



Maritime Safety Queensland Queensland Coastal Contingency Action Plan 2018

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Forward

The Queensland Government, acting through Maritime Safety Queensland (MSQ), a branch of the Department of Transport and Main Roads, is responsible for dealing with ship-sourced pollution that impacts, or is likely to impact, Queensland's coastal waters and the waters of the Great Barrier Reef Marine Park and Torres Strait. The arrangements for dealing with maritime casualties and mitigating the effects of ship-sourced pollution on Queensland's marine and coastal environment are described in this document: the Queensland Coastal Contingency Action Plan (QCCAP).

QCCAP is recognised as a hazard-specific plan under Queensland's disaster management arrangements, and supports Australia's national arrangements for oil and chemical spills under the National Plan for Maritime Environmental Emergencies.

The plan is based on the comprehensive approach to disaster managements incorporating all aspects of the prevention, preparation, response and recovery (PPRR) model as provided in section 4A Guiding Principles of *Queensland's Disaster Management Act 2003*.

This version is a result of a review of previous versions of the plan and addresses recommendations arising from the Cape Upstart oil spill in 2015. It also reflects the changes to the Queensland State Disaster Management Plan. In line with the National Plan, the scope of QCCAP has been extended to include arrangements for dealing with maritime casualties and adopts the fourth edition of the Australasian Inter-service Incident Management System (AIIMS-4).

I urge you to take the time to read this document and trust that it will prove to be a useful resource in helping to protect Queensland's important marine environment from ship-sourced pollution.

Glenn Hale

A/General Manager, Maritime Safety Queensland

Amendments

Suggested amendments or additions to this document should be forwarded to:

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1. Background

The Queensland Government, acting through the Department of Transport and Main Roads, is committed to ensuring its emergency management and response procedures and processes are regularly tested and refined.

This plan, the Queensland Coastal Contingency Action Plan (QCCAP), outlines Queensland's prevention, preparation, response and recovery arrangements for a maritime casualty and/or marine pollution incident (oil and/or chemical spill) in Queensland.

1.1 Aim

This plan outlines the arrangements for response to maritime environmental emergencies that impact on, or are likely to have an impact on, Queensland's coastal waters and waters of the Great Barrier Reef Marine Park (GBRMP) and the Torres Strait Protected Zone.

1.2 Scope

This plan applies to maritime casualties and ship-sourced pollution events that occur within:

- Queensland's coastal waters including gazetted port limits
- waters of the GBRMP as defined in section 31 of the *Great Barrier Reef Marine Park Act 1975*
- waters of the Torres Strait Protected Zone as described in the Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two countries, including the area known as Torres Strait, and Related Matters of 18 December 1978, which entered into force on 15 February 1985.

1.3 Purpose

The plan serves two purposes (see Figure 2):

- QCCAP supports Australia's marine pollution response arrangements outlined in the National Plan for Maritime Environmental Emergencies (the National Plan)
- QCCAP is also a hazard specific plan for marine pollution incidents under Queensland's state disaster management arrangements.

1.4 QCCAP structure

QCCAP comprises four sections (see Figure 1):

- the main body of QCCAP uses the comprehensive prevention, preparedness, response and recovery model
- a list of key resources, details of the Incident Management System and selected Decision Support tools (Appendices 1-5)
- the Oiled Wildlife Response Plan administered by the Department of Environment and Science (DES), details the management arrangements for wildlife affected by or likely to be affected by marine pollution (Appendix 5).
- first-strike Response Plans and Area Specific Plans provide contact details, and other site-specific information for ports and other selected areas (Appendices 9-30).



Figure 1 QCCAP Structure

1.5 Areas of risk

1.5.1 Queensland's coast

A risk assessment conducted by the Queensland Government in 2000, in collaboration with the Great Barrier Reef Marine Park Authority (GBRMPA), identified areas with a higher than average risk of a serious marine pollution event. This resulted in the promulgation of the following six Marine Environment High Risk Areas (MEHRAs):

- Torres Strait and the Great North East Channel
- the inner route of the Great Barrier Reef north of Cape Flattery
- the port of Cape Flattery
- the Whitsunday Islands
- Hydrographers Passage off Mackay
- Moreton Bay.

In addition to these higher risk areas, the Queensland Government recognises that all Queensland's coastal waters, all waters of the GBRMP, the Torres Strait, and offshore areas should be protected from marine pollution.

The Australian Maritime Safety Authority (AMSA) commissioned the 2011 Report by Det Norske Veritas: *Assessment of the Risk of Pollution from Marine Oil Spills in Australian Ports and Waters*. The report identified the eastern Queensland coast, particularly from Townsville to Hay Point, had a relatively high oil spill risk, arising mainly from trading ships in ports such as Hay Point, Gladstone and Brisbane. However smaller spills from small commercial vessels and shore-based activities also contributed. The report noted the high risk took account of the high environmental sensitivity of the Great Barrier Reef¹.

1.5.2 Queensland's ports

A large range of oils and chemicals² are carried by ships within the area covered by QCCAP. In August 2010 the Queensland Government commissioned a risk assessment of ship-sourced oil spills in Queensland's ports. The results of this study identified the following:

- The port of Brisbane (high risk) dominates the risk profile due to the high number of ship arrivals, the high number of oil and chemical tankers, the lengthy 43 nautical mile (nm) approach channel and higher sensitivity rating.
- The port of Gladstone (medium risk) shows the greatest increase in risk since the last study (conducted in 2003) mainly due to an increase in ship arrivals.
- The following ports are classified as low risk: Weipa, Cairns, Townsville, Port Alma, Hay Point, Karumba, Mackay, Mourilyan, Thursday Island, Abbot Point, Bundaberg, Cape Flattery (also designated as a MEHRA), Lucinda, Cooktown, Skardon River, Quintell Beach, Maryborough and Burketown.

¹ [Assessment of the Risk of Pollution from Marine Oil Spills in Australian Ports and Waters \(2011\)](#) Report by Det Norske Veritas (pp.33-34)

² as defined in Appendixes 1, 2 and 3 of MARPOL, including Heavy Fuel Oil (Bunker C), heavy, medium and light Crude oils, lubricating oils and refined products such as Diesel fuel and petrol

1.5.3 Spill volumes

Table 1 indicates typical volumes of oil that could be spilled from oil tankers. In most cases the figures quoted for bunker fuel also apply to bulk carriers and general cargo ships.

Table 1 Spill volumes

Tonnage (dwt)	Slight grounding or collision (m3)	Rupture of two or more cargo tanks (m3)	Rupture of most bunker oil tanks (m3)
30,000	700	3,000	1,350
50,000	1,100	5,000	2,300
70,000	3,000	12,500	5,200
100,000	5,500	21,000	7,000
200,000	10,500	45,000	8,300
240,000	15,000	60,000	12,000

2. Governance and Management

2.1 International conventions

Australia is a signatory to two international conventions that relate to the prevention of, and response to, ship-sourced pollution:

- The *International Convention on Oil Pollution Preparedness, Response and Cooperation* (OPRC) commonly known as OPRC 90, and its associated *Hazardous and Noxious Substances (HNS) Protocol*, is the primary international convention for response to ship-sourced marine pollution incidents.
- The *International Convention for the Prevention of Pollution from Ships, 1973* as modified by the *Protocol of 1978*, commonly referred to as MARPOL, is an important international marine environmental convention designed to minimise pollution of the seas and to preserve the marine environment, through the prevention of pollution by oil and other harmful substances from ships.

