements – Australia - Guideline

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1 Introduction

1.1 Objective

The purpose of the Oil Pollution Emergency Arrangements (Australia) (OPEA (Australia)) Guideline is to describe the arrangements and processes adopted by Woodside Energy Limited (Woodside) when responding to a hydrocarbon spill (HSP) from a petroleum activity.

This OPEA (Australia) provides details of hydrocarbon spill response arrangements across Woodside's Australian-based activities. Facility/activity specific response plans are detailed in the relevant Oil Pollution First Strike Plan.

The objectives of this OPEA (Australia) are:

- to detail the means by which Woodside delivers an integrated response with port, Territory, State and National agencies and their respective hydrocarbon spill contingency plans
- to outline Woodside's Incident Management Structure with a view to implementing a rapid and effective response to any hydrocarbon pollution incident
- to provide an overview of Woodside's preparedness arrangements that support an efficient and timely response via the oil pollution first strike plans, operational plans and tactical response plans
- to provide the overarching framework for hydrocarbon spill response to meet Commonwealth and Western Australia State Regulations and
- to provide alignment with the arrangements in the National Plan for Maritime Environmental Emergencies (prepared by the Australian Marine Safety Authority (AMSA)) (the National Plan).

1.2 Scope

This OPEA (Australia) applies to any hydrocarbon spill related to a petroleum activity or facility, as defined by the Offshore Petroleum and Greenhouse Gas Storage Act (Environment) Regulations 2009 (Cth) (the OPGGS (E) Regulations), where Woodside is the nominated titleholder. For the purposes of this document, the term hydrocarbon spill includes any spill of crude oil, condensate or marine fuel oil.

The OPEA (Australia) applies to Woodside's Australian activities only (Figure 1-1) and includes spills from petroleum activities.

Woodside is not the Control Agency for vessel-related spills, where the vessel is not considered a petroleum facility. The National Plan applies to vessel-related spills in Commonwealth waters. Woodside will undertake first strike response on behalf of Australian Maritime Safety Authority (AMSA) for vessel-related spills in line with the relevant Oil Pollution First Strike Plan.

As discussed in Section 2.3, the relevant State and Territory hydrocarbon spill contingency plans (e.g. WestPlan - Marine Oil Pollution (WestPlan-MOP)) and NT Oil Spill Contingency Plan (NT OSCP)) apply to vessel-related spills in State and Territory waters.

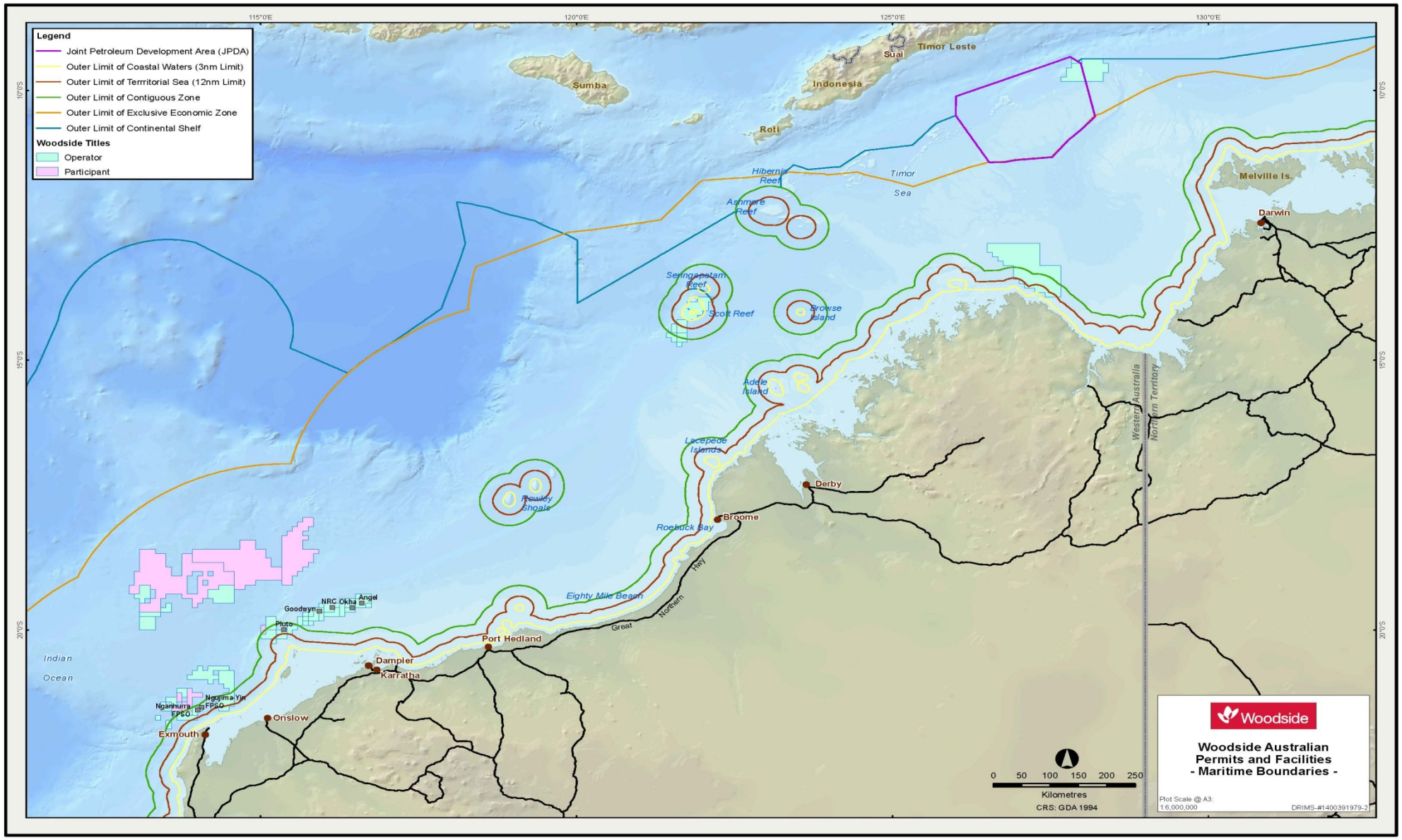


Figure 1-1: Woodside's Australian Permits and Facilities

2 Governance

This section outlines the key internal and external governance arrangements associated with hydrocarbon spills applicable to this OPEA (Australia).

2.1 Legislative Framework

In accordance with the OPGGS (E) Regulations, oil pollution emergency planning is a requirement of an Environment Plan's (EP) implementation technique. This OPEA (Australia) contributes to the fulfilment of the requirements of Regulation 14 (8), Reg 14 (4), Reg 8 (C) and Reg 8 (E), together with supporting hydrocarbon response documents, will be implemented in accordance with the National Plan, where appropriate.

This OPEA (Australia) is relevant to the following Regulations and regulatory agencies, as appropriate to their statutory needs:

- National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), in accordance with Regulation 14(8) of the OPGGS (E) Regulations.
- Western Australian (WA) Department of Mines and Petroleum (DMP), in accordance with the Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 (WA).
- Department of the Environment (formerly the Department of Sustainability, Environment, Water, Population and Communities) where the OPEA (Australia) is used to satisfy a Ministerial Condition of approval.
- Department of Transport as the Hazard Management Authority, in accordance with the Emergency Management Regulations 2006 (WA).

2.2 Statutory and Control Agency Jurisdictions

Woodside's facilities and permit areas are currently situated in Western Australian and Commonwealth waters. Depending on their location, these facilities and permit areas fall under various statutory jurisdictions and nominated Control Agencies, as outlined in Table 2-1 and Figure 2-1.

A Statutory Authority is the agency with legislative responsibility to regulate the responsible party. The Statutory Authority oversees the response to hydrocarbon spills and may request the State or Commonwealth Control Agency takes control if deemed appropriate. Refer to Table 2-1 for Statutory Authority responsibility relevant to Woodside activities.

2.2.1 Control Agencies

The Control Agency is the agency assigned by legislation, administrative arrangements or within the relevant contingency plan, to control response activities to a maritime environmental emergency. The Control Agency will have responsibility for appointing the Incident Controller (IC). Refer to Table 2-1 for Control Agency responsibility relevant to Woodside activities.

2.2.2 Control Agency Transfer Protocols for Commonwealth Waters Response

The National Plan includes a *Guideline for Change of Control Agency* to a third party and includes processes for:

- approval from the relevant jurisdiction, or relevant regulator within that jurisdiction
- planning for the transfer of control
- Implementing a transfer arrangement.

The procedure provides for a jurisdiction to request that AMSA or another Control Agency assume operational control of an incident in exceptional circumstances. This is clarified in a Memorandum of Understanding between Woodside and AMSA.

In accordance with Woodside's Emergency and Crisis Management arrangements (Section 4.1), the Woodside Crisis Management Team Leader will decide to request handover of the Control Agency role and will determine this based primarily on the circumstances of the incident.

2.2.3 Control Agency Transfer Protocols for State Waters/Shorelines Response

In the event of a spill entering State waters/shorelines, where Woodside is the responsible party, if it is a Level 1 (definition of levels can be found in Section 4.1.1), Woodside will remain the Controlling Agency. If the spill is a Level 2/3, Woodside will transfer control to WA Department of Transport (DoT) DoT for the State waters/shorelines response only and remain the Controlling Agency for the response in Commonwealth waters. To aid with transfer of control, a checklist has been prepared by the DoT and can be found in APPENDIX C.

Table 2-1 Statutory Authorities and Control Agencies relevant to Woodside activities

Location of Incident Response	Spill Source or Location	Statutory Authority	Control Agency	
			Level 1[8]	Level 2/Level 3[8]
Commonwealth waters[1]	Offshore Petroleum Facility	NOPSEMA[3]	Titleholder (Woodside)[5]	
	Shipping Sourced Spill	AMSA (& NOPSEMA) [9]	AMSA[6]	
State waters/shorelines[2]	Onshore Petroleum Facility	Port Authority	Titleholder (Woodside)[5]	Port Authority
	Offshore Facility (Commonwealth waters)[1]	NOPSEMA[3]	Titleholder (Woodside)[5]	WA / NT DoT[7]
	Shipping Sourced Spill	WA / NT DoT[7]	Vessel Owner	WA / NT DoT[7]
Terminals (WA Waters)		WA DMP	Terminal Operator (Woodside)[5]	Port Authority or WA / NT DoT[7]
Port waters[2]	Vessel in Port	WA / NT DoT[7]	Port Authority	WA / NT DoT[7]
JPDA waters	Vessels / FPSO (in transit)	ANP[4]	AMSA	

Notes:

(1) Beyond 3 nm of the State sea baseline.

(2) Within 3 nm of the State/Territory sea baseline.

(3) NOPSEMA does not have the legislative function to perform the Control Agency role.

(4) The JPDA does not have a Statutory Authority. The ANP is a Designated Authority, which regulates operations within the JPDA on behalf of both Australia and Timor Leste.

(5) The Control Agency may request support from AMOSC and Government response agencies.

(6) Woodside and the vessel owner may provide first strike response capabilities in the event of a spill under the direction of the Control Agency.

(7) Port Authority may be required to respond initially as "First Response/Controlling Agency" under WestPlan-MOP or NT OSCP.

(8) Refer to Section 4.1.1.

(9) If the ship is a facility.

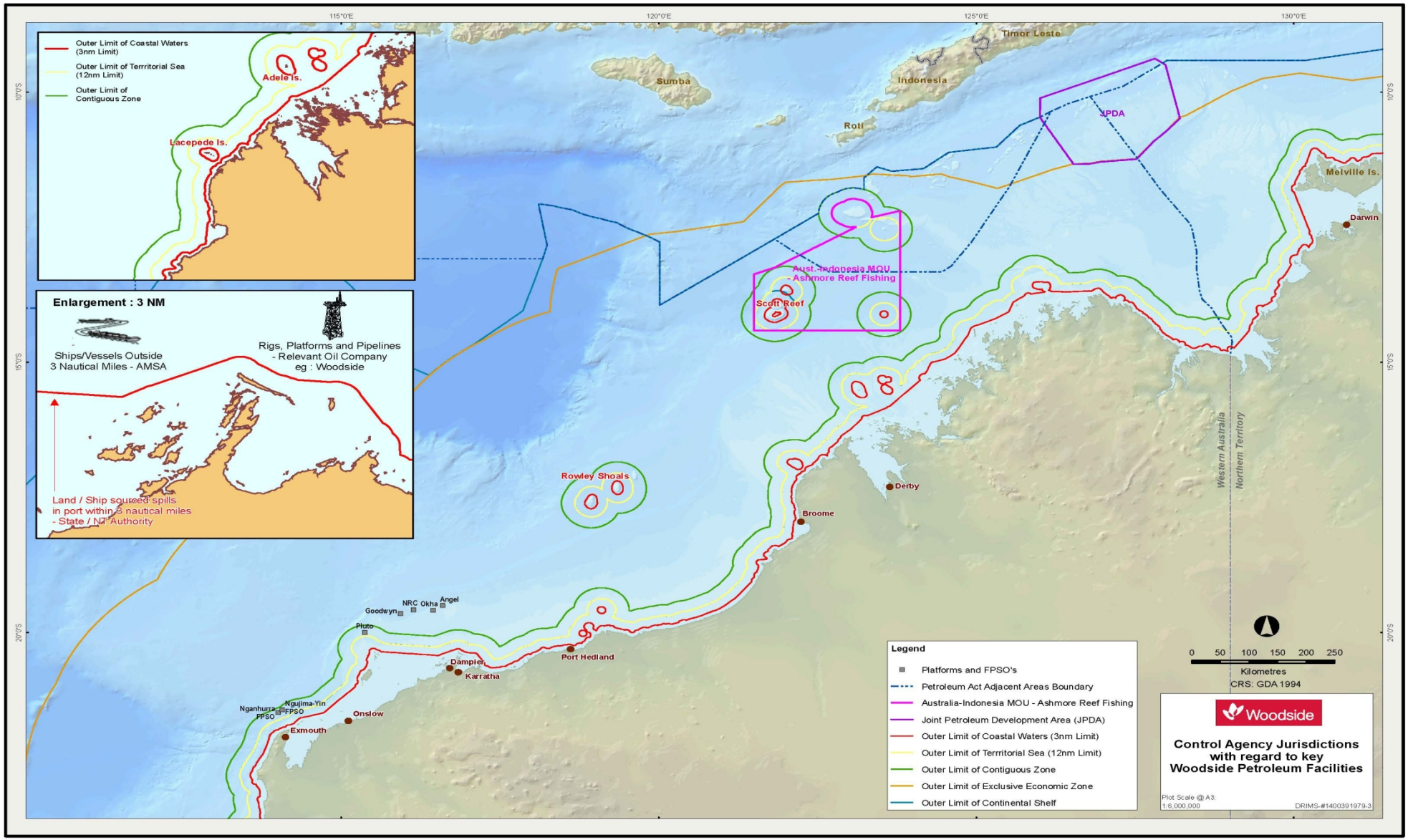


Figure 2-1: Control Agency jurisdictions in relation to key Woodside petroleum facilities.

2.3 Government and External Agencies

APPENDIX A summarises how this document interfaces with the relevant hydrocarbon spill response plans of the Government and external agencies discussed within this section.

2.3.1 NOPSEMA

NOPSEMA is the Statutory Authority responsible for the oversight of response actions to pollution events from offshore petroleum activities, in areas of Commonwealth jurisdiction, which administers the OPGGS (E) Regulations.

NOPSEMA has National Plan Statutory Responsibility for the offshore petroleum industry. During a spill incident, NOPSEMA's role will be to:

- Implement regulatory processes to monitor and secure compliance with the OPGGS(E) Regulations and the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cth) (the OPGGS Act), including the issuing of directions as required.
- Investigate accidents, occurrences and circumstances involving deficiencies in environment management.
- Provide management, operational, technical, and environmental advice to the Titleholder.

Although NOPSEMA is the Statutory Authority for hydrocarbon spill incidents from offshore petroleum activities, it does not have the legislative capacity to undertake the role of Control Agency and, as such, the titleholder remains responsible (as Control Agency) for all Levels of hydrocarbon spill incidents from offshore petroleum activities. NOPSEMA will, however, provide support for a whole of government approach to incident coordination by providing advice and issuing directions to Titleholders and/or operators during an offshore petroleum incident.

2.3.2 Australian Maritime Safety Authority (AMSA)

AMSA is the national shipping and maritime industry regulator and was established under the Australian Maritime Safety Authority Act 1990 (Cth). AMSA manages the National Plan on behalf of the Australian Government, working with State and the Northern Territory governments, emergency services, and private industry to maximise Australia's marine pollution response capability[1].

Legislatively, AMSA is responsible for protecting the marine environment from pollution from vessels and other environmental damage caused by vessels. AMSA functions are to:

- combat pollution in the marine environment
- provide a search and rescue service
- perform other functions conferred on it by or under any other Acts.

AMSA is to be notified immediately through the Rescue Coordination Centre (RCC) of all ship-sourced incidents. When AMSA is the Control Agency, AMSA will assume control of the incident and respond in accordance with the AMSA's Marine Pollution Response Plan. AMSA's Marine Pollution Response Plan is the operational response plan for the management of vessel-sourced spills (as per Section 8 of the Memorandum of Understanding between Woodside and AMSA). AMSA is Control Agency for hydrocarbon spills, as per Table 2-1. Woodside will undertake first strike response on behalf of AMSA for vessel-sourced spills, in line with the relevant Oil Pollution First Strike Plan.

[1] http://www.amsa.gov.au/forms-and-publications/Publications/national_plan.pdf

2.3.2.1 National Plan

The National Plan implements Australia's obligations as a State Party under the United Nation's Convention on the Law of the Sea 1982, the International Convention on Oil Pollution Preparedness, Response and Cooperation 1990, and the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances (HNS) 2000. AMSA works with the State/Northern Territory governments, emergency services and private industry to maintain Australia's marine pollution response capability. Central to this capability is the Inter-Governmental Agreement on the National Plan that outlines AMSA and State/Northern Territory Government responsibilities.

As part of the National Plan, a Marine Pollution Controller will be appointed to an incident. As outlined within the National Plan, the duties of the appointed Marine Pollution Controller may include:

- Assisting the Control Agency with strategic communications, including:
    - primary spokesperson for the multi-agency response.
    - primary point of contact for the briefing of government(s).
- Providing the common operating picture and situational awareness at the strategic Level
- Strategic coordination, including:
    - resolution of strategic multi-jurisdictional policy and legislative issues on behalf of the Control Agency.
    - facilitating collaboration between all parties and resolving multi-jurisdictional-agency conflicts.
    - facilitating national and international assistance through the National Plan and Australian Emergency Management arrangements.

2.3.2.2 AMSA Memorandum of Understanding (MoU)

For offshore petroleum activity (non-shipping) related spills in Commonwealth waters, Woodside has nominated AMSA as a support agency when Woodside is acting as Control Agency (for all Levels of spill). In this circumstance, the Woodside hydrocarbon spill arrangements would apply (e.g. the Oil Pollution First Strike Plan) and AMSA, as managers of the National Plan, may provide support such as equipment, people and liaison. AMSA will coordinate the resources of the National Plan in response to a formal request made by the Woodside IC. Notification of AMSA should be through RCC Australia.

2.3.3 Western Australian Agency Arrangements and the WA Department of Transport (WA DoT)

The Emergency Management Act 2005 (WA) designates Agencies within the State as Statutory Authority for hazards. In Western Australia, the hazard management agency for Marine Oil Pollution is the WA DoT.

Under the Act, the Statutory Authorities are required to produce and administer WestPlans for the hazards assigned to them.

They are responsible not only for the oversight of a response, but also for responding, should the party responsible for the spill not be able to control the situation.

For oil pollution to the marine environment in State waters/shorelines the WA DoT have produced and administer the WestPlan Marine Oil Pollution (WestPlan MOP – APPENDIX B).

In the event of a spill where Woodside is the responsible party and the spill may impact State waters/shorelines, Woodside will notify WA DoT.

If the spill impacts State waters/shorelines and is a Level 1, Woodside will remain the Controlling Agency. If the spill is a Level 2/3, then WA DoT will become the Control Agency for the response in

State waters/shorelines only. WA DoT will appoint an Incident Controller and form a separate Incident Management Team to manage the State waters/shorelines response only.

For any Level 2/3 Marine Oil Pollution (MOP) incident, Woodside will conduct initial response actions in State waters as necessary, in accordance with their OSCP/ Oil Pollution Emergency Plan (OPEP) and continue to manage those operations until formal incident control can be established by DoT.

Initially, Woodside will be required to make available an appropriate number of suitably qualified persons to work in the WA DoT Incident Management Team (IMT). WA DoT's role as the Controlling Agency for Level 2 and 3 spills in State waters/shorelines does not negate the requirement for Woodside to have appropriate plans and resources in place to adequately respond to a Marine Oil Spill incident in State waters/shorelines, or to commence the initial response actions to a spill prior to WA DoT establishing incident control in line with the WA DoT Offshore Petroleum Industry Guidance Note, Marine Oil Pollution: Response and Consultation Arrangements.

A list of roles and key duties for Woodside personnel working in the DoT IMT and the response structure can be found in APPENDIX B.

To assist DoT in assuming formal incident control, the nominated DoT Incident Controller will establish contact with the Woodside Incident Controller and work through the Controlling Agency Transfer Checklist at APPENDIX C.

Upon establishment of incident control by DoT, Woodside will to continue to provide planning and resources in accordance with their OSCP/OPEP. This will include response assets and contracts specified in the OSCP/OPEP, such as those pertaining to waste management, transport and personnel, as well as response arrangements with the Australian Marine Oil Spill Centre (AMOSC) and other third-party responders.

In performing the Controlling Agency function, DoT will use Woodside's approved/accepted OSCP/OPEP as a starting point for all aspects of a response. DoT reserves the right to deviate from the OSCP/OPEP in circumstances where there is a justifiable cause, in consultation with Woodside.

By arrangement with WA DoT, within designated Port limits the relevant Port Authority is responsible for hydrocarbon spills in port waters.

2.3.4 Northern Territory Agency Arrangements and the NT Department of Transport (NT DoT)

The Statutory Authority for marine hydrocarbon spills in NT waters (with the exception of Darwin Port) is the NT DoT. The relevant plan is the NT Oil Spill Contingency Plan (NT OSCP), which is administered and executed by the Marine Safety Branch of the NT DoT as the Control Agency. Where Woodside believes a spill may cross into Territory waters, Woodside will notify NT DoT.

2.3.5 Port Authority Arrangements

Woodside operates within the Dampier Port (under the Pilbara Port Authority), and Exmouth Port limits in Western Australia, and the Darwin Port Corporation limits in the Northern Territory.

The port authorities house and maintain National Plan equipment. These stockpiles are detailed in the National Environmental Maritime Operations (NEMO) system (obtainable from AMSA and WA/NT DoT) and can be hired during hydrocarbon spill incidents of any size. National Plan equipment can be accessed via the AMSA RCC, the WA and NT DoT, or may also be obtained via AMOSC.

Each Port Authority maintains its own OSCP as a sub-set of the State/Territory Plan. These plans are summarised in APPENDIX A. Port authorities may also be involved in the following tasks in relation to hydrocarbon spill preparedness:

- Operator training (i.e. via the WA/NT DoT).
- Regular exercises (including deployment).

- Coordination of committees, such as quarterly meetings of the DPA Marine Oil Pollution (MOP) Committee of Port Users and the Regional Response Team, which is a collaboration between adjacent port authorities and ports (as defined by the Shipping and Pilotage Act 1967 (WA).
- Risk assessments.

2.3.6 Trans-National Boundary Incidents

The Australian Government has agreed that, in responding to offshore petroleum incidents originating in Australian Government waters, a central incident coordination committee be convened and chaired by the Department of Industry, Innovation and Science. The committee is known as the Offshore Petroleum Incident Coordination Committee (OPICC).

The purpose of OPICC is to effectively coordinate the Australian Government efforts and resources and communicate to the public and affected stakeholders all matters relevant to a significant offshore petroleum incident that originates in Commonwealth waters.

It should be noted that the OPICC is not a mechanism to deploy Australian Government resources, exercise incident control or implement operational response arrangements.

If a spill has the potential to cross into non-Australian waters[2] Woodside will contact the Australian Government Crisis Coordination Centre for diplomatic assistance.

The role of the Joint Strategic Coordination Committee (JSCC) is to ensure appropriate coordination between the respective Incident Management Teams (IMTs) established by multiple Controlling Agencies, and ensuring that the key objectives set by multiple IMTs in relation to the MOP incident are consistent and focused on achieving an effective coordinated response. Key functions of the JSCC include:

- De-conflicting competing priorities between multiple IMT
- De-conflicting competing requests for resources between the multiple IMTs, including those managed by Australian Maritime Safety Authority (AMSA), such as national stockpile equipment, dispersant aircraft and the National Response Team.
- Resolution of significant strategic issues as they arise during the incident response
- Ensuring that there is a single shared understanding of the concept of operations for the response and resolution of any controversial actions.
- Ensuring that there is a shared understanding of the incident situation and its meaning amongst all key stakeholders.
- Ensuring there is agreement on how information is communicated to the public, particularly those issues that have actual or perceived public health implications.
- Ensuring adequate coordination and consistency is achieved in relation to access and interpretation of intelligence, information and spill modelling to promote a common operating picture.

It is important to note that the JSCC is a committee, not a team operating from a specified location. The JSCC will be administered by DoT and the inaugural JSCC meeting will be convened by the State Maritime Environment Emergency Coordinator (SMEEC) once both the Petroleum Titleholder and DoT formally assume the role of Control/Controlling Agency.

The JSCC will be jointly chaired by the SMEEC and the PT's nominated senior representative and will comprise of individuals deemed necessary by the chairs to ensure an effective coordinated

[2] Note: If oil spill trajectory modelling of credible scenarios indicates that there is potential for spills to cross into international waters, Woodside's response operations across trans-national boundaries will be determined in conjunction with the Australian Government, in consultation with local authorities, in accordance with the National Plan *Guideline on the Coordination of International Incidents.*

response across both jurisdictions. As the relevant Jurisdictional Authority in Commonwealth Waters, NOPSEMA may opt to participate in the JSCC as they see fit.

Where State waters may be impacted by a Marine Oil Pollution (MOP) incident in Commonwealth Waters, DoT will send a DoT Liaison Officer to the Woodside's ICC. The Role of the DoT Liaison Officer will be to:

- Facilitate effective communications between DoT's SMEEC and Incident Controller and Woodside's appointed CMT Leader and Incident Controller.
- Provide enhanced situational awareness to DoT of the incident and the potential impact on State waters.
- Assist in the provision of support from DoT to Woodside.
- Facilitate the provision technical advice from DoT to the Woodside Incident Controller as required.

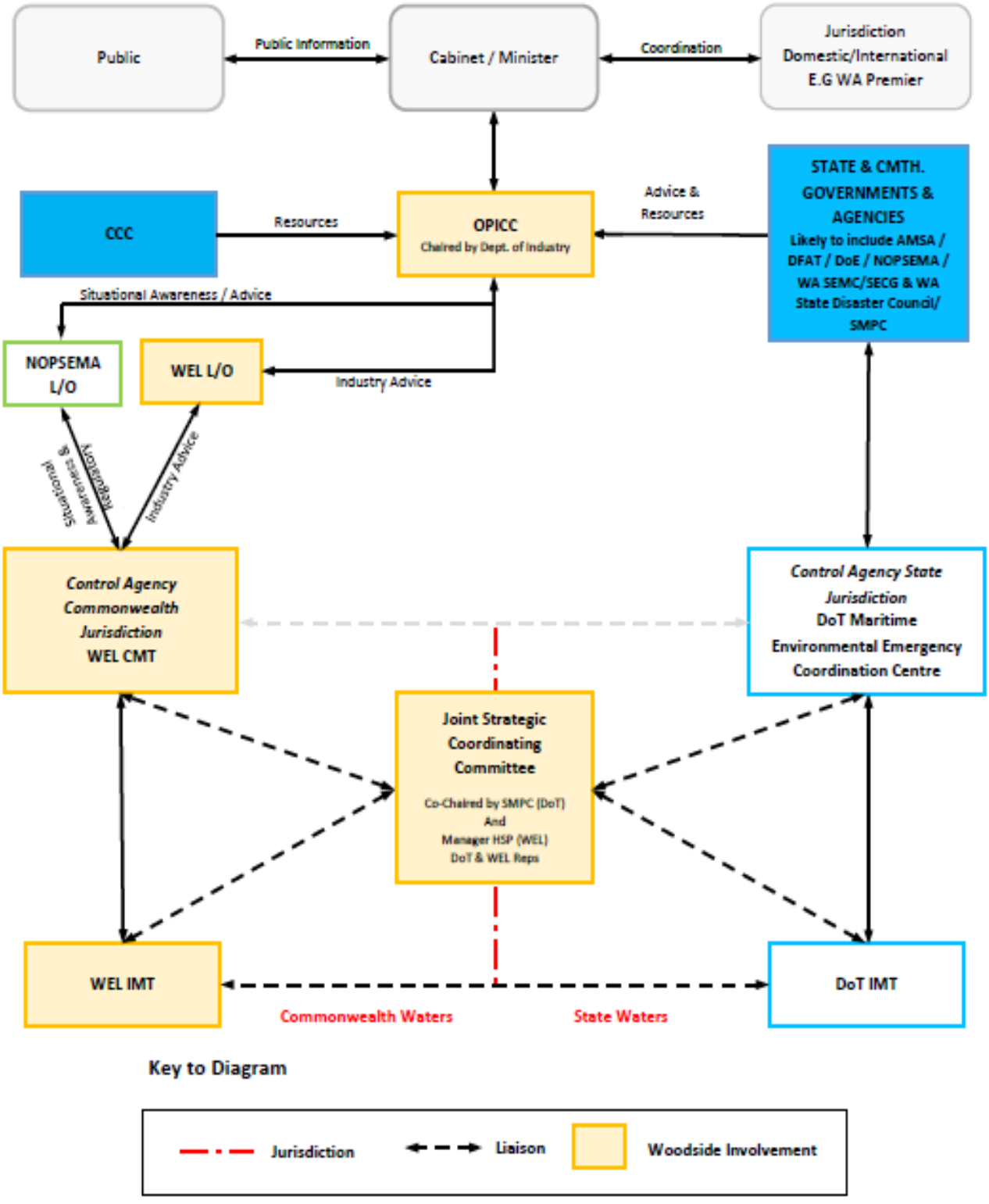


Figure 2-2: Coordination Structure for a Concurrent Hydrocarbon Spill in Both Commonwealth & State Waters/Shorelines[3]

[3] Sourced and adapted from WA DoT Offshore Petroleum Industry Guidance Note, Marine Oil Pollution: Response and Consultation Arrangements DoT Guidance Note

2.3.7 Environmental and Scientific Coordinators

As per the National Plan, Environmental and Scientific Coordinators (ESCs) are appointed in each jurisdiction in Australia. The role of the ESC is to coordinate environmental input into response planning and decision making and to provide environmental and scientific advice and services to response teams. ESCs can be accessed through the Statutory Authority or AMSA.