2.2 Legislation

As a signatory to OPRC 90/HNS Protocol, the Australian Government is obliged to prepare for, and respond to, incidents of ship-sourced oil and chemical pollution that impact on, or are likely to impact on, waters of Australia's Exclusive Economic Zone. These obligations are given force through the Commonwealth *Protection of the Sea (Powers of Intervention) Act 1981*, and various State and Northern Territory Government legislation.

Other relevant Commonwealth legislation includes the *Great Barrier Reef Marine Park Act 1975*, which outlines the arrangements for the Great Barrier Reef Region, and empowers the GBRMPA to direct the entry and use of ships in the GBRMP, and to authorise the use of oil spill dispersants within the GBRMP.

Within Queensland's jurisdiction, MARPOL and the OPRC 90/HNS Protocol is given force through the *Transport Operations (Marine Pollution) Act 1995* (TOMPA) and *Transport Operations (Marine Pollution) Regulation 2018* (TOMPR) which aim to protect Queensland's marine and coastal environment from the adverse effects of ship-sourced pollution. Section 93A(2) of the TOMPA appoints the General Manager, Maritime Safety Queensland (MSQ) as the Marine Pollution Controller (MPC) to direct the marine pollution response in Queensland's coastal waters. Other relevant Queensland legislation is the *Maritime Safety Queensland Act 2002* which establishes MSQ and empowers it to 'deal with the discharge of ship-sourced pollutants into Queensland's coastal waters'.

2.3 National Plan for Maritime Environmental Emergencies

AMSA manages the National Plan, working with State/Northern Territory governments, the shipping, oil, exploration and chemical industries and emergency services, to maximise Australia's maritime emergency response capability. The National Plan is underpinned by two Inter-Governmental Agreements, both of which have been endorsed by the Queensland government:

- the Inter-Governmental Agreement on the National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances³, and
- the Inter-Governmental Agreement on the National Maritime Emergency Response Arrangements⁴.

³ <http://www.amsa.gov.au/forms-and-publications/MOUs/Nat-Plan/index.asp>

⁴ <https://www.amsa.gov.au/forms-and-publications/mous/documents/NMERA-IGA.pdf>

2.4 Jurisdictional authority

Agencies that have jurisdictional or legislative responsibilities for maritime environmental emergencies are obligated to work closely with the Control Agency to ensure that incident response actions are adequate.

Maritime environmental emergencies have the potential to impact upon the interests of two or more Australian jurisdictions, where both jurisdictions have legitimate administrative and regulatory interests in the incident.

Typically, MSQ is the jurisdictional authority within Queensland's coastal waters; however AMSA, the GBRMPA, and DES may also have administrative and regulatory interests in the incident.

2.5 Control agency

The control agency is the agency or company 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. This is the equivalent of Responsible Agency or Control Authority under the Australasian Inter-service Incident Management System (AIIMS-4).

- MSQ is the control agency for ship-sourced marine pollution within the scope of QCCAP, including Queensland's coastal waters, the GBRMP and the Torres Strait, except from those that occur at oil or chemical terminals.
- The relevant oil company or chemical terminal operator is responsible for responding to marine pollution incidents at terminals. The oil industry's response arrangements are described in the Australian Marine Oil Spill Plan (AMOSPlan) and are covered under the mutual aid arrangements of the Australian Marine Oil Spill Centre (AMOSOC). The chemical industry's response arrangements are described in the Plastics and Chemicals Industries Association (PACIA) Chemsafe Emergency Management Program arrangements.
- DES is responsible for the management of oil spills from land-based sources from non-devolved environmentally relevant activities into Queensland's coastal waters. Under a Memorandum of Understanding, MSQ will assist DES in managing land-sourced oil spills by providing experienced officers and the necessary infrastructure and resources.
- Local government organisations are responsible for devolved land-based spills or dumping for: non-licensed premises where clean-up costs are less than \$5000, and for Environmentally Relevant Activity registered premises regardless of clean-up costs. All other land-based spill situations are the responsibility of DES. Under Queensland's disaster management arrangements Local Disaster Management Groups can be activated to support marine pollution response operations and/or manage the clean-up of pollutants from impacted shorelines.

2.5.1 Maritime casualty incidents

The jurisdictional governments have agreed the following responsibilities in relation to the response to maritime casualty incidents:

- MSQ is responsible for the management of maritime casualties within Queensland's coastal and internal waters
- AMSA is responsible for the management of all maritime casualties within the Commonwealth's area of jurisdiction, except in the Great Barrier Reef Marine Park
- Within the Great Barrier Reef Marine Park:
 - the GBRMPA is responsible for the management of maritime casualties that are vessels not subject to the *International Convention for the Safety of Life at Sea (SOLAS)* (that is, vessels less than 500 gross tonnes). Noting its maritime expertise, MSQ will, under agreement with the GBRMPA, manage higher risk maritime casualties with the direct support of GBRMPA, and further support from AMSA, as required.
 - AMSA is responsible for the management of maritime casualties that are SOLAS vessels (that is, greater than 500 gross tonnes) with the direct support of MSQ and the GBRMPA.

2.6 Queensland's disaster management arrangements

Queensland's disaster management arrangements are described in the Queensland State Disaster Management Plan. This plan, along with the Emergency Management Assurance Framework implement the guiding principles and objectives of the *Disaster Management Act 2003*. This legislation and its supporting plan applies to an event that causes, or has the potential to cause, serious community disruption that requires a significant coordinated response by the State and other entities to help the community recover from the disruption.

The Act provides a framework in which all levels of government, government owned corporations, non-government organisations, partners, and stakeholders can work collaboratively to ensure effective disaster management across the State. The Act makes provision for the establishment of disaster management groups for State, disaster districts and local government areas.

The extent of activation of Queensland's disaster management resources will depend on the circumstances of the incident. Activation of State level arrangements can be initiated by the Chairperson of the Queensland Disaster Management Committee (QDMC).

Where necessary, the Act provides for the declaration of a disaster situation which enlivens extraordinary powers that may be used by District Disaster Coordinators (DDCs) and declared disaster officers to assist with the management of an event.

The State Disaster Management Plan is supported by various 'hazard specific' plans. QCCAP is Queensland's hazard specific plan for a marine pollution event.