2.3.8 Commonwealth Department of the Environment and Energy (DoEE)

Under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (the EPBC Act), actions that may have a significant impact on a matter of national environmental significance (MNES) require referral to the Australian Government Minister for Environment (the Minister). The Minister will decide whether assessment and approval is required under the EPBC Act.

Importantly for hydrocarbon spill response, an exemption from Part 3 of the EPBC Act was granted in March 2014 and remains in place for agencies acting in accordance with the National Plan. This exemption allows for the implementation of hydrocarbon spill response options, without the need for Part 3 approvals, provided that the actions taken are in accordance with the National Plan.

While the use of chemical dispersant may be consistent with the National Plan, the dispersant type is required to be on the list of accepted National Plan Oil Spill Control Agents (OSCA list) or comply with the transitional arrangements for existing dispersants stocks accepted prior to 1 December 2012, in order for its use to be exempt from Part 3 of the EPBC Act.

An exemption from Part 13 of the EPBC Act was also granted in March 2014. Where response actions are taken in accordance with the National Plan, those actions are exempt from the Part 13 contraventions that would otherwise apply.

2.3.9 WA Department of Water and Environment Regulation (DWER)

The DWER has responsibilities associated with state environmental regulation, approvals and appeals processes, and pollution prevention. The DWER primarily administers the *Environment Protection Act 1986* (WA).

The DWER's Pollution Response Unit has operational waste management responsibilities in accordance with the Environmental Protection Act 1986 (WA). This includes approving temporary waste storage areas. The DER may send an Officer to a spill site and can provide an External Liaison role in Woodside's IMT.

The DWER Pollution Response Unit will be notified directly of any spill incident that requires temporary waste storage outside of existing Woodside Lease boundaries.

2.3.10 WA Department of Biodiversity, Conservation and Attractions (DBCA)

The DBCA has responsibilities associated with wildlife and activities in national parks, reserves and State marine parks.

The Wildlife Conservation Act 1950 (WA) is the legislation that provides DPaW with the responsibility and Statutory Authority to treat, protect and destroy wildlife. The DPaW does not provide oiled wildlife operational response support. Industry is expected to have access to their own oiled wildlife capability.

DBCA, together with AMOSC, have developed the Western Australia Oiled Wildlife Response Plan (WAOWRP) which aligns with the WestPlan MOP and addresses requirements for oiled wildlife response in both State and Commonwealth waters. The WAOWRP details the legislative responsibilities, relationships to other plans, roles and responsibilities, emergency management structure and procedures for OWR.

2.3.11 NT Environment Protection Authority (NT EPA)

The NT EPA is an independent corporation established under the Northern Territory Environment Protection Authority Act 2012. The NT EPA is responsible for regulatory services to provide for effective waste management, pollution control and sustainable practices. The NT EPA will be informed verbally and by email as soon as practicable via notification through a 24-hour pollution hotline and email, in the event of a hydrocarbon spill which is predicted to enter NT waters.

2.3.12 NT Department of Environment and Natural Resources (NT DENR)

The NT DENR is the regulatory authority responsible for protecting the NT's environment and natural resources while providing advice and support to enable the responsible use and development of the Territory's land and waters within three nautical miles of the coastline. DENR will be responsible for wildlife response in the event that a spill tracks towards NT waters. DENR will also provide advice on waste management and clean-up of NT shorelines, if required, and provide resources and personnel to the NT DoT IMT as required.

2.4 Woodside Governance

Woodside will maintain a state of preparedness to manage a response to any hydrocarbon spill. Section provides an overview of the Incident Management Structure that integrates Woodside's business functions and draws upon external resources where required to respond to the hydrocarbon spill.

This section of the document provides an overview of the Woodside Management System (WMS) and hierarchy of documentation which provides details of Woodside's hydrocarbon spill preparedness in the event of a spill incident.

This Woodside documentation hierarchy is compatible with the National Plan, NT/WA arrangements (via the NT OSCP and WestPlan-MOP), and AMOSPlan (the Australian Industry Co-operative Oil Spill Response Arrangements, managed by AMOSC).

2.4.1 Woodside Management System

The Woodside Management System (WMS) provides a structured governance framework across Woodside's processes with defined accountabilities and performance requirements for Woodside's managers, employees and contractors to deliver the Mission, and Vision and improve the business. The WMS sets mandatory requirements and provides guidance regarding the conduct of Woodside's operations and business activities. The WMS includes:

- Policies
- Expectations
- Processes and Procedures
- Guidelines and tools.

Under the provisions of this system, the Hydrocarbon Spill Preparedness and Response Procedure defines the company's minimum requirements for hydrocarbon spill preparedness. Specifically, this procedure addresses the:

- requirement for hydrocarbon spill response plans
- risk assessments and other preparations for a hydrocarbon spill response plan
- minimum content of OPEA (Australia)
- requirement to maintain people competencies to respond to a hydrocarbon spill
- requirement for exercise capability
- minimum equipment requirements.

The Hydrocarbon Spill Preparedness and Response Procedure is reviewed and updated every three years, or earlier if there are changes to the regulatory environment, to Woodside Group policy, or a

significant re-organisation which could affect accountabilities. Monitoring of spill preparedness is tracked in accordance with the HSP Internal Control Environment.

A review of this document the (OPEA) will be reviewed under the following circumstances:

- Every three years, in accordance with the Hydrocarbon Spill Preparedness and Response Procedure, or sooner in response to other triggers.
- if a change in Woodside's business materially affects the actual or potential impact on the environment or introduces a significant new environmental impact or risk.
- If there is a change in the response capability of Woodside, the Australian Marine Oil Spill Centre, Oil Spill Response Limited, or any supporting Government Agencies.
- If requested to submit a revision by NOPSEMA, in accordance with Regulation 18 of the OPGGS(E) Regulations.

Document Control manages the quality control of authorised persons to make changes to plans.

3 Preparedness

3.1 Plans

3.1.1 Hydrocarbon Spill Document Hierarchy

Woodside's hydrocarbon pollution preparedness and response documentation hierarchy is presented in Figure 3-1. The documentation has three core document Levels:

- Strategic documents
- Operational Response documents
- Supporting documents.

A description of each document/plan in the hierarchy is detailed below. The Incident Management Structure roles and responsibilities discussed in the sections associated with delivery of components of the documents are discussed further in Section 3.1.2.

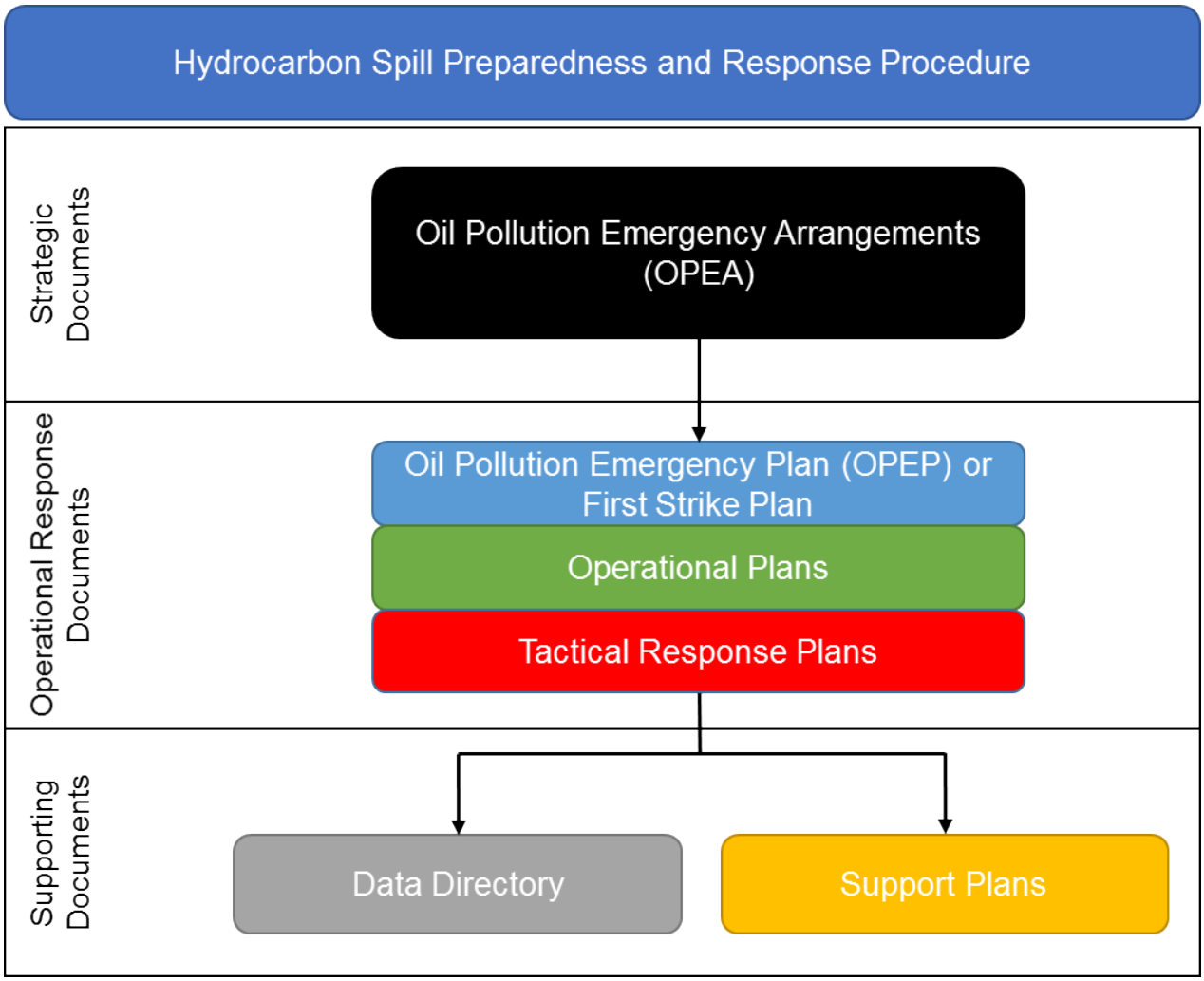


Figure 3-1: Hydrocarbon Pollution Preparedness and Response Documentation Hierarchy

3.1.2 Operational Response Documents

3.1.2.1 Oil Pollution First Strike Plans

An Oil Pollution First Strike Plan is an activity- or facility-specific document which details the tasks required to activate and mobilise a first strike response. This document applies to the initiating actions of a response until a full Incident Action Plan (IAP) specific to the event is developed. Oil

Pollution First Strike Plans are intended to be the first document used to provide guidance to the IMT.

The Oil Pollution First Strike Plan contain details and forms for use in immediate response, including hydrocarbon spill trajectory modelling, incident management structures, and immediate notifications required in the event of a spill. Relevant Operational Plans to be initiated for mobilisation are identified in the Oil Pollution First Strike Plan, as part of a summary of the spill response option assessment (pre-operational Spill Impact Mitigation Assessment (SIMA)).

3.1.2.2 Operational Plans

Operational Plans outline the process to mobilise personnel and equipment to undertake a response. The documents also detail the process for gaining immediate access to equipment and personnel and mobilising additional resources, if required. The relevant Operational Plan to be initially selected for a response is based upon the activity/facility Oil Pollution First Strike Plan. Additional Operational Plans may be activated during a response, depending on the nature and scale of the release.

Operational plans include regional information on resource mobilisation locations and how to mobilise them (air, road, etc.), resource implementation details, and facility requirements for corresponding resource locations. Operational Plans are to be used by the IMT for first strike and ongoing activities (Operations and Logistics Functions) and to assist in informing the appropriate responses for an IAP (Planning Function). These plans will also reference relevant Tactical Response Plans for location-specific information.

3.1.2.3 Tactical Response Plans

Tactical Response Plans have been developed for selected receptors, and they identify suitable response strategies and equipment requirements, and any relevant environmental information and access and permit requirements. Tactical Response Plans are referenced in both the activity/facility Oil Pollution First Strike Plan and Operational Plans.

Tactical Response Plans are to be used by the IMT for first strike and ongoing activities (Operations and Logistics) and to assist in informing the appropriate responses for inclusion in an IAP (Planning Function).

3.1.3 Incident Action Plans

The IAP details the arrangements for the ongoing hydrocarbon spill response, beyond the initial 24 hours. The document transitions from the Oil Pollution First Strike Plan. The IMT will use the IAP for providing ongoing project management direction for the hydrocarbon spill response. Woodside's IMT Planning Function develops the IAP during a spill response.

The content of the IAP includes the overarching mission and objectives for ongoing response, the strategy and tactics to achieve the IAP objectives, the response personnel involved in the ongoing response, and assignment details for key functions involved in the response.

3.1.3.1 Transition from the Oil Pollution First Strike Plan to the IAP

The process to develop an IAP begins while the Oil Pollution First Strike Plan is under way, commencing with a planning meeting attended by relevant IMT members. In some instances, technical specialists may attend to provide expert advice. The meeting may also be attended by the Liaison Advisers from supporting Government Agencies.

In the case where a spill for which Woodside is responsible has, or will, enter State waters/shorelines, the WA DoT will send a State Marine Pollution Coordinator (SMPC) Liaison Officer and a Media Liaison Officer to Woodside's IMT.

The Planning Function is responsible for coordinating the development of the IAPs and gaining the necessary input from the different functions and/or external agencies. Specifically, this includes the identification and sourcing of necessary concurrences/approvals for proposed response objectives.

These objectives form the basis for response strategies to be identified, agreed by the Incident Controller (IC), and then implemented by the Operations and Logistics Functions.

3.1.4 Supporting Plans

3.1.4.1 Support Plans

Support Plans detail Woodside's approach to resourcing and services during a hydrocarbon spill response. Support Plans are to be used by the Operations, Logistics and Planning Functions of the IMT to inform the strategy for mobilising and managing additional resources outside of Woodside's immediate preparedness arrangements.

3.1.4.2 Data Directory

The Hydrocarbon Spill Response Data Directory provides regional-specific information and may be utilised by the Planning Function for the development of an IAP. The Data Directory provides reference information, such as hydrocarbon information (including physical and chemical characteristics) and environmental data, which may inform ongoing response planning.

3.2 Hydrocarbon Spill Response Capability

Capability can be briefly described as the resources required to deal with the spill incident and can be broadly considered in three categories:

- Response personnel.
- Response equipment.
- Additional support (i.e. services and contracts).

Woodside's capability framework reflects the global best practice Tiered Preparedness and Response model for oil spill response, with resources locally, regionally and internationally (IPIECA-OGP, 2015). Woodside maintains access to equipment through internal stockpiles (Local/Tier 1), oil spill response organisations (Regional and International/Tier 2 and 3), government (Regional/Tier 2), and mutual aid (Regional/Tier 2)

3.2.1 Response Personnel

Personnel involved in emergency and crisis management are required to commit to ongoing training, process improvement, and participation in emergency and crisis response scenarios (both real and simulated).

Woodside's pool of trained responders is composed of, but not limited to, personnel from the following organisations:

- Woodside internal
- Australian Marine Oil Spill Centre (AMOSC) core group
- AMOSC Staff and contractors
- Oil Spill Response Limited (OSRL)
- Marine Spill Response Corporation (MSRC)
- AMSA
- DoT
- Woodside contracted workforce.

3.2.1.1 Woodside Internal Personnel

All core roles in the Incident Management Structure detailed in Section 4.1.4.2 are rostered on a 24/7 basis. In line with Woodside's Emergency and Crisis Management arrangements, all rostered personnel for all Emergency and Crisis Management roles must be:

- fit for work
- contactable
- able to respond when activated by the WCC.

3.2.1.2 AMOSC and AMOSPlan

AMOSC was established through the support of members of the Australian Institute of Petroleum (AIP), including Woodside. The Centre, based at Geelong, maintains a 24-hour stand-by status and has the ability to respond quickly to a major incident.

Arrangements between AMOSC and its participating members are outlined in a Master Services Contract signed between AMOSC and the participating Member Company. When activating AMOSC as a service (i.e. hydrocarbon spill response or training) a Service Contract is executed. Woodside also has contractual arrangements with the AMOSC to access the Australian Subsea First Response Toolkit (SFRT) equipment and dispersant stockpiles.

AMOSC administers the AMOSPlan, which outlines arrangements for mutual aid between members. Mutual aid support is available from the member companies of AMOSC and the AMOSC Core Group response team and may comprise response equipment and personnel employed by another AMOSC member company. AMOSC Core Group members are a group highly skilled in the discipline of hydrocarbon spill response, which includes approximately 120 experienced member company personnel who can be made available to support/assist with spill response activities. The request for assistance is made directly between companies via each company-nominated Mutual Aid Contact (AMOSC should be consulted for the most up-to-date Mutual Aid Contacts). AMOSC will also activate the Service Contract of the lending company and will coordinate the signing of a Service Contract for the borrowing company(ies).

As a member of AMOSC, Woodside can obtain assistance through the AMOSPlan in combating incidents to supplement Woodside's own spill response resources.

AMOSC can also request additional services and resources via Oil Spill Response Limited. This can be facilitated via their joint services alliance arrangement.

AMOSC will be a primary point of contact for Woodside in the event of a Level 2 or Level 3 spill where non-National Plan external resources may be required, and Woodside is the Control Agency.

3.2.1.3 Oil Spill Response Limited

Oil Spill Response Limited (OSRL) is an international industry-funded hydrocarbon spill service provider. Their services include response services, training, contingency planning, spill modelling / sensitivity mapping, personnel support, equipment use, exercise and drill support, post spill management support, and incident investigation support.

Woodside is a Participant Member with OSRL, which allows access to OSRL's international holding of response equipment and response capabilities, including incident management expertise and specialist personnel.

Upon receipt of an incident notification form, OSRL will plan and place resources on standby. Mobilisation of resources will take place once OSRL receives a copy of the OSRL mobilisation form signed by the designated call-out authority.

3.2.1.4 Marine Spill Response Corporation

Woodside is a member of and has entered into an Agreement with Marine Spill Response Corporation (MSRC).

Woodside will primarily utilise the agreement to gain access to specialist trained oil spill response personnel, to enable a global surge capacity for response where required.

For additional personnel resources, Woodside can activate their contract with MSRC (in full) for the provision of personnel. Please note that provision of these personnel from MSRC is on a best endeavours basis and is not guaranteed.

3.2.1.5 The Australian Maritime Safety Authority (AMSA)

The Australian Maritime Safety Authority (AMSA), is a federal government self-funded maritime safety agency established in 1990, is responsible for providing a national response capability for marine pollution. AMSA administers the “National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances”, a cooperative arrangement between the Federal, State and Northern Territory (NT) Governments and the shipping, oil, exploration and chemical industries, emergency services and fire brigades.

As part of this national plan, a National Response Team (NRT) and the National Response Support Team (NRST) were established to provide support to control agencies in the event of a major marine oil pollution incident.

Each State/NT is to nominate, to AMSA, suitably qualified personnel to fill designated roles; including Planning Officer, Operations Officer, Logistics Office and Response Team Leader. Each of these roles is filled in each state/NT as part of the NRT.

3.2.1.6 Western Australia Department of Transport (WA DoT)

The WA DoT coordinates the Metro State Response Team (SRT).

SRT is part of Western Australia’s commitment to ensure the effective preparedness and response to marine pollution incidents. The SRT members are primarily frontline responders who can provide guidance to other responders.

In the event of a major marine pollution incident the SRT are the personnel that are likely to take on the role of team leader. Members of the team are from government agencies, port authorities and industry, all of whom have a vested interest in marine oil pollution.

3.2.1.7 Woodside Contracted Workforce

Woodside currently holds a contract with a labour provider to provide routine and campaign maintenance on Woodside operated facilities and other areas. The contractor has extensive experience mobilising temporary construction and shutdown crews (rapid mobilisation and surge capability) and is an experienced user of the Woodside Enable system (logistics and personnel movement system).

3.2.2 Response Equipment

This section outlines the equipment stockpiles that Woodside has access to, or that is provided by the National Plan/service providers to respond to a hydrocarbon spill.

State/Territory and National equipment stockpiles are listed in the National Environmental Maritime Operations (NEMO) system. This database can be accessed via AMOSC, AMSA, WA DoT, or NT DoT.

3.2.2.1 AMOSC Equipment

AMOSC stores Level 3 stockpiles at their premises in Geelong and Fremantle. In addition to the main Level 3 stockpiles, smaller AMOSC stockpiles are located at Exmouth and Broome. Wildlife response equipment is available in Geelong and Fremantle.

AMOSC operates on a 100% availability of “in service” equipment philosophy. Should a concurrent spill occur, reprioritisation of resources between AMOSC and the relevant member companies would occur. A status report of “in service” equipment is available to members via a secure password on the AMOSC website.

3.2.2.2 OSRL Equipment

As a participant member of OSRL, Woodside has access to OSRL's full range of equipment and is entitled to 50% (by equipment type) of the available OSRL global stockpile[4] in the event of an incident. OSRL's closest global stockpile to Woodside's Australian operations is located in Singapore. Woodside also has access to OSRL's aerial and satellite surveillance services.

3.2.2.3 National Plan Equipment

National Plan Level 2 and Level 3 equipment[5] is stored in stockpiles around Australia, including the ports of Fremantle, Darwin, and Dampier. This AMSA owned equipment can be released by formal request from the appointed Incident Controller. Notification of AMSA will be through RCC Australia.

3.2.2.4 Logistics & Transport of Equipment

Figure 3-2 illustrates the location of available logistics resources, some key travel routes, and their approximate response times.

Woodside has existing contracts for road transportation to assist with transportation of regional equipment. Transportation of AMOSC equipment is coordinated by AMOSC, with the exception of the Subsea First Response Toolkit (SFRT) equipment. National Plan equipment transportation is arranged by AMSA, who have a standing panel of transport providers in place.

Woodside's Logistics Coordinator (or delegate) will coordinate the sourcing of road transportation and mobile plant during a spill response.

[4] The OSRL global stockpile report, updated regularly to reflect what equipment is available and what is committed for other incidents, is available at http://www.oilspillresponse.com/activate-us/equipment-stockpile-status-report

[5] AMSA Equipment List can be found at https://amsa-forms.nogginoca.com/public/equipment.html?loc=%2Fapi%2Fv1%2Fasset%2F2547301

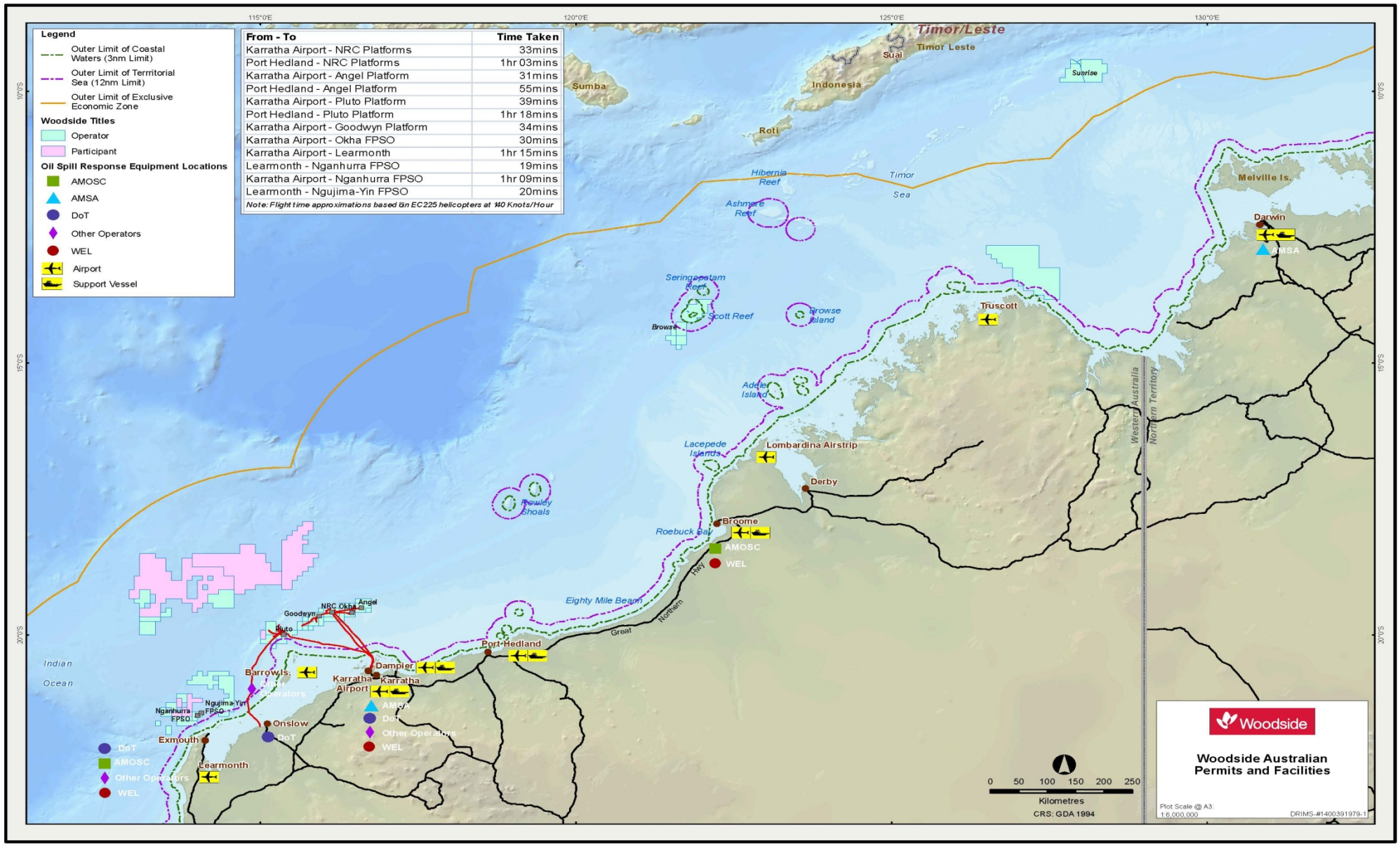


Figure 3-2: Locations of response resources & approximate travel times between key locations

3.2.3 Additional Support

Capability that exists externally to Woodside, such as service provision from oil spill response organisations such as AMOSC and OSRL, is maintained to ensure contractual agreements are in place as required

Some of the Key Services Provided by external providers include:

- Waste management
- Satellite imagery services
- Environmental specialists
- Scientific monitoring
- Operational monitoring
- People mobilisation and management systems
- Oil spill modelling
- National and International logistical support services
- Personnel and Labour services
- Vessel tracking services
- Forklifts and lifting equipment / machinery
- Well control services
- Accommodation and food services
- Oil Spill Response specialist personnel and equipment (including oiled wildlife)
- Light well intervention
- Marine vessels and support
- Aviation platforms and support
- Remote Operated Vehicles (ROV) services
- Unmanned Aerial Vehicles (UAV) services
- Security services.

3.3 Testing of Arrangements

3.3.1 Testing, Drills and Exercises

There are a number of arrangements that will underpin Woodside's response across its petroleum activities in the event of a spill. In order to ensure all of these arrangements are adequately tested, the Security & Emergency Management Team ensures tests are conducted in alignment with a testing of arrangements schedule.

Woodside's testing of arrangements schedule aligns with international good practice for spill preparedness and response management; the testing is compatible with the IPIECA Oil spill exercises good practice guide and the Australian Emergency Management Arrangements Handbook, produced by the Australian Institute for Disaster Resilience.

The schedule identifies the type of test which will be conducted annually for each arrangement, and how this type will vary over a five-year rolling schedule. Testing methods may include (but are not limited to): audits, drills, field exercises, functional workshops, assurance reporting, assurance monitoring, and reviews of key external dependencies.

The schedule of tests provides for the following:

- testing the response arrangements when they are introduced;
- testing the response arrangements when they are significantly amended;
- testing the response arrangements not later than 12 months after the most recent test;

- if a new location for the activity is added to the environment plan after the response arrangements have been tested, and before the next test is conducted—testing the response arrangements in relation to the new location as soon as practicable after it is added to the plan;
- if a facility becomes operational after the response arrangements have been tested and before the next test is conducted—testing the response arrangements in relation to the facility when it becomes operational.

4 Hydrocarbon Spill Response

4.1 Woodside Emergency Response Structure and Framework

This section outlines the Levels of response used by Woodside in the event of a hydrocarbon spill, and the emergency response structure that is enacted depending on the Level of spill that occurs. This section focuses on Woodside's arrangements for a spill response and does not outline arrangements of other Control Agencies such as AMSA in the event of a spill. These arrangements are addressed in each Control Agency's relevant documentation, for example the National Plan, and port OSCPs.

4.1.1 Levels of Response

Woodside's hydrocarbon spill response is based on a graduated level response classification aligned to the National Plan. Table 4-1 provides a summary of the key Woodside hydrocarbon spill response levels. These levels align closely with those defined in the National Plan and are consistent with the Australasian Inter-service Incident Management System (AIIMS)

The three levels - 1, 2 and 3 – are defined based on characteristics associated with the resources mobilised, organisational arrangements, and the nature and scale of impacts that could occur for the hydrocarbon spill.