National marine pollution arrangements

Queensland disaster management arrangements

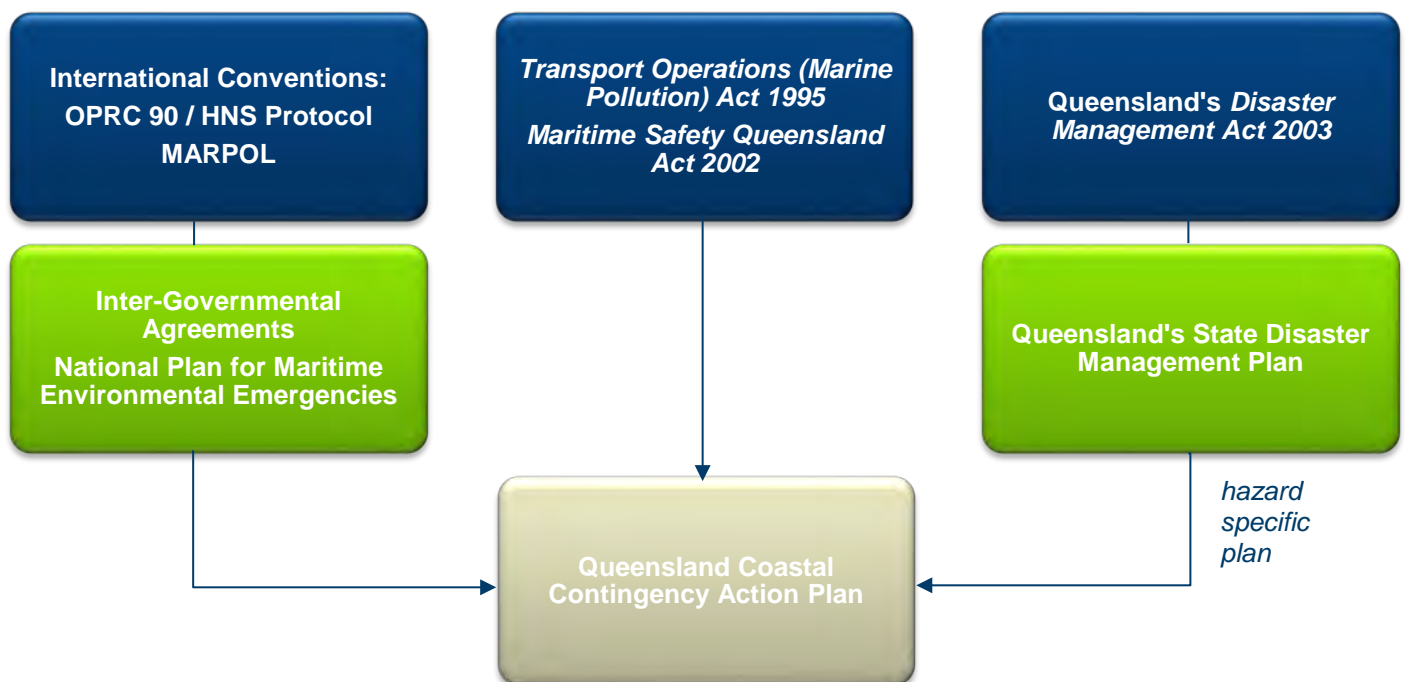


Figure 2 Queensland's marine pollution response arrangements

2.7 Stakeholders

Key stakeholders and their roles are outlined alphabetically in the table below:

Table 2 Stakeholder roles and responsibilities

Agency/Organisation	Roles and responsibilities
Australian Marine Oil Spill Centre (AMOSC)	<ul style="list-style-type: none"> • operate Australia's major oil spill response equipment industry stockpile on 24-hour stand-by for rapid response • provide training in oil spill response management for oil industry, government and other personnel
Australian Maritime Safety Authority (AMSA)	<ul style="list-style-type: none"> • manage the National Plan • liaison point for national marine pollution issues • coordinate interstate and international support for marine pollution response (e.g. National Response Team) • provide decision support resources (e.g. Oil Spill Trajectory Model (OSTM), Oil Spill Response Atlas (OSRA), Chemical Discharge Modelling System (CHEMMAP)) • provide response assets (e.g. National Plan oil spill equipment, fixed wing aerial dispersant capability) • maritime Emergency Response Commander (MERCOTM) • provide Casualty Coordinators • provide emergency towage capability
Bulk Liquids Industry Association (BLIA)	<ul style="list-style-type: none"> • national association of companies and organisations involved in the movement of bulk liquids between ship and shore
Department of Aboriginal and Torres Strait Islander Partnerships	<ul style="list-style-type: none"> • share knowledge, information and advice on Indigenous communities, including advice on engagement and identification of disaster management issues affecting those communities • share knowledge, information, and advice on multicultural stakeholders and culturally diverse communities including advice on engagement and identification of disaster management issues affecting those communities
Department of Agriculture and Fisheries	<ul style="list-style-type: none"> • provide advice relative to fisheries and aquaculture
Department of Communities, Child Safety and Disability Services	<ul style="list-style-type: none"> • functional lead agency for the Human and Social Recovery Group • manage and direct offers of volunteering through Volunteering Queensland
Department of Environment and Science (DES)	<ul style="list-style-type: none"> • lead combat agency for oiled wildlife response • custodian of the Oiled Wildlife Plan • provide environmental and scientific support including strategic environmental advice as the Environmental and Scientific Coordinator (ESC) in Queensland's coastal waters and the Torres Strait Protected Zone to: <ul style="list-style-type: none"> – Marine Pollution Controller (MPC) – Incident Controller (IC) • provide assistance and support to GBRMPA's ESC role during maritime environmental emergencies in the GBRMP • provide additional support to maritime environmental emergencies in Queensland's coastal waters, the GBRMP and the Torres Strait Protected Zone including waste management advice • jurisdictional authority for land-based oil spills
Department of Infrastructure, Local Government and Planning	<ul style="list-style-type: none"> • lead agency for recovery coordination and monitoring, including developing event-specific recovery plans and reporting to government and the community on recovery progress

Agency/Organisation	Roles and responsibilities
Parks and Forests under Department of Environment and Science (DES)	<ul style="list-style-type: none"> • work in partnership with the GBRMPA through the Field Management Unit. • jurisdictional authority for State Marine Parks • provide assistance and support to Environmental and Scientific Coordinator (ESC) role in Incident Control Centre for incidents: <ul style="list-style-type: none"> – GBRMPA's ESC – DES ESC • provide support to marine pollution response including: <ul style="list-style-type: none"> – shoreline assessment – overseeing shoreline clean-up teams, particularly in national and marine parks – environmental advice in national and marine parks – traditional owner liaison and coordination – stakeholder engagement – provision of assets and resources to assist the response(for example tier 1 oiled wildlife equipment) – assisting with oiled wildlife retrieval – incident management team personnel for the ICC
Department of the Premier and Cabinet	<ul style="list-style-type: none"> • functional lead agency for public information • support and provide advice to the Premier as Chairperson of the Queensland's Disaster Management Committee and as leader of the government
Department of Innovation, Tourism Industry Development and the Commonwealth Games	<ul style="list-style-type: none"> • advocate / point of contact for tourism industry and tourism-related businesses • advocate/ point of contact for small business community
Department of Transport and Main Roads (TMR)	<ul style="list-style-type: none"> • jurisdictional authority and control agency for marine pollution and maritime casualties in Queensland waters. Control agency for ship-sourced marine pollution in the GBRMP and Torres Strait • custodian of QCCAP • General Manager of Maritime Safety Queensland is the state's Marine Pollution Controller • relevant Regional Harbour Masters are (generally) the nominated Incident Controllers (ICs) • provide response assets • provide public information • coordinate the provision of personnel to support marine pollution response activities (e.g. MSQ personnel for the State Incident Coordination Centre (SICC) and operational activities, and RoadTek staff) • provide Geographic Information System (GIS) support • provide liaison with disaster management agencies • provide marine pollution response training to Queensland's agencies • functional lead agency for transport systems • functional lead agency of the Roads and Transport Recovery Group • provide information and advice on the impact of disruptive events on road, rail, aviation and maritime infrastructure as it affects the transport system