This level based response system provides a structured approach to both establishing hydrocarbon spill preparedness and undertaking a response. An overview of the roles, responsibilities, and the external organisations that Woodside may utilise to respond to differing levels of hydrocarbon spill is outlined in Section 4.1.2.

Table 4-1: Woodside Hydrocarbon Spill Incident Levels Guidance

Characteristic	Incident Level 1	Incident Level 2	Incident Level 3
General Description	Generally able to be resolved through the application of local or initial response resources (first strike response).	Typically, more complex in size, duration, resource management and risk than Level 1 incidents. May require deployment of resources beyond the first strike response.	Characterised by a high degree of complexity, requires strategic leadership and coordination. May require national and international response resources.
Woodside EM / CMT Activation	On Site or Facility Incident Controller (IC) activated	CICC or relevant ICC activated Perth based Crisis Management Team (CMT) may be activated	Perth based CMT activated
Management			
Jurisdiction	Single jurisdiction	Multiple jurisdictions	Multiple jurisdictions, including international
Delegation	Incident Controller responsible for all functions	Some functions delegated, or Sections created	All functions delegated and/or divisions created
Number of agencies	First-response agency	Routine multi-agency response	Agencies from across government and industry
Resources	Resourced from within one area	Requires intra-state resources	Requires national or international resources
Type of response	First-strike	Escalated	Campaign
Type of Incident			
Duration	Single shift	Multiple shifts Days to weeks	Extended response Weeks to months
Hazards	Single hazard	Single hazard	Multiple hazards
Resources at Risk			
Human	Potential for serious Injuries	Potential for loss of life	Potential for multiple loss of life
Environment	Isolated impacts or with natural recovery expected within weeks. Remediation required	Significant impacts and recovery may take months	Significant area and recovery may take months. Remediation required
Wildlife	Individual fauna	Groups of fauna or threatened fauna	Large numbers of fauna
Economy	Business Level disruption	Business failure	Disruption to a sector
Social	Reduced services	Ongoing reduced services	Reduced quality of life

4.1.2 Woodside Hydrocarbon Spill Response Organisation by level

4.1.2.1 Level Escalation

In the event of any hydrocarbon spill occurring where effective management is considered to be beyond the capability of Woodside's immediate resources, the response may be escalated immediately to the next level. Specific details for level escalation are detailed below and depicted schematically in Figure 4-1.

Level 1 to 2 Escalation – The ICC Duty Manager (CICC DM in Perth or KICC DM for Karratha) will escalate the response if:

- requested by the facility/Site Incident Commander (IC)
- no information is received from the incident site
- the situation is escalating, or source control has not been established immediately or is lost
- the spill has moved off-site and beyond effective facility control, or
- knowledge of the area or hazard indicates that a serious risk may develop.

In the event of an escalation in response, the IC informs the rostered ICC Duty Manager via the WCC. If the IC is the vessel master, then they will need to notify AMSA via the Rescue Coordination Centre (RCC) and follow directions of the AMSA IC.

In the event of an offshore facility spill where Woodside is the responsible party and the spill may enter State waters/shorelines, Woodside will notify WA DoT. The WA DoT Maritime Environmental Emergency Response (MEER) unit Duty Officer can be contacted on (08) 9480 9924.

Level 2 to 3 Escalation – Through consultation with the ICC DM, the CMT Duty Manager will escalate the response to a Level 3 if:

- requested by the ICC DM
- the spill event involves casualties or severe asset damage
- the spill may have an adverse impact on company reputation, stakeholders, liabilities, business continuity, or environmentally sensitive receptors
- the situation is escalating, or control of the spill source has not been established or is lost
- knowledge of the area or hazard indicates that a serious risk may develop.

If the spill impacts State waters/shorelines and is a Level 1, Woodside will remain the Controlling Agency. If the spill is a Level 2/3, then WA DoT will become the Control Agency for the response in State waters/shorelines only. WA DoT will appoint an Incident Controller and form a separate Incident Management Team to manage the State waters/shorelines response only.

Initially, Woodside will be required to make available an appropriate number of suitably qualified persons to work in the WA DoT IMT.

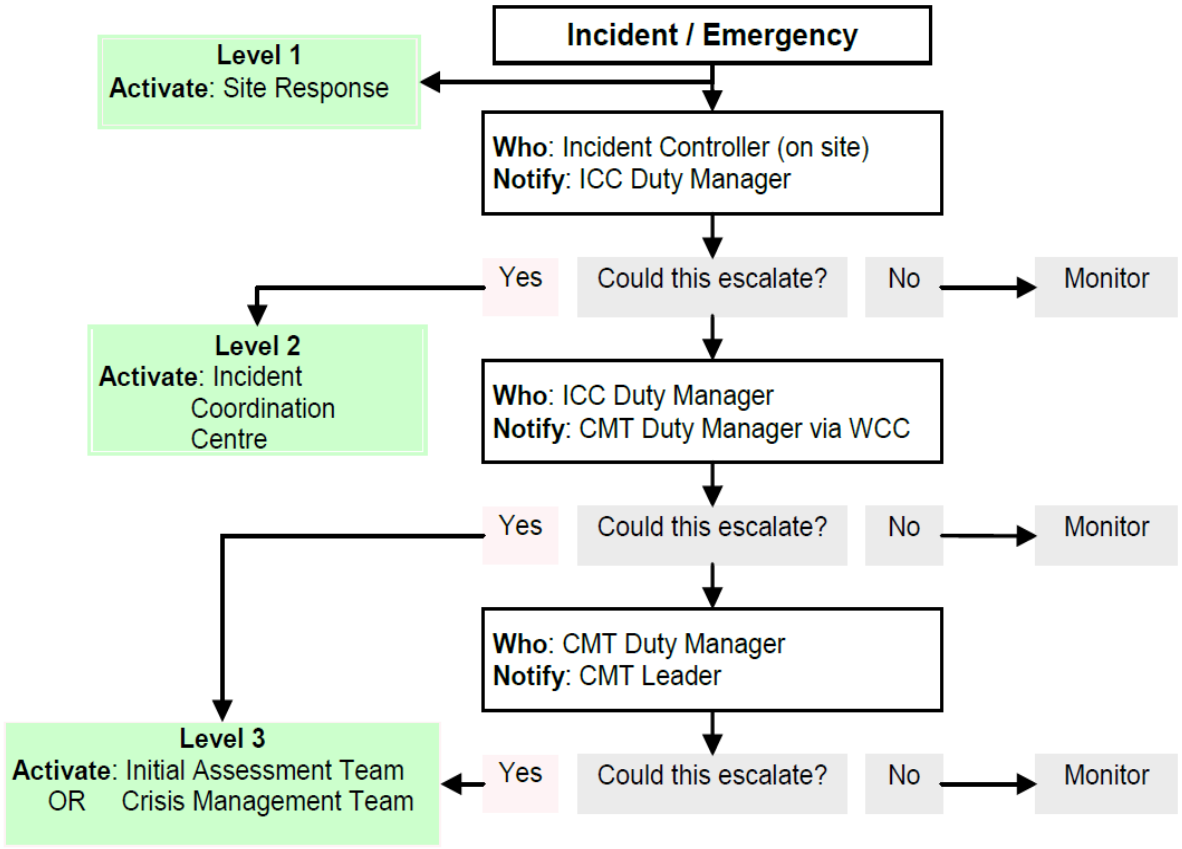


Figure 4-1: Indicative Response Escalation Process.

4.1.3 Resources and Organisation

4.1.3.1 Level 1 Resources and Organisation

Resources – A Level 1 response will be site/facility-based and does not require external assistance. Resources will be drawn from Woodside's own stockpiles for a Level 1 response. For each Woodside facility, these may include shore-based equipment and personnel and also the resources held for other operations (exploration, drilling and completions, pipelines and production facilities) and trained personnel based in Woodside's Perth headquarters.

The objectives of the response relate to the security and protection of health, safety and well-being of people, protection of the environment and restricting damage to assets.

Organisation – A Level 1 response can be controlled and resolved with the operational resources normally available at the site/facility.

The IC coordinates a Level 1 response on a facility or site. The IC is responsible for the immediate response undertaken on-site to manage a spill response. The IC will determine additional roles and teams required to support the hydrocarbon spill response. The IC will be the person in charge (i.e. vessel master if the spill originates on a vessel). The ICC Duty Manager retains the authority to replace an IC.

4.1.3.2 Level 2 Resources and Organisation

Resources – A Level 2 response assumes the existing activation of Level 1 response arrangements. Level 2 resources are based primarily on utilising Woodside's existing stockpiles and industry support, which will be sought through AMOSC in both Fremantle, Geelong or at their stockpiles around Australia, or via OSRL, from their Singapore base, if required. The support that AMOSC will provide to Woodside is discussed further in Section 3.2 Regional (Port and State/Territory)

equipment and human resources may also be mobilised through the relevant Port Authority or State/Territory Control Agency.

Organisation – A Level 2 hydrocarbon spill response requires coordination support, which is provided to the site via the activation of part or all of the appropriate ICC. For Level 2 hydrocarbon spills, the ICC Duty Manager transitions to become the IC, due to the evolving complexity of the spill response. The objectives are similar to Level 1 incident response and involve providing additional resources to support the site and notify stakeholders.

The ICC Duty Manager (via the WCC) informs the Crisis Management Team Duty Manager (CMT DM) by providing an initial incident notification report of the Level 2 event and the potential for the spill response to escalate. The ICC Duty Manager then:

- activates the required resources to provide operational management support to the site
- reviews, with the CMT DM, the possibility of escalation and the need for additional resources, and
- assumes the role of IC for the spill event, given the facility or site-based IC will need to focus on the asset and safety of personnel.

4.1.3.3 Level 3 Resources and Organisation

Resources – A Level 3 response assumes the existing activation of Level 1 and 2 response arrangements. Such a response is likely to utilise industry response arrangements, comprising the mobilisation of AMOSC's Level 3 stockpiles in Geelong and/or Fremantle and potentially other AMOSC or AMSA stockpiles, depending on the spill location.

In addition, Woodside can activate OSRL's international-based services and resources via an existing contract arrangement (Section 3.2). Level 3 responses are likely to result in many of the operational and scientific monitoring plans being triggered.

Organisation – Level 3 responses require corporate strategic direction, due to the impact on reputation, liabilities, business continuity and stakeholders via activation of part, or all, of the CMT.

For a Level 3 Response the CMT DM (after discussion with the CMT Leader):

- activates the required resources to manage the strategic element of the incident
- fulfils the role of Team Leader until that person is available
- on arrival of the Team Leader, assumes the role of facilitator.

The CMT Leader:

- informs the CEO of the event
- discusses actions taken and the possible activation of the full CMT.

4.1.3.4 Level De-escalation/Termination

Under the terms of the National Plan Inter-Governmental Agreement (IGA), an incident response may be terminated by the Statutory Authority when the Statutory Authority considers that the effective completion of the response is achieved, based on expert Control Agency advice.

A recommendation to terminate a response will be made by Woodside, based on operational monitoring results. This recommendation will be supported by a net environmental benefit assessment.

Typically, a response may be de-escalated/terminated when:

- the response strategies have been successful
- the response strategies are no longer effective
- data and analysis show a response would be environmentally ineffective or detrimental

- the clean-up activities are having a greater deleterious effect than the hydrocarbon, or

4.1.4 Woodside Emergency Response Structure and Roles

4.1.4.1 Incident Management System

Woodside utilises AIIMS for incident management. Details of Woodside's organisational structure utilising AIIMS are detailed in Section 4.1.

AIIMS provides the basis for running incident management teams for incidents involving multiple hazards or impacts. AIIMS is utilised by the WA DoT, as detailed in WestPlan-MOP. AMSA utilises an incident management system which is consistent with AIIMS.

4.1.4.2 Woodside's Incident Management Structure

Woodside's full Incident Management Structure for a hydrocarbon spill is shown in Figure 4-2.

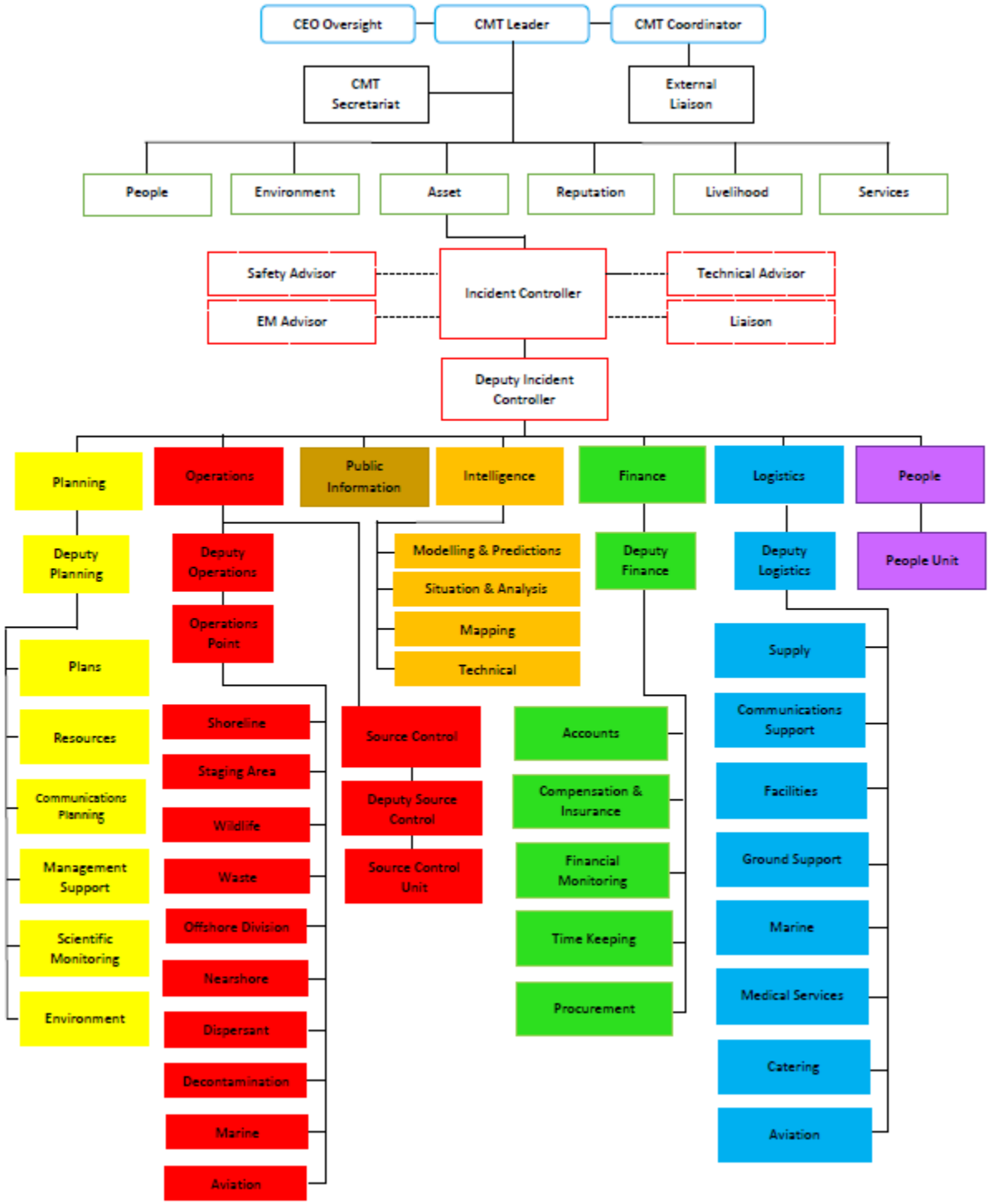


Figure 4-2: Woods'de's Incident Management Structure for Hydrocarbon Spill

This structure outlines Woodside's Incident Management Structure related to hydrocarbon spills and summarises coordination, command and control arrangements during a hydrocarbon spill response. Figure 4-2 is a full representation of a structure that could be mobilised by Woodside for a hydrocarbon spill. The Incident Management Structure has been formulated to allow a response to be scaled according to the level of response required and the specific needs presented by the hydrocarbon spill. Teams will be mobilised as required to respond consistent with Woodside's PEARLS philosophy. The structure includes a CMT and an IMT, with roles appointed as appropriate to the Level of hydrocarbon spill occurring.