Agency/Organisation	Roles and responsibilities
Great Barrier Reef Marine Park Authority (GBRMPA)	<ul style="list-style-type: none"> • jurisdictional authority for GBRMP and marine casualties <500 tonnes within the GBRMP • provide environmental and scientific support including strategic environmental advice as the ESC for incidents within the GBRMP • provide assistance and support to DES's ESC role during pollution events within the Great Barrier Reef World Heritage Area (GBRWHA) but outside the GBRMP • provide Incident Management Team personnel for the ICC • coordinate resources to support a marine pollution response through the Field Management Unit • provide support to marine pollution response within the GBRMP including: <ul style="list-style-type: none"> – traditional owner liaison – shoreline assessment – GIS support for responses in the GRBMP
Local Government Association of Queensland (LGAQ)	<ul style="list-style-type: none"> • advocate on behalf of local governments at State level • provide representation and facilitate collaboration with (and between) local government
Local Governments	<ul style="list-style-type: none"> • manage Local Disaster Management Group (LDMG) (chaired by Mayor) and liaise with relevant Regional Harbour Master on marine pollution response arrangements (e.g. First-Strike Response Plans) • provide resources such as council staff and State Emergency Service (SES) to support a shoreline clean-up pollution response under the direction of the IC/District Disaster Coordinator (DDC)
Plastics and Chemicals Industries Association (PACIA)	<ul style="list-style-type: none"> • represent Australia's chemicals and plastics industries • Provide industry based training and professional development
Port Authorities and Corporations	<ul style="list-style-type: none"> • prepare for, and implement first-strike oil spill responses in accordance with First Strike Response Deeds

Agency/Organisation	Roles and responsibilities
Queensland Fire and Emergency Services (QFES)	<ul style="list-style-type: none"> • functional lead agency for disaster warnings • establish and maintain arrangements between the state and Commonwealth about matters relating to effective disaster management • ensure that disaster management and disaster operations in the State are consistent with the State group's strategic policy framework; the State Disaster Management Plan, the disaster management standards and the disaster management guidelines • ensure that persons performing functions under the <i>Disaster Management Act 2003</i> in relation to disaster operations are appropriately trained • provide advice and support to the State group and local and district groups in relation to disaster management and disaster operations • planning and Logistics functions of the State Disaster Coordination Centre (SDCC) • provide situational monitoring of events and incidents across the State via the SDCC Watchdesk • primary agency for fire and chemical / hazmat related incidents • provide rescue capability for persons trapped in any vehicle, vessel, by height or in confined space • provide advice, chemical analysis and atmospheric monitoring at chemical / hazmat incidents • provide impact assessment, and intelligence gathering capabilities <p>Perform the following responsibilities in support of disaster operations:</p> <ul style="list-style-type: none"> • ensure the availability, maintenance and operation of the SDCC which includes the following: <ul style="list-style-type: none"> – the operation of the Intelligence, Logistics, Operations, Planning and Aviation Capabilities – coordinate emergency supply – coordinate resupply operations – coordinate and implement the logistics support framework • coordinate, support and manage the deployment of SES resources (as required, in consultation with local government, appoint a suitably experienced and/or qualified officer as SES Coordinator to support the coordination of SES operations

Agency/Organisation	Roles and responsibilities
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Queensland Health	<ul style="list-style-type: none"> • functional Lead Agency for health response • provide a whole-of-health emergency incident management and counter disaster response capability to prevent, respond to, and recover from a State declared emergency or disaster event • deliver health-related advice and media statements <p>Queensland Ambulance</p> <ul style="list-style-type: none"> • provide, operate and maintain ambulance services • access, assess, treat and transport sick and/or injured persons • protect persons from injury or death, during rescue and other related activities • coordinate all volunteer first aid groups during for major emergencies and disasters

Agency/Organisation	Roles and responsibilities
Queensland Police Service (QPS)	<ul style="list-style-type: none"> • primary agency responsible for terrorism response • provide executive support to the Queensland Disaster Management Committee • preserve peace and good order • prevent crime • management of crime scenes and potential crime scenes • conduct investigations pursuant to the <i>Coroners Act 2003</i> • provide for the effective regulation of traffic • control and coordinate search and rescue operations • provide security for damaged or evacuated premises • respond to and investigate traffic, rail and air incidents • coordinate the review and renewal of the SDMP • command the SDCC on activation • command the SDCC capabilities of operations and intelligence on activation • chair of DDMGs
Public Safety Business Agency	<ul style="list-style-type: none"> • provide the State Government owned Aircraft assets to the Disaster Response via the Queensland Government Air Service • provide support to the SDCC for Logistics, Procurement, Finance, Information Technology and Human Resource management during Disaster Operations • provide public information support through the SDCC Public Information capability • provide mapping services to the SDCC during operations to support the SDCC and QDMC decision-making
Surf Life Saving Queensland	<ul style="list-style-type: none"> • Queensland's peak beach safety and rescue authority and one of the largest volunteer based community service organisations in Australia • provides advice on coastal and aquatic rescue management to government (State and local) agencies across the State • provides a network of support and advice to the District Disaster Management Group (DDMG), LDMG and QDMC in relation to disaster and emergency response via volunteer surf life savers, professional lifeguards, and the Westpac Life Saver Helicopter Rescue Service.
Terminal Operators	<ul style="list-style-type: none"> • responsible for responding to marine pollution incidents at terminals.

3. Prevention

The Department of Transport and Main Roads is committed to protecting Queensland's marine and coastal environment from the adverse effects of marine pollution. MSQ is responsible for developing strategies to prevent marine pollution and to mitigate its effects by:

- enforcing maritime pollution legislation in a manner that results in a high level of compliance
- developing, maintaining and implementing an appropriate regulatory framework for the safe movement and operation of vessels and ship-sourced pollution prevention in Queensland's coastal waters
- promoting a safety culture in recreational, commercial and trading ships operating in Queensland
- providing essential maritime services and waterways management for safe and sustainable access to Queensland waters.

3.1 Maritime Safety Queensland's role

MSQ is Queensland's marine pollution regulator under the *Transport Operations Marine Pollution Act 1995* (TOMPA) and, as such, delivers enforcement services that apply to all commercial and recreational vessels operating within Queensland's jurisdiction. Key activities include:

- informing the boating public on their legislative obligations
- inspecting recreational and commercial ships for compliance with relevant standards and legislative requirements
- investigating suspected breaches of legislation and, where applicable, taking compliance action
- provide public and industry awareness of the dangers of marine pollution on the environment through communication programs.

3.2 Port State Control

As part of the Port State Control (PSC) regime administered by AMSA, Marine Surveyors inspect trading ships visiting Australian ports to assess their safety and condition, and welfare of seafarers. Ships with identified deficiencies are detained until defects are rectified and it is safe for them to continue their voyage. This regime exerts a positive influence on the quality of ships visiting Australia.

3.3 Compulsory pilotage

There are four Commonwealth-regulated compulsory pilotage areas within the Great Barrier Reef and Torres Strait:

- the Inner Route (from Cape York to Cairns)
- the Great North East Channel
- Hydrographers Passage
- Whitsundays (Whitsunday Passage, Whitsunday Group and Lindeman Group).

In addition, under Queensland's legislation all ships 50 metres in length and over proceeding within a Queensland compulsory pilotage area must carry a licensed marine pilot or be under the command of a master who holds a pilotage exemption certificate for the area. Government-owned port corporations are responsible for management of regional pilotage services while MSQ retains responsibility for pilotage services at Brisbane, Southport and Abbott Point.

3.4 Great Barrier Reef and Torres Strait Vessel Traffic Service

The Great Barrier Reef and Torres Strait Vessel Traffic Service (REEFVTS) monitors vessel movements and provides ship traffic information, navigational assistance and maritime safety information to vessels operating in a defined area which includes waters of the Torres Strait and Great Barrier Reef.

REEFVTS uses radar, Automatic Identification System (AIS), Automated Position Reporting via Inmarsat C and VHF Reporting to compile a traffic image of shipping and provide ship traffic information and other navigational safety-related information to shipping within the REEFVTS waters, to reduce the likelihood of a ship grounding or other incident.

Oil tankers, liquefied gas carriers, chemical tankers, ships within the INF Code and ships 50 metres or greater in overall length are required to report to REEFVTS while operating within the REEFVTS area.

REEFVTS operates 24 hours a day from the REEFVTS centre in Townsville (radio call identity – REEFVTS, radio call sign VZQ 641).

3.5 Port Vessel Traffic Service

Ships calling at the ports of Brisbane, Gladstone, Hay Point, Mackay, Townsville, Weipa and Cairns are also required to report to Port VTS. This enables MSQ to monitor all shipping movements within VTS areas, advise ships' masters of special requirements about entry to, and use of, particular ports and to inform them of marine pollution prevention and control measures that apply within ports.

3.6 Aids to Navigation

MSQ and AMSA maintain a system of marine Aids to Navigation (AtoN) which accurately and reliably indicates the safest navigable waters for mariners. This minimises the risk of marine incidents in Queensland's coastal waters.

3.7 Navigation charts

The use of adequate and up-to-date nautical charts and publications is critical to safe ship operations and protection of the marine environment. Official nautical charts and publications can be obtained from the Australian Hydrographic Service and are official vector Australian Electronic Navigational Charts (AusENC) providing coverage of Australian and Papua New Guinea waters. They are authorised for use in International Maritime Organisation (IMO) compliant Electronic Chart Display and Information Systems (ECDIS). The Australian Hydrographic Service also publishes and updates official paper nautical charts providing coverage of the Australia Charting Area.

3.8 Ships' documents

Ships operating in Queensland's coastal waters are required to carry on-board the following documents aimed at preventing marine pollution:

Shipboard Oil Pollution Emergency Plan (SOPEP)

- All ships more than 24m in length overall carrying oil as cargo or a cargo that is carrying more than 400 litres of oil as cargo, or any ship more than 35m in length overall are required to carry a Shipboard Oil Pollution Emergency Plan (SOPEP).
- This plan is to assist personnel in dealing with an unexpected discharge of oil. The plan's primary purpose is to explain the necessary actions required to stop or minimize the discharge and to mitigate its effects.

Oil Record Book

- All ships that are an oil tanker with a gross tonnage of 150 or more; or ships, other than an oil tanker, that have a gross tonnage of 150 or more and carries oil in a portable tank with a capacity of 400 litres or has a gross tonnage of 400 or more, must carry on-board an Oil Record Book. It is mandatory for the masters of these ships to record all transfers or discharges of oil in their ship's oil record book.

Procedures and Arrangements Manual

- All ships with a gross tonnage of 150 or more that are certified to carry noxious liquid substances as defined in the International Bulk Chemical Code are required to retain on-board Procedures and Arrangements Manual.

Cargo Record Book

- All trading ships that carry liquid substances in bulk and are proceeding en route on an voyage other than an overseas voyage are required to carry on-board a certificate or declaration stating that the shipment is properly packaged, labelled and marked and that it is in proper condition for carriage to minimise the hazard to the marine environment.

Sewage Documentation Requirements

- All declared ships are required to carry on-board a shipboard sewage management plan, a sewage disposal record book, their sewage treatment system documentation and service manual, and all sewage treatment service records.
- All ships other than declared ships are required to carry on-board their sewage treatment system documentation and service manual and all sewage treatment service records.

Garbage Placard

- All ships of 12 metres or more in length overall are required to display a Garbage Placard.

Shipboard Waste Management Plan

- All ships with an overall length of 35 metres or that are designed to sleep 15 or more persons are required to carry on-board a shipboard waste management plan.

Compulsory Insurance

- All ships greater than 15 metres in length overall operating in Queensland's coastal waters are required to have pollution clean-up, salvage and wreck removal insurance. The monetary limits must specified on the certificate of insurance or another document and it is to be retained on-board.

4. Preparation

The Department of Transport and Main Roads prepares for ship-sourced marine pollution incidents by ensuring that communities, resources and services are available and capable of responding appropriately. This is done by establishing arrangements and plans, delivering training and education programs, testing procedures and capabilities through exercise programs, and the pre-positioning and maintenance of specialised equipment.

4.1 First-strike response deeds

The arrangements for first-strike response to ship-sourced pollution incidents that occur within Queensland ports are defined in Oil Pollution First-Strike Response Deeds between individual port authorities and the Queensland Government acting through Maritime Safety Queensland, a branch of the Department of Transport and Main Roads. Under the terms of the Deeds individual port authorities are responsible for:

- ensuring oil transfer operations are monitored by appropriately qualified personnel
- providing adequately trained personnel and equipment for the first-strike response to oil spills
- storing and maintaining first-strike response equipment within ports.

These responsibilities complement MSQ's related responsibilities which include:

- developing oil spill contingency plans for ports
- training nominated response personnel
- conducting exercises to refine and test response arrangements
- performing regular audits of response capacity within ports.

MSQ and the Gold Coast Waterways Authority have a similar agreement, dated 14 May 2013, for which the Gold Coast Waterways Authority will provide oil pollution first strike responses within the limits of the Gold Coast Waterways as defined in the *Gold Coast Waterways Authority Act 2012*.

4.2 Memorandums of Understanding

Queensland's marine pollution response arrangements are supported by the following Memorandums of Understanding:

- a Memorandum of Understanding between MSQ and the Queensland Fire and Emergency Service (QFES) on response to ship-sourced spills of oil and hazardous and noxious substances, dated 13 May 2015.
- a Memorandum of Understanding between Queensland Transport (now the Department of Transport and Main Roads) and the Department of Environment and Resource Management (now DES) regarding response to land-sourced oil spills impacting on Queensland's coastal waters dated 7 January 2000.
- a Protocol agreement between Main Roads, Queensland Transport (now the Department of Transport and Main Roads) and the Local Government Association of Queensland (LGAQ) designed to facilitate ongoing cooperation and participation by both levels of government in the planning, construction, maintenance, operation and management of road and transport infrastructure and services.