The Woodside's Incident Management Structure can comprise representatives from the teams outlined below.

4.1.4.3 Incident Coordination Centre (ICC)

Woodside has Regional ICCs to service specific significant Woodside facilities, and a Corporate ICC (CICC) which is based in Perth. The CICC supports all offshore facilities, drillings and completions, site/facility-based IMTs and marine vessel hydrocarbon spills.

An Incident Controller (is appointed for all hydrocarbon spills. For Level 1 hydrocarbon spills, this is typically the Offshore Installation Manager (OIM) or the Vessel Master. The IC for Level 2/3 spills is the ICC Duty Manager. Further details on this escalation process are provided in Section 4.1.2.

4.1.4.4 Incident Management Team (IMT)

The IMT operates in accordance with the Emergency Management Guideline. The ICC provides tactical and operational support for Woodside's individual offshore assets, drilling facilities, seismic, survey operations, international locations, and marine pipelines. The ICC also provides a structured command and control system that interfaces with all internal and external agencies and provides hydrocarbon spill reporting/recording systems and participation in training and education for emergencies to support Woodside's operations.

The IMT can comprise of a series of functional groups to support a spill response, including Planning, Operations, Logistics and Source Control. Planning are responsible for the tactical and strategic planning to deliver the hydrocarbon spill response. They are also responsible for coordinating the delivery of the IAPs and managing the spill intelligence (including operational monitoring) and communications planning. Operations manage activities to deliver the hydrocarbon spill response in the field. Logistics arrange all the human, physical or financial resources required to support the spill response such as catering and equipment. Source Control provides the planning, support and operational management of arrangements for control of a well blowout, such as a capping stack and relief well drilling

Some Woodside sites or facilities have site-specific IMTs that are responsible for managing the response to an emergency event. The primary responsibility of the IMT is to ensure the safety and security of all personnel. This may include the safe deployment of site-based emergency response teams to combat the spill, in line with the activity/facility Oil Pollution First Strike Plan.

This requirement is shown in APPENDIX B**.**

4.1.4.5 Crisis Management Team (CMT)

The CMT is typically activated for a large hydrocarbon spill (Level 2/3) which could seriously threaten people, environment, assets, reputation, livelihood or essential services, or any combination of these elements. The CMT operates in accordance with the Woodside Crisis Management Procedure. The CMT will provide strategic level support to the ICC to enhance emergency response effectiveness and ultimately assist recovery to normal operations. The decision to activate the CMT will be made by the CMT Leader, in consultation with the CMT Duty Manager, who will receive regular situational updates from the IC.

4.2 Response Technique Selection

There are several proven hydrocarbon spill response techniques which can be utilised in response to hydrocarbon spills in the open ocean marine environment. For hydrocarbon spills to the marine environment, Woodside considers the use of the following response strategies:

- Monitor and evaluate (operational monitoring)
- Chemical dispersion
- Containment and recovery
- In-situ burning
- Shoreline protection and deflection
- Wildlife response, including hazing, translocation rescue and rehabilitation
- Shoreline clean-up.

An evaluation and assessment of each response technique and the risks of implementing the response technique is undertaken for each activity or facility and presented in the relevant EP (through the Oil Spill Preparedness and Response Mitigation Assessment (OSPRMA) document).

A description of each of the possible response strategies, including objectives, possible triggers and methods, is provided in Section 4.3.

4.3 Response Strategies

In the event of a hydrocarbon spill, a review of the pre-approved response strategies listed in the Oil Pollution First Strike Plan, together with an operational SIMA, taking into account the conditions at the time of the spill will commence. Details on how each of these response strategies may be mobilised are provided in each relevant response strategy Operational Plan. This section provides a broad overview of the objectives, triggers and methods associated

4.3.1 Monitor and Evaluate (Operational Monitoring)

Objective

Monitor and evaluate may be conducted to maintain situational awareness and gather information. The information gathered from multiple sources helps to establish an accurate Common Operating Picture (COP) as soon as possible. This helps predict the fate and behaviour of the spill, to validate planning assumptions and adjust response plans as appropriate to the spill incident.

Trigger

Monitor and evaluate may be used for all hydrocarbon spills arising from Woodside operations, scaled according to the nature, volume and characteristics of the spill.

Methods

Trajectory Modelling

Trajectory modelling provides forecasting of the movement and weathering of spilled hydrocarbons, possibly identifies resources that are potentially at risk from contamination, and provides simulations showing the outcomes of alternative response options (dispersant application, etc.).

Tracking Buoy Deployment

Satellite tracking drifter buoys are used to provide data on predicted trajectory of the spill. They move with the water current and are effective even when poor weather conditions prevent overflights and observation operations.

Aerial Surveillance

Aerial surveillance can provide: verification of hydrocarbons on the water, quantification of those spilt hydrocarbons, and information on location and weathering of the hydrocarbons within the spill.

Satellite Remote Sensing

Satellite Remote Sensing produces an image that can be useful as a first assessment tool to detect the possible location and extent of a hydrocarbon spill. Remote sensing is operational 24 hours a day, and has good spatial range.

Water Quality Monitoring

Water quality monitoring is a process that includes the monitoring of entrained hydrocarbons within the water column, either from subsea releases, natural dispersion, or chemical dispersant applications. Water quality monitoring can determine the effectiveness of dispersant spraying and will include taking water samples (both surface and subsea) that can be sent to a laboratory for further analysis.

Pre-emptive assessment of sensitive receptors

Pre-emptive assessment of sensitive receptors aims to undertake a rapid assessment of the presence, extent, and status of sensitive receptors prior to contact from the hydrocarbon spill, by providing categorical or semi-quantitative information on the characteristics of resources at risk.

Indirectly, qualitative/semi-quantitative pre-contact information collected on the status of the environmental resources may also aid in the verification of environmental baseline data and provide

context for the assessment of environmental impacts, as determined through subsequent Scientific Monitoring Programs.

4.3.2 Shoreline Assessment

Shoreline assessment provides rapid, accurate geo-referenced documentation and data of shoreline contamination conditions. Teams will be mobilised to systematically survey shorelines both pre-contact and upon contamination, to advise on clean-up strategies.

Wildlife Response – Hazing

Hazing is used to minimise the number of animals at risk of contact with a spill, preventing them from becoming oiled or contaminated by scaring them from the path of the spill.

Trigger

This response may be triggered when the monitor and evaluate technique identifies potential impact on wildlife amenable to hazing in the trajectory of Environment which may be affected (EMBA) or contact with the EMBA of the spill is likely.

Methods

Hazing involves use of deterrents to encourage potentially impacted wildlife to move away from the spill. Hazing can utilise vessel horns, lights and firewater systems or artificial visual or auditory threat stimuli to dissuade or exclude wildlife from the spill area. This technique would be applied in a targeted manner, as appropriate to wildlife groups detected in the open ocean (e.g. seabirds, cetaceans etc.) or affected shorelines.

4.3.3 Wildlife Response – Pre-emptive capture translocation rescue and rehabilitation

Pre-emptive capture and relocation is used to translocate wildlife groups from areas predicted to be impacted by a spill (pre-emptive) or cleaning up affected oiled individual animals (post contact).

Trigger

Pre-emptive capture/translocation could be triggered when the monitor and evaluate technique identifies potential impacts to wildlife amenable to translocation, while post contact may be triggered where contact with the hydrocarbon spill has occurred for amenable individuals in the EMBA.

Methods

Pre-emptive capture allows wildlife to be relocated from the risk area and releasing or holding the wildlife in short-term captivity.

When hazing or pre-emptive capture response practices fail to prevent the risk of impact to wildlife, post contact response actions are implemented to collect, clean and remediate oiled wildlife. Equipment and personnel resources for the exclusion and capture of wildlife requirements may be identified and sourced in consultation with AMOSC/ OSRL and their relevant subcontractors.

4.3.4 At Sea Containment and Recovery

At-Sea Containment and Recovery involves the controlled encounter and collection of hydrocarbons from the water's surface. Floating barriers or booms are used to corral and concentrate the spilled hydrocarbons on the sea surface into a suitable surface thickness, to allow its mechanical removal using a recovery device known as a skimmer, which pumps the oil from the water surface into temporary storage.

Trigger

Containment and recovery response strategies may be triggered for ongoing persistent hydrocarbon spills (amenable to containment), and only if sensitive receptors are at risk from a surface hydrocarbon contacting the EMBA.

Methods

Containment and recovery involves the use of vessels and boom infrastructure to corral and collect spilled hydrocarbon. Differing boom types, skimmers/collection nets and vessel configurations may be appropriate to spills, depending on location, sea state, and hydrocarbon properties.

4.3.5 Dispersant Application

Dispersants are chemicals that help break up an oil slick into smaller droplets, which disperse through the water column. Dispersants act by reducing the surface tension at the hydrocarbon/water interface. This allows for wind, wave, and current motion to help form smaller hydrocarbon droplets, enhancing the natural dispersion of hydrocarbons into the water column. The increased surface area of the small hydrocarbon droplets makes it easier to be biodegraded and provides a measure of protection for sensitive receptors otherwise threatened by a surface slick.

Trigger

The application of dispersant may be triggered where considered to have environmental benefit, as outlined in the Oil Pollution First Strike Plan. The basis of this determination will be outlined in the activity specific Oil Spill Preparedness and Response Mitigation Assessment document. Dispersant application is likely to only take place for ongoing larger spills, and only if personnel or environmental receptors are at risk and would benefit from application of dispersant.

Methods

Dispersant may be applied using a combination of aircraft (using the Fixed Wing Aerial Dispersant Capability (FWADC) and vessels (surface application) or using the subsea first response toolkit (subsurface at the well head).

Subsea dispersant injection involves the deployment of a subsea dispersant manifold with associated equipment to inject dispersant directly into the hydrocarbon plume, in the event of a loss of well control.

The use of subsea dispersants has similar benefits to surface dispersant application, including a potential reduction in the volume of hydrocarbons that reach the shoreline, thereby reducing impacts to sensitive receptors. In addition to these benefits, subsea dispersant application may greatly reduce volatile organic compound (VOC) levels during surface response operations, reducing risks and hazards to responders.

4.3.6 In-Situ burning

In-situ burning is a technique to purposefully set fire to a corralled spill in order to rapidly minimise or remove surface hydrocarbons from the marine environment, reducing the risk of shoreline impact.

Trigger

In-situ burning may be triggered where sufficient thickness of surface hydrocarbon, hydrocarbon type, and weather and ocean conditions allow, and is it is considered safe to do so.

Methods

Floating hydrocarbon is contained, corralled and concentrated within specialised fire-resistant booms. It is then ignited using either hand held igniters, or an igniter suspended from a helicopter.

4.3.7 Shoreline Protection

Shoreline protection aims to protect sensitive receptors (e.g. intertidal (shoreline or emergent) habitat) to mitigate exposure and accumulation risks. This technique is focussed on protecting specific small-scale areas of significant ecological or socio-economic importance, for example emergent coral reefs or mangrove sites, and is not suitable for protection of large areas of coastline.

Trigger

Shoreline protection response may be triggered if hydrocarbon trajectory modelling and surveillance of hydrocarbon indicates the spill is likely to impact environmentally sensitive receptors with shorelines or surface features.

Methods

Shoreline protection can involve the use of one or multiple response strategies, utilising specialised barriers/berm, boom and vessel infrastructure to corral or deflect spilled hydrocarbon. A range of boom types, skimmers/collection nets, and vessel configurations may be appropriate to spills, depending on location, sea state, and hydrocarbon properties.

4.3.8 Shoreline Clean-up

Shoreline clean-up aims to clean shorelines to reduce impact on the sensitive receptor or to avoid reintroduction of hydrocarbons.

Trigger

Shoreline clean-up response may be triggered when accumulated hydrocarbons (above 100 g/m^2 thresholds for shoreline assessment and 250 g/m^2 for clean-up operations) are observed at an area of shoreline and there is adequate access to the shoreline to carry out clean-up activities safely.

Methods

Shoreline clean-up methods typically involve manual methods, collecting residual-hydrocarbons, and treatment in situ with biodegradation agents and contaminated debris to minimise ongoing contamination at the site and risks of direct exposure of shoreline habitats and wildlife.

4.3.9 Source Control

This section outlines some of the key means by which Woodside may deliver source control for a hydrocarbon spill due to a loss of well containment or integrity.

4.3.9.1 Subsea First Response Toolkit

Woodside has a contract arrangement with the AMOSC for access to the SFRT equipment and dispersant stockpiles. The SFRT is used for debris clearing and subsea dispersant at the well head following a hydrocarbon spill due to loss of well containment. The equipment and dispersant are owned and maintained by AMOSC. The Woodside agreement with AMOSC forms part of a multi-operator Participant's Agreement that enables the sharing of a single equipment package.

The AMOSC equipment is provided on a 'first-come-first-served' basis. As there is a remote possibility of two titleholders requiring the equipment at the same time, Woodside has also established a contract with Wild Well Control (WWCI) that provides access to similar equipment.

SFRT equipment is located in Perth, is maintained in a state of readiness, and is ready for mobilisation within 24 hours.

The SFRT comprises the following:

- Chemical dispersants and subsea deployment system: Dispersant is pumped close to the wellhead or source of the leak, to provide better visibility for response operations and to reduce the impact of pollution.
- Debris clearance equipment: ROV deployed cutters and tools are used to remove damaged or redundant items from the wellhead and allow better access to the well.
- Emergency blowout preventer (BOP) control equipment: A Capping Stack is generally required when primary control of the BOP is lost; however, a subsea accumulator can be deployed as a secondary means of BOP control to close in the well.

4.3.9.2 Capping and Containment

In addition, to the SFRT outlined above, Woodside has a contract with WWCI for the provision of a capping stack and SFRT equipment. The equipment is provided on a shared basis between several global oil and gas titleholders. The equipment based at WWCI's facility in Singapore and is available for rapid deployment to Australia on a call-out basis.