4.3 Stakeholder awareness

A marine pollution incident response requires the coordinated engagement of stakeholders including, but not limited to, local, state and commonwealth governments, port authorities, shipping, industry, traditional owners and the community. Regular stakeholder liaison maintains appropriate levels of stakeholder awareness and response preparedness.

Stakeholder awareness is achieved through:

Strategic level

- the Director-General, Department of Transport and Main Roads, as a member of the SDCG, providing SDCG members with periodic briefings on Queensland's marine pollution response arrangements
- the General Manager, Maritime Safety Queensland periodically liaising with the designated Queensland Police Service (QPS), and if appointed, the State Disaster Coordinator (SDC) to discuss Queensland's marine pollution response arrangements
- the General Manager, Maritime Safety Queensland maintaining regular contact with AMSA and GBRMPA to discuss marine pollution incident response preparedness.

Operational level

- the Department of Transport and Main Roads' Transport Network Security and Resilience section coordinating the department's involvement with the SDCG and arranging with MSQ to provide periodic briefings to the SDCG on Queensland's 'hazard specific' marine pollution response arrangements
- Regional Harbour Masters regularly liaising with relevant DDMGs on disaster management arrangements in support of a marine pollution response, and relevant First-Strike Response Plans

Tactical level

- the Department of Transport and Main Roads Transport Network Security and Resilience section, in conjunction with MSQ, periodically briefing LDMGs on Queensland's marine pollution response arrangements and the role of local governments.

4.4 Training

Effectively managing a response to a marine pollution incident requires technical proficiency acquired through training and experience.

AMSA and MSQ provide training in marine pollution response techniques across three levels:

- Level 1 – operator level personnel including oil spill equipment operators, shoreline assessors and responders, and finance personnel
- Level 2 – incident management team personnel responsible for planning and implementing response operations, for example, Incident Controllers, their deputies and section heads, Environment and Scientific Coordinators, and hazardous materials specialists.
- Level 3 – senior government and industry personnel responsible for strategic level decision making in the management marine pollution incidents.

For more information on marine pollution response training contact MSQ's Environment and Incident Response team by email pollution.response.training@msg.qld.gov.au.

4.5 Exercising

Queensland's marine pollution response plans are exercised regularly to:

- continually assess the efficacy of the arrangements
- identify opportunities to improve incident response arrangements
- establish and strengthen relationships across relevant response agencies
- ensure stakeholders have a thorough and common understanding of:
 - command, control and coordination arrangements;
 - roles and responsibilities of stakeholder agencies; and
 - marine pollution response procedures, issues and considerations.

Exercises can be conducted at three broad levels:

- Field Exercises are the most complex types of exercises. They involve the development and tactical implementation of response plans and the deployment of trained personnel and equipment resources in a field situation.
- Desk Top Exercises involve members of the Incident Management Team and other specialist advisors in the development of incident action plans for various components of the required response.
- Discussion Exercises are scenario based and are designed to raise awareness of the roles and responsibilities of various stakeholders.

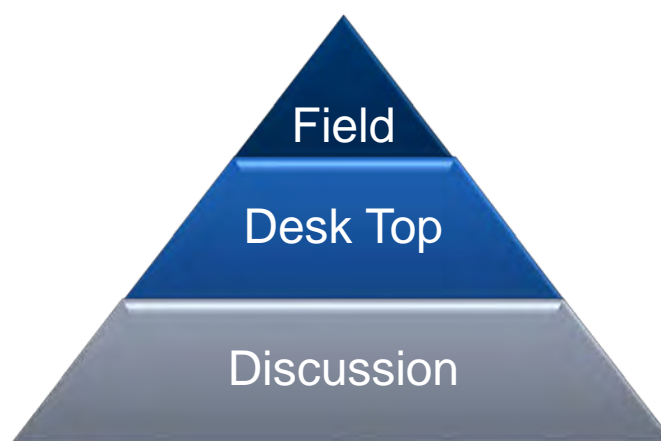


Figure 3 Exercise types

As a minimum:

- MSQ will conduct a high level multi-agency exercise at least annually to test marine pollution response arrangements involving disaster management support
- MSQ will regularly exercise First-Strike Response Plans and involve relevant port authorities, LDMGs and DDMGs as appropriate
- relevant Queensland agencies (including disaster management response agencies) should participate in national or other marine pollution response exercises as appropriate.

4.6 Response personnel

As outlines in section 2.6 , there are a range of stakeholders that participate. A list of marine pollution response management personnel and other key stakeholders may be found at Appendix 1. For privacy reasons Appendix 1 is not available for general publication. Lists of appropriately trained and qualified operational and tactical level personnel are maintained by individual stakeholders.

4.7 National Response Team

On activation of the National Plan, the IC or the MPC may, if the size or complexity of the emergency warrants it, submit a request to AMSA for personnel from other states and NT to assist with the incident response, for example to fill positions in the Incident Control Centre or incident response team.

A request should be made initially through the Joint Rescue Coordination Centre, AMSA. This request must be followed by written confirmation within three hours of the verbal request. During extended responses AMSA may appoint an officer to coordinate inter-state deployments and will advise the IC and the MPC accordingly.

The following information is to be provided when making such a request:

- roles or skills required, for example Planning Officer, Aerial Observer
- number of personnel required to fill each role
- preferred start date
- contact name, address, and time of where personnel are to initially report
- brief overview of the work to be undertaken.

Suitable personnel will be selected by AMSA from the National Response Team (NRT) or the National Response Support Team (NRST), unless special circumstances exist.

The maximum release period is 10 days (including travel time) as per the National Response Team Policy, unless both AMSA and the NRT/NRST member's organisation reach a separate agreement. Where an extension on deployment is being sought, the requesting agency is to provide details on how the health and safety of the individual/s is to be managed.

Personnel will remain in the employment of their own agency and all entitlements in relation to their contract of employment remain unchanged.

4.8 Charter and use of vessels

Marine pollution response operations often involve the charter of vessels of opportunity for various tasks including monitoring, dispersant application and effectiveness testing, oil spill containment and recovery, and various other tasks such as accommodation or command and control platforms. Any vessel that is chartered must be commercially registered and suitable for its intended purpose.

4.9 Charter and use of aircraft

A critical element of efficient and effective response to marine pollution incidents is understanding and conveying situational awareness which can be greatly enhanced by the accurate and timely gathering and dissemination of critical incident intelligence. The most effective means of gathering incident intelligence is to deploy qualified and experienced aerial observers, in either fixed or rotary wing aircraft, to overfly the site of an incident, gather information, verify facts and report back to the incident management team.

Aviation assets can be obtained through the Queensland state air desk operated by Queensland Fire and Emergency Services.

The use of drones to gather intelligence can also be effective especially in locations that are difficult to access by foot.

4.10 Oil spill response equipment

At the local level, all Queensland ports are equipped with a small stockpile of first-strike oil spill response equipment. This equipment is owned by individual port authorities and oil companies and is not generally available for use outside of port limits. In addition, there are stockpiles of first-strike response equipment at the MSQ marine operations base on the Sunshine Coast and the Gold Coast Waterways Authority (GCWA). Minor stocks of equipment, mainly oil absorbents, are also located in Queensland Government owned boat harbours at Manly, Tin Can Bay, Urangan, Rosslyn Bay and Bowen.

Regional stockpiles of oil spill response equipment, owned and maintained by MSQ, are located at six strategic locations along the Queensland Coast including Brisbane (Pinkenba), Gladstone, Mackay, Townsville, Cairns, and Thursday Island in Torres Strait (see Appendix 31).

At a national level AMSA owns and maintains two stockpiles of National Plan oil spill response equipment located in Brisbane and Townsville, as well as stockpiles in other States and the NT. Access to National Plan equipment is through the Joint Rescue Coordination Centre, AMSA.

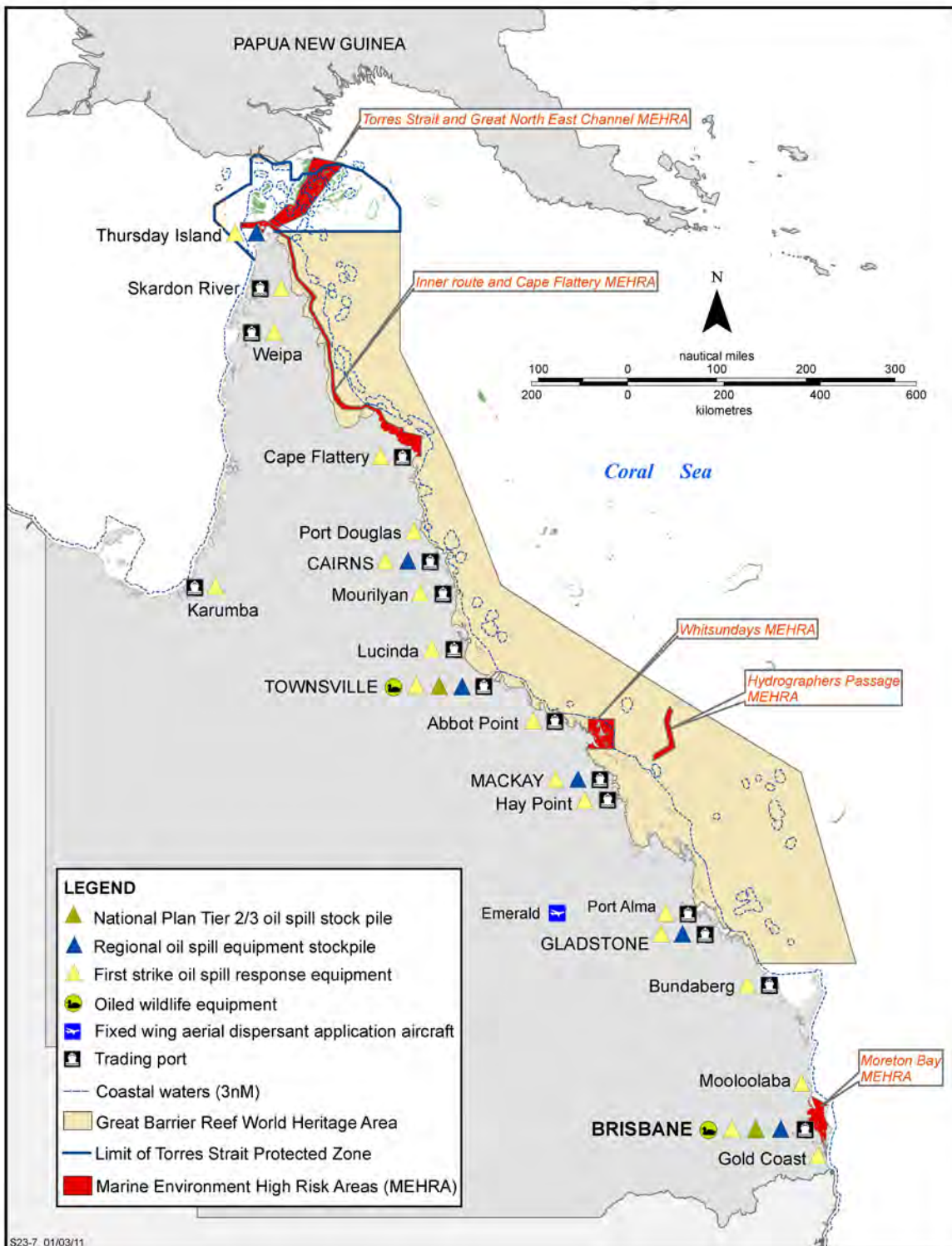


Figure 4 Marine pollution equipment locations

4.11 Aerial dispersant spraying arrangements

As manager of the National Plan, AMSA has developed and jointly funded with the Australian Institute of Petroleum (AIP), through AMOSC, a Fixed Wing Aerial Dispersant Capability (FWADC) for oil spills in the marine environment. Based on the concept of utilising large agricultural fixed wing aircraft to apply oil spill dispersants, the FWADC is designed to complement dispersant spraying arrangements using helicopters, which are typically confined to inshore work.

Under the contract arrangements six aircraft are strategically located to provide full coverage of the Australian coastline. The aircraft are located in:

- Ballarat, Victoria
- Adelaide, South Australia
- Ballidu, Western Australia
- Batchelor, Northern Territory
- Emerald, Queensland
- Moree, New South Wales.

Activation of the FWADC is through Joint Rescue Coordination Centre, AMSA. Each aircraft is available to depart within four hours of activation, twenty-four hours per day, seven days per week. In addition, AMSA will also activate an Airbase Manager and loading crew to manage the aircraft and load dispersant into the aircraft.

4.12 Waste disposal arrangements

Typically the waste generated during a response is classified as regulated waste and needs to be managed in accordance with the appropriate environmental regulations. DES regulates waste management organisations across Queensland and maintains a list of certified waste disposal operators that could be utilised to support a marine pollution incident response.

5. Response

5.1 Incident Classification

In line with both the National Plan and AIIMS-4 marine pollution incidents are classified to provide guidance for agency readiness levels, incident notifications, response actions and potential response escalation. The three levels of incidents are as follows:

- **Level 1 incidents** are generally able to be resolved through the application of local or initial resources only
- **Level 2 incidents** may be more complex either in size, duration, resources or risk. They are characterised by the need for:
 - deployment of resources beyond initial response; or
 - development of discrete areas of operations for the incident; or
 - the establishment of functional sections due to the levels of complexity; or
 - a combination of the above.
- **Level 3 incidents** are characterised by degrees of complexity that may require the establishment of divisions for effective management of the situation. These incidents will usually involve delegation of all functions.

Consistent with AIIMS, the National Plan employs a scalable approach to incident classification, noting that simple thresholds pose the risk of arbitrary decisions.

Figure 5 provides a non-exhaustive list of the general characteristics of each of the three levels. During a response these characteristics can be used to evaluate and adjust the response accordingly.