Woodside's contract with WWCI is structured to provide the capping stack and associated equipment together with competent and experienced personnel to operate and deploy the equipment. The agreement provides for immediate availability of WWCI personnel upon call-out.

A capping stack is designed to be installed on a subsea well, in circumstances where the BOP has failed to operate or provide an effective seal. The capping stack provides a temporary means of sealing the well until a permanent well kill can be performed, through either a relief well or well re-entry. The capping stack is connected to the well, either at the top of an existing subsea BOP when the Lower Marine Riser Package (LMRP) is removed, or at the subsea wellhead when the entire BOP is removed. The system is modular and designed for airfreight.

Australian Petroleum Production and Exploration Association (APPEA) Memorandum of Understanding

A Memorandum of Understanding for mutual assistance is in place among APPEA member signatories to facilitate the transfer of drilling units and well site services between titleholders in Australian and Timor Leste administered waters in the event of emergency conditions that require the drilling of a single or multiple relief wells.

4.3.10 Scientific Monitoring

Woodside will activate a scientific monitoring program in the event of any Level 2 or 3 hydrocarbon release, or any release event with potential to contact sensitive environmental receptors (i.e., a suite of biological attributes such as habitats and marine fauna). The main objectives of activating and implementing a scientific monitoring program are to:

- Assess the extent, severity and persistence of the environmental impacts from a hydrocarbon release.
- Monitor subsequent recovery of impacted key species, habitats and ecosystems.

Woodside's hydrocarbon spill scientific monitoring program process, operational requirements, and supporting information are documented as follows:

- The Scientific Monitoring Program Process and Methodologies Guideline is a supporting plan which details the following:
  - Objectives and scope of the scientific monitoring program.
  - The roles and responsibilities of the Woodside hydrocarbon spill scientific monitoring team and external resourcing (including qualifications, competencies, and training).
  - A summary table of the ten scientific monitoring programs, per focus receptor, objectives, activation triggers, and termination criteria.
  - Details on the hydrocarbon spill environmental monitoring activation and termination decision-making processes.
  - Environmental baseline knowledge to support scientific monitoring.
  - Survey design and bio-statistical approach to scientific monitoring.
  - Hydrocarbon spill scientific monitoring program reporting.
- An operational response document, the Hydrocarbon Oil Spill Scientific Monitoring Program - Operational Plan documents the operational requirements to activate and implement monitoring by the Woodside Response Phase SMP delivery team.

- The Science Data Directory[6] is a repository of scientific information on hydrocarbon spill and environmental impacts including scientific literature, a biodiversity database. It is used to identify sensitivity seasonality, and receives environment information. Receiving environment information includes protected areas and species - including migratory, breeding and foraging grounds and links to baseline studies, such as the Woodside baseline database and the International Genetically Engineered Machine (I-GEM) Foundation. This resource is kept current, to support the risk evaluation of potential hydrocarbon spills, and would be accessed by the Woodside SMP delivery team in the event of a hydrocarbon release.

[6] Science Data Directory

REFERENCES

Title	Reference
AMOSPlan	Link
AMSA Equipment List	Link
Australian Emergency Management Arrangements Handbook	Link
Australian Maritime Safety Authority	Link
Department of Transport (WA) Offshore Petroleum Industry Guidance Note – Marine Oil Pollution: Response and Consultation Arrangements (Sept. 2018)	Link
Emergency & Cyclone Plans (Darwin Port)	Link
Hydrocarbon Spill Response Data Directory	Link
International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (Protection of the Sea (Civil Liability for Bunker Oil Pollution Damage) Act 2008	Link
International Convention on Civil Liability for Oil Pollution Damage 1992	Link
International Maritime Organisations (IMO)	Link
IPIECA Oil spill exercises good practice guide	Link
OSRL Global Stockpile Status Report	Link
Signed Memorandum of Understanding - Mutual Assistance [APPEA] To Facilitate the Transfer of Drilling Units and Well-Site Services between Operators in Australian and Timor Leste-administered Waters to Overcome Emergency Conditions	Link
State Hazard Plan for Maritime Environmental Emergencies	Link
Tiered Preparedness and Response	Link

Legislation

Title	Reference
Australian Maritime Safety Authority Act 1990 (Cth)	Link
Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)	Link
Emergency Management Act 2005 (WA)	Link
Emergency Management Regulations 2006 (WA)	Link
Environmental Protection Act 1986 (WA)	Link
Northern Territory Environment Protection Authority Act 2012	Link
Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cth)	Link
Offshore Petroleum and Greenhouse Gas Storage (OPGGS) Act (Environment) Regulations 2009 (Cth)	Link
Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 (WA)	Link
Shipping and Pilotage Act 1967 (WA)	Link
Wildlife Conservation Act 1950 (WA)	Link

DEFINITIONS

Term	Meaning
Control Agency	The agency or company assigned by legislation, administrative arrangements or within the relevant contingency plan, to control response activities to a maritime environmental emergency.
Deterministic modelling	This type of deterministic modelling predicts the trajectory of the spill as appropriate to the prevailing oceanographic and meteorological conditions at the time of the spill.
Dissolved hydrocarbon	Soluble components of a hydrocarbon mixture become incorporated into the water column to form a hydrocarbon solution.
Emulsification of hydrocarbon	The process of dispersing one liquid in a second immiscible liquid. Hydrocarbons spilt to the marine environment take up water droplets to form water-in-oil emulsions.
Entrained hydrocarbon	Droplets or globules of hydrocarbon that physically mix (but are not dissolved) into the water column. Physical entrainment can occur either during pressurised release from a sub-surface location, or through action of breaking waves.
First Strike	First Strike refers to the prompt initial response to a spill by a Control Agency or on behalf of a control agency (i.e. by a Person in Charge (PICC) or Vessel Master) to protect the environment and is intended to limit the effect of an incident, until such time as other supporting resources can be deployed.
Fresh hydrocarbon	Hydrocarbon newly released to the receiving environment, before the weathering process begins.
Support Agency	An agency or company that provides essential services, personnel, material or advice in support of the Control Agency during the response to a maritime environmental emergency.
Statutory Authority	An agency authorised by law to enforce legislation on behalf of the relevant country or state.
Stochastic Modelling	This modelling undertakes a series of simulations over differing seasons and hydrodynamic/climatic conditions representative of the operational area. Results of the replicate simulations are then statistically analysed and mapped to define the furthest (i.e. worst-case) possible extent from the release point within reach of hydrocarbons above defined threshold concentrations This mapped extent is referred to by Woodside as the Zone of Consequence (ZoC). The ZoC is then used to identify key response areas based on the receptor sensitivities within this defined area. These percentage probability maps produced for stochastic modelling do not represent the expected coverage of hydrocarbon following a spill incident. They provide data on percentage probability were a spill to occur during the historical periods evaluated in the modelling exercise.
Volatile	Evaporating readily at normal temperatures and pressures.

ABBREVIATIONS

Abbreviation	Term
ADIOS	Automated Data Inquiry for Oil Spills. Hydrocarbon weathering and behaviour model developed by the (US) National Oceanographic and Atmospheric Administration (NOAA).
AIIMS	Australian Inter-Service Incident Management System
AIP	Australian Institute of Petroleum
ALARP	As Low As Reasonably Practicable
AMOSC	Australian Marine Oil Spill Centre
AMOS-Plan	A voluntary oil industry mutual aid plan intended to supplement the National Plan, administered by Australian Institute of Petroleum through AMOSC.
AMSA	Australian Maritime Safety Authority
ANP	Autoridade Nacional de Petról–o – Timor-Leste National Petroleum Authority (Designated Authority of the JPDA) –
RPS APASA	RPS Asia Pacific Applied Science Associates
BOP	Blowout Preventer
BrPA	Broome Port Authority
CEO	Chief Executive Officer
CHEMPLAN	The National Marine Chemical Spill Contingency Plan
CICC	Corporate Incident Co-ordination Centre
CMT	Crisis Management Team
COP	Common Operating Picture
cp	Centipoise (Dynamic Viscosity measurement unit)
DA	Designated Authority
DBCA	Department of Biodiversity, Conservation and Attractions (Western Australia)
D&C	Drilling & Completions
DENR	Department of Environment and Natural Resources (Northern Territory)
DFES	Department of Fire and Emergency Services (Western Australia)
DM	Duty Manager
DMIRS	Department of Mines, Industry Regulation and Safety
DoEE	Commonwealth Department of the Environment and Energy
DRIMS	Document Recording Information Management System

Abbreviation	Term
DWER	Department of Water and Environment Regulation (Western Australia)
EAG	Executive Advisory Group. WA Committee chaired by the EAG Coordinator, responsible for management of WestPlan-Marine Oil Pollution (formerly known as ERG)
EMBA	Environment which may be affected
EMP	Environmental Management Plan
EPA	Environmental Protection Authority
ESC	Environmental Scientific Coordinator
ESI	Environmental Sensitivity Index
EP	Environment Plan
E&P	Exploration and Production
ERP	Emergency Response Plans
ESC	Environmental and Scientific Coordinator
FOB	Forward Operations Base
FPSO	Floating Production, Storage and Offloading Vessel
FWADC	Fixed Wing Aerial Dispersant Capability
GIS	Geographical Information System
HAZMAT	Hazardous Material
HMA	Hazard Management Agency
HPI	High Potential Incident
HR	Human Resources
HSE	Health Safety Environment
HSP	Hydrocarbon Spill
IAP	Incident Action Plan
IC	Incident Controller
ICC	Incident Coordination Centre
IGA	National Plan Inter-Governmental Agreement
IHR	Incident and Hazard Report
IMS	Incident Management System
IMO	International Maritime Organisation

Abbreviation	Term
IMT	Incident Management Team
JIP	Joint Industry Project
JPDA	Joint Petroleum Development Authority
JSCC	Joint Strategic Coordination Committee
JVP	Joint Venture Participant
KBSF	King Bay Supply Facility (also referred to as the King Bay Supply Base)
KGP	Karratha Gas Plant
KICC	Karratha Incident Co-ordination Centre
LNG	Liquefied Natural Gas
KSAT	Kongsberg Satellite Services
LPG	Liquefied Petroleum Gas
MACs	Mutual Aid Contacts (under AMOSPlan)
MCCU	Maritime Casualty Control Unit
MDM	Marine Duty Manager
MEER	WA DoT Marine Environment Emergency Response Unit
MNES	Matter of National Environmental Significance
MODU	Mobile Offshore Drilling Unit
MOP	Marine Oil Pollution
MoU	Memorandum of Understanding
MSRC	Marine Spill Response Corporation
NEBA	Net Environmental Benefit Analysis
NEMO	National Environmental Maritime Operations System
NOAA	(US) National Oceanographic and Atmospheric Administration
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
NRT	National Response Team
NRST	National Response Support Team
NT DoT	Northern Territory Department of Transport
National Plan	National Plan for Maritime Environmental Emergencies
NWS	North West Shelf

Abbreviation	Term
NWSSSC	Northwest Shelf Shipping Service Company
OIL	Oil Insurance Limited
OILMAP	Hydrocarbon Spill Trajectory Model
OIM	Offshore Installation Manager
OM	Operational Monitoring
OMP	Operational Monitoring Program
OPEA	Oil Pollution Emergency Arrangements
OPEP	Oil Pollution Emergency Plan
OPGGS	Offshore Petroleum and Greenhouse Gas Storage
OPICC.	Offshore Petroleum Incident Coordination Committee
OPP	Offshore Project Proposal
OPRC	Oil Pollution Preparedness, Response and Co-operation Convention
OSCP	Oil Spill Contingency Plan
OSPRMA	Oil Spill Preparedness and Response Mitigation Assessment
OSR	Oil Spill Response
OSRA	Oil Spill Response Atlas. National CRA, developed by various State agencies. In WA, Transport holds the State OSRA
OSRL	Oil Spill Response Limited
OSTM	Oil Spill Trajectory Modelling
PICC	Person in Charge
POLREP	Marine Pollution Incident Report
PPA	Pilbara Ports Authority
RCC	Rescue Coordination Centre (AMSA)
ROV	Remotely Operated Vehicle
SIMA	Spill Impact Mitigation Assessment
SITREP	Marine Pollution Incident Situation Report
SFRT	Subsea First Response Toolkit
SM	Scientific Monitoring
SMEEC	State Maritime Environment Emergency Coordinator
SMP	Scientific Monitoring Program

Abbreviation	Term
SOPEP	Shipboard Oil Pollution Emergency Plan
VP	Vice President
WCC	Woodside Communication Centre
WCCS	Worst Credible Spill Scenario
WestPlan	A series of Emergency Management Plans in Western Australia
WestPlan-MOP	WestPlan Marine Oil Pollution.
WA DoT	Western Australian Department of Transport
WA DoT OSCP	Western Australian DoT Oil Spill Contingency Plan
Woodside	Woodside Energy Limited
WMS	Woodside Management System
ZoC	Zone of Consequence

APPENDIX A INTERFACE BETWEEN WOODSIDE'S OPEA (AUSTRALIA) AND OTHER PLANS

Table 4-6: Interface with other plans

Relevant Plans	Responsible Party	Main Content
National Plan for Maritime Environmental Emergencies (National Plan)	AMSA	The National Plan for Maritime Environmental Agencies provides a national system for responding promptly and effectively to marine pollution by hydrocarbons and other noxious and hazardous substances, by designating competent national and local authorities. The National Plan is responsible for maintaining: • a national contingency plan for preparedness and response • an adequate Level of pre-positioned marine pollution combat equipment and program for its use • a comprehensive national training program for personnel familiarisation • detailed state, local and industry contingency plans. The National Plan provides for AMSA to be the Australian Government's Control Agency in the event of vessel-based spills for the purposes of the National Plan.
State Hazard Plan: Maritime Environmental Emergencies (MEE)	WA DoT	The State Hazard Plan for Maritime Environmental Emergencies (MEE) (the Plan) provides an overview of arrangements for the management of marine oil pollution and marine transport emergencies in Western Australia and contains information on prevention, preparedness, response and recovery. Collectively these two hazards are referred to as Maritime Environmental Emergencies. The Plan refers to a range of existing plans and documents relating to Maritime Environmental Emergencies but does not duplicate the information contained in these, instead providing directions to websites or other sources where further information can be obtained if required. The Marine Safety, General Manager, Department of Transport (DoT) is the Hazard Management Agency (HMA) for marine oil pollution and marine transport emergencies.
Broome Port Authority OSCP	BrPA	BrPA's OSCP is a sub-plan of the Port's ERP and is activated as the primary plan to combat pollution of the Port from oil. The ERP requires that all personnel who may be involved in the management of oil spills in the Port are conversant with the content of the National Plan. The current version of BrPA OSCP can be obtained from the BrPA Harbour Master.
Pilbara Ports Authority (PPA) Marine Oil Pollution Plan	PPA	The Dampier Port Authority ERP provides guidelines for actions to be taken during an emergency to minimise the potential for loss of life, injury to people, and damage to the environment and property by covering foreseeable incidents and outlining remediation. The latest version of the PPA Emergency Response Plan and Marine Pollution Plan is available on the Emergency Preparedness and Response page of the PPA website.
NT OSCP	The Marine Branch, NT DoT	The Marine Branch, on behalf of the NT Department of Transport, is responsible for the NT Oil Spill Contingency Plan, which supports the National Plan.

Relevant Plans	Responsible Party	Main Content
Darwin Port Corporation Oil Spill Contingency Plan (DPC OSCP)	Darwin Port Corporation	The DPC OSCP sets out the response to spills of oil and hazardous and noxious substances within the Port of Darwin. This includes hydrocarbon spills from vessels or land based activities that enter Port waters. More information is available on the Emergency & Cyclone Plans page of the Darwin Port Authority website. The Port of Darwin Harbourmaster is the Incident Controller for all spills within the harbour.
AMOSPlan	AMOSC	AMOSPlan covers the spill response and training activities of AMOSC and the company- to- company mutual assistance arrangements administered by AMOSC. The AMOSPlan is underpinned by a Principal and Agency Agreement signed between AMOSC and each Participating Company that sets out the basis on which personnel and company-owned equipment can be loaned by each Company to AMOSC. A Master Services Contract is also signed between these parties. This contract also covers the entities of Member Companies. In the event that a company is involved in a hydrocarbon spill incident necessitating activation of its Contract, a supplementary Service Contract specifies the equipment and/or personnel to be hired. The specified equipment will vary depending on the nature and location of the oil spill incident. AMOSPlan is activated by a company when the response to an oil spill incident is regarded by the company as requiring resources beyond those of the company itself. The AMOSPlan also outlines the agreement between AMOSC and AMSA that enables AMSA to hire equipment and personnel from AMOSC on behalf of the National Plan. The AMOSPlan divides into several response regions with Mutual Aid Contacts (MACs) identified in each region.

APPENDIX B DOT PERSONNEL REQUIREMENTS & STRUCTURE

Initially, Woodside will be required to make available an appropriate number of suitably qualified persons to work in the WA DoT IMT. Those roles are shown below;

Area	WEL Liaison Role	Personnel Sourced from:[7]	Key Duties	#
DoT MEECC	CMT Liaison Officer	CMT Duty Managers Roster	• Provide a direct liaison between the CMT and the MEECC. • Facilitate effective communications and coordination between the CMT and SMPC. • Offer advice to SMPC on matters pertaining to Woodside crisis management policies and procedures.	1
DoT IMT Incident Control	WEL IMT Liaison Officer	CICC Duty Managers Reserve List Roster	• Provide a direct liaison between Woodside IMT and DoT IMT. • Facilitate effective communications and coordination between Woodside IC and the DoT IC. • Offer advice to the DoT IC on matters pertaining to Woodside incident response policies and procedures. • Offer advice to the Safety Coordinator on matters pertaining to Woodside safety policies and procedures, particularly as they relate to Woodside employees or contractors operating under the control of the DoT IMT.	1
DoT IMT Planning-Intelligence/ Mapping	Intelligence Liaison Officer	AMOSC Staff Member or AMOSC Core Group (non WEL) mutual aid from other member PT	• As part of the Intelligence Team, assist the Intelligence Officer in the performance of their duties in relation to situation and awareness. • Facilitate the provision of relevant modelling and predications from the Woodside IMT. • Assist in the interpretation of modelling and predictions originating from the Woodside IMT. • Facilitate the provision of relevant situation and awareness information originating from the DoT IMT to the Woodside IMT. • Facilitate the provision of relevant mapping from the Woodside IMT. • Assist in the interpretation of mapping originating from the Woodside IMT. • Facilitate the provision of relevant mapping originating from the DoT IMT to the Woodside IMT.	1
DoT IMT	Planning Liaison Officer	AMOSC Core Group (non WEL) mutual aid from other member PT	• As part of the Planning Team, assist the Planning Officer in the performance of their duties in relation to the interpretation of existing response plans and the development of incident action plans and related sub plans.	1

[7] See Combined CICC, KICC, CMT roster & Preparedness Schedule DRIMS#4992584 / AMOSC Service Contract DRIMS#8697281

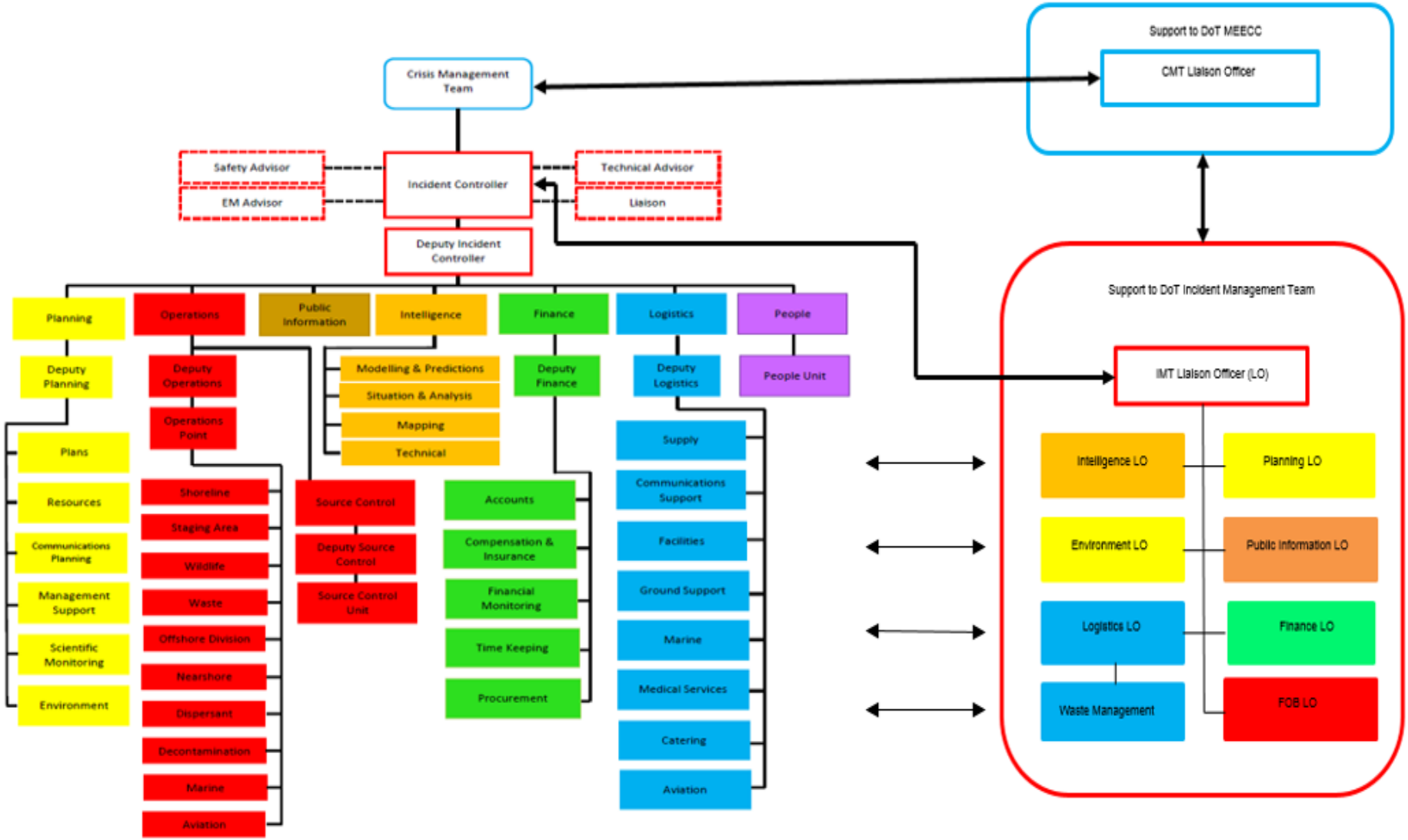
Planning-Plans/Resources		/CICC Planning Coordinator Reserve List & Planning Group 3	• Facilitate the provision of relevant IAP and sub plans from the Woodside IMT. • Assist in the interpretation of the Woodside OPEP. • Assist in the interpretation of the Woodside IAP and sub plans from the Woodside IMT. • Facilitate the provision of relevant IAP and sub plans originating from the DoT IMT to the Woodside IMT. • Assist in the interpretation of the Woodside existing resource plans. • Facilitate the provision of relevant components of the resource sub plan originating from the DoT IMT to the Woodside IMT. ***(Note: This individual must have intimate knowledge of the relevant Woodside OPEP and planning processes.)***	
DoT IMT Planning-Environment	Environmental Liaison Officer	CMT Environmental FST Duty Managers Roster	• As part of the Planning Team, assist the Environmental Officer in the performance of their duties in relation to the provision of environmental support into the planning process. • Assist in the interpretation of the Woodside OPEP and relevant TRP plans. • Facilitate in requesting, obtaining and interpreting environmental monitoring data originating from the Woodside IMT. • Facilitate the provision of relevant environmental information and advice originating from the DoT IMT to the Woodside IMT.	1
DoT IMT Public Information-Media/Community Engagement	Public Information & Media Liaison Officer	CMT Reputation {Media} FST Duty Manager Roster	• As part of the Public Information Team, provide a direct liaison between the Woodside Media team and DoT IMT Media team. • Facilitate effective communications and coordination between the Woodside and DoT media teams. • Assist in the release of joint media statements and conduct of joint media briefings. • Assist in the release of joint information and warnings through the DoT Information & Warnings team. • Offer advice to the DoT Media Coordinator on matters pertaining to Woodside media policies and procedures. • Facilitate effective communications and coordination between the Woodside and DoT Community Liaison teams. • Assist in the conduct of joint community briefings and events. • Offer advice to the DoT Community Liaison Coordinator on matters pertaining to the Woodside community liaison policies and procedures. • Facilitate the effective transfer of relevant information obtained from through the Contact Centre to the Woodside IMT.	1
DoT IMT Logistics-Supply	Logistic Liaison Officer	CMT Services FST Logistics Team 2 Roster	• As part of the Logistics Team, assist the Logistics Officer in the performance of their duties in relation to the provision of supplies to sustain the response effort. • Facilitate the acquisition of appropriate supplies through the Woodside existing OSRL, AMOSC and private contract arrangements. • Collects Request Forms from DoT to action via the Woodside IMT.	1

			(Note this individual must have intimate knowledge of the relevant Woodside logistics processes and contracts)	
DoT IMT Logistics-Waste	Facilities Support Liaison Officer (Waste)	CMT Services FST Logistics Team 2 and WEL Waste Contractor Roster	• As part of the Logistics Team, assist the Facilities Coordinator in the performance of their duties in relation to the provision of the management and disposal of waste collected in State waters. • Facilitate the acquisition of appropriate services and supplies through Woodside's existing private contract arrangements related to waste management. • Collects Request Forms from DoT to action via the Woodside IMT.	1
DoT IMT Finance-Accounts/Financial Monitoring	Finance Liaison Officer	CICC Finance Coordinator Roster	• As part of the Finance Team, assist the Finance Officer in the performance of their duties in relation to the setting up and payment of accounts for those services acquired through Woodside's existing OSRL, AMOSC and private contract arrangements. • Assist the DoT Finance Officer in time keeping and the setting up and payment of accounts for those services acquired through Woodside's existing OSRL, AMOSC and private contract arrangements. • Facilitate the communication of financial monitoring information to Woodside to allow tracking the overall cost of the response.	1
DoT FOB Operations Command	Deputy On Scene Commander / FOB Liaison Officer	AMOSC Core Group (non WEL) mutual aid from other member PT	• Provide a direct liaison between the Woodside FOB and DoT FOB. • Facilitate effective communications and coordination between the Woodside FOB Operations Commander and the DoT FOB Operations Commander. • Offer advice to the DoT FOB Operations Commander on matters pertaining to PT incident response policies and procedures. • Assist the Senior Safety Officer deployed in the FOB in the performance of their duties, particularly as they relate to Woodside employees or contractors. • Offer advice to the Senior Safety Officer deployed in the FOB on matters pertaining to Woodside's safety policies and procedures.	1
			Total Woodside Personnel Initial Requirement to DoT IMT	10

WA DoT also have a requirement to initially provide personnel into the Woodside IMT, as shown below.

Area	DoT Liaison Role	Personnel Sourced from:	Key Duties	#
WEL CMT	DoT Liaison Officer	DoT	• Facilitate effective communications between DoT's SMPC and Incident Controller and Woodside's appointed CMT Leader and Incident Controller. • Provide enhanced situational awareness to DoT of the incident and the potential impact on State waters. • Assist in the provision of support from DoT to Woodside. • Facilitate the provision technical advice from DoT to the Woodside Incident Controller as required.	1
WEL Reputation FST (Media Room)	DoT Media Liaison Officer	DoT	• Provide a direct liaison via Reputation FST Media Team between the Woodside Media team and DoT IMT Media team. • Facilitate effective communications and coordination between the Woodside and DoT media teams. • Assist in the release of joint media statements and conduct of joint media briefings. • Assist in the release of joint information and warnings through the DoT Information & Warnings team. • Offer advice to the Woodside Media Coordinator on matters pertaining to DoT and wider Government media policies and procedures.	1
			Total WA DoT Personnel Initial Requirement to Woodside	2

Woodside personnel required in the WA DoT IMT will report and liaise via the command structure shown below into the Woodside Incident Management Structure.



APPENDIX C DOT INCIDENT CONTROL TRANSFER CHECKLIST

☐	Confirm date and time of formal transfer of Incident Control in State Waters
☐	Confirm respective Incident Controller lines of communication arrangements (including exchange of Liaison Officers in IMT.
☐	Confirm respective On-Scene Commander lines of communication arrangements (including exchange of Liaison Officers in FOB)
☐	Confirm the location of any Woodside FOB and Staging Areas.
☐	Confirm the details of all current response operations being conducted by Woodside in State Waters
☐	Confirm the composition and status of all response resources, both personnel and equipment, currently being controlled by Woodside that relate to response operations in State Waters.
☐	Confirm the composition and status of all response resources, both personnel and equipment that has been mobilised by Woodside and in transit to the spill site that will contribute to future response operations in State Waters.
☐	Confirm the composition and status of all response resources, both personnel and equipment that is in the process of being mobilised by Woodside to contribute to future response operations in State Waters.
☐	Confirm current level of incident and the predicted level in the future
☐	Confirm existence and adherence to an OPEP/OSCP and secure a copy for the relevant OPEP/OSCP plan.
☐	Secure a copy of the current Situation Report and incident prognosis.
☐	Secure a copy of the Product Material Safety Data Sheet (MSDS)
☐	Notification of significant Safety Risks
☐	Secure a copy of the latest spill trajectory modelling
☐	Secure a copy of the latest actual spill monitoring and surveillance information.
☐	Secure a copy of the current IAP as it relates to State Waters response operations specifically the details of all immediate and future response operations planned by Woodside in State waters.
☐	Secure a copy of the most recent media statements.
☐	Secure a summary of all community / stakeholder engagement activities undertaken to date and those planned in the immediate future that pertain to state waters impact.
☐	Confirm deployment of initial Woodside personnel to DoT IMT and DoT FOB
☐	Reconfirm date and time of formal transfer of Incident Control in State Waters

DoT Incident Controller _____

Date_____

Time_____