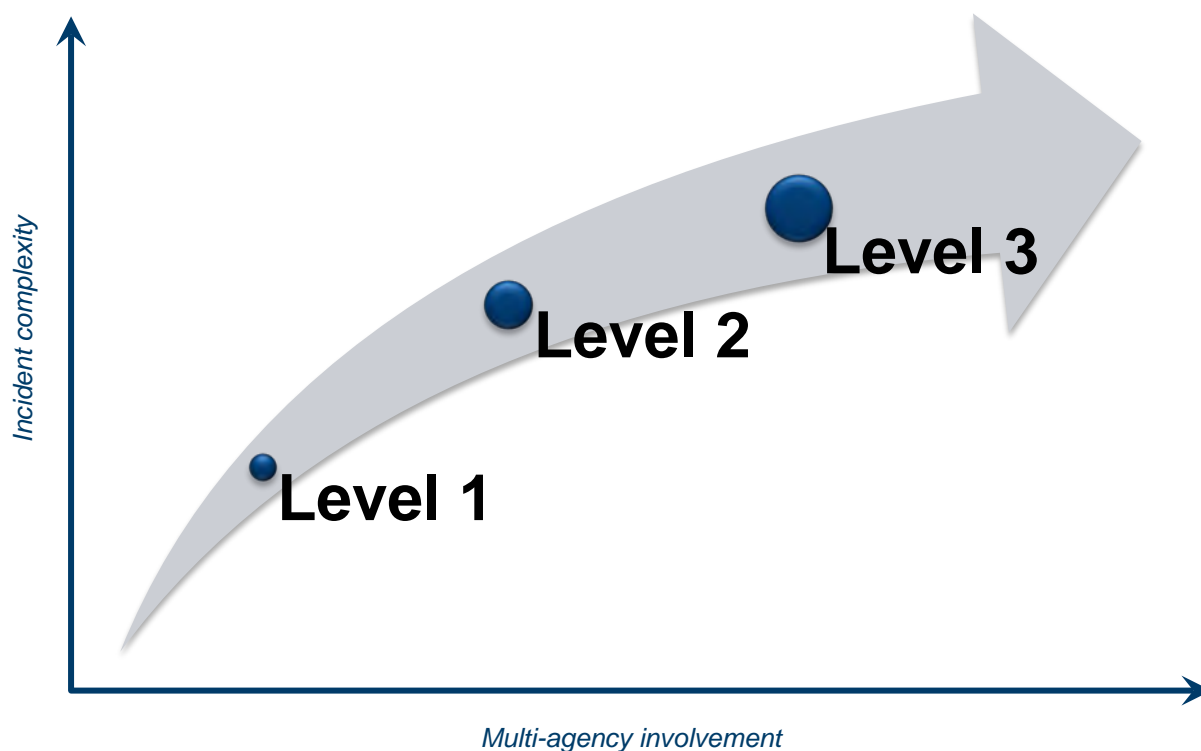


Figure 5 Levels of response activation

Table 3 Guidance for incident classification

Characteristic	Level 1	Level 2	Level 3
Management			
Delegation	Incident Controller responsible for all functions	Some functions delegated or Sections created	All functions delegated and/or divisions created.
Boundaries	Single jurisdiction	Multiple jurisdictions	Across jurisdictional boundaries including international
Incident Action Plan	Unwritten	Outline	Detailed
Resources	Initial responders and local resources from first response agencies	Requires additional resources including neighbouring and intra-state resources	Requires national or international resources
Type of Incident			
Size	Small	Medium	Large
Type of Response	First strike	Escalated response	Campaign response
Duration	Single shift	Multiple shifts Days to weeks	Extended response Weeks to months
Values at Risk			
Human	Potential for serious injuries	Potential for loss of life	Potential for multiple losses of life
Environment	Isolated impacts or with natural recovery expected within weeks	Significant impacts requiring recovery actions. Remediation likely	Severe impairment of landscapes. Recovery may take months. Remediation required.
Wildlife	Individual fauna	Groups of fauna or threatened fauna	Large numbers of fauna
Economy	Disruptions at business level	Potential for business failure	Significant disruption to a sector
Social	Reduced services	Ongoing reduced services	Reduced quality of life
Infrastructure	Shore-term failures	Mid-term failures	Severe impairment of landscapes
Public Affairs (Administration)	Local and regional media coverage	State media coverage	National and international media coverage

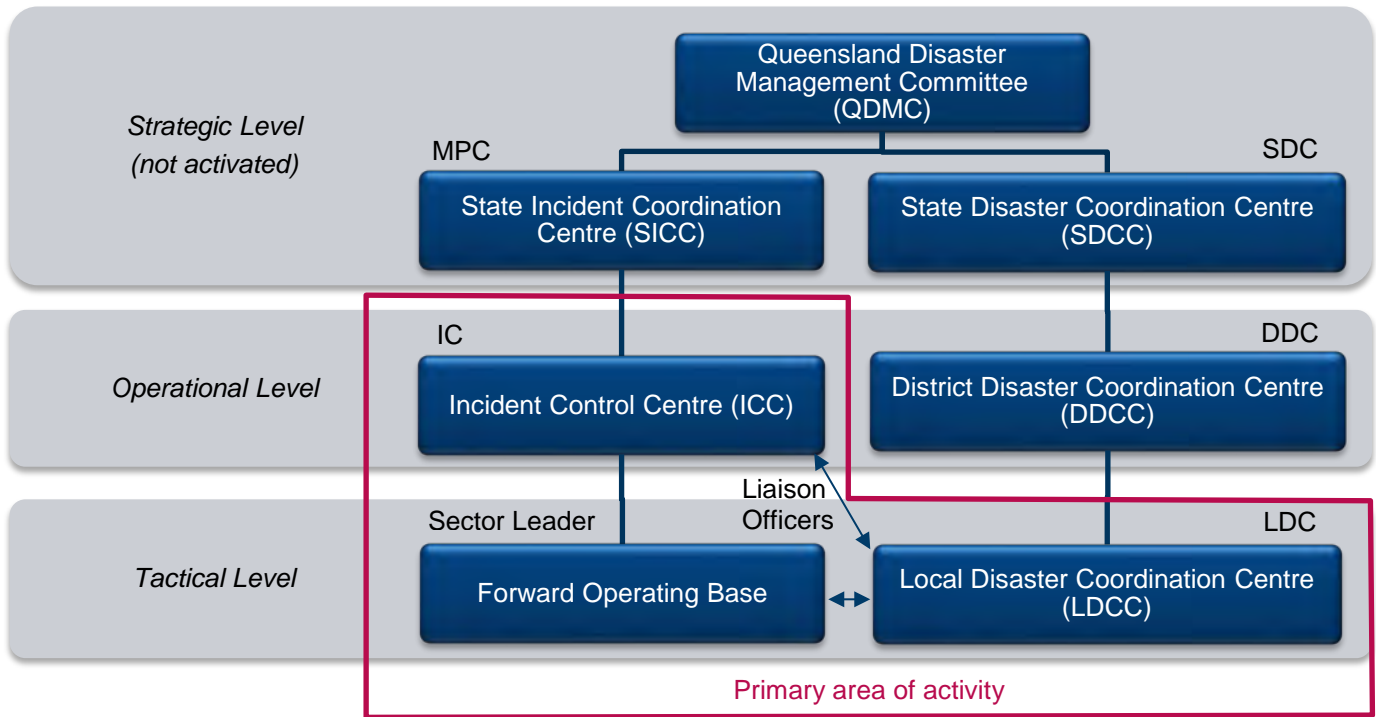


Figure 6 Level 1 Incident Response Command and Control Structure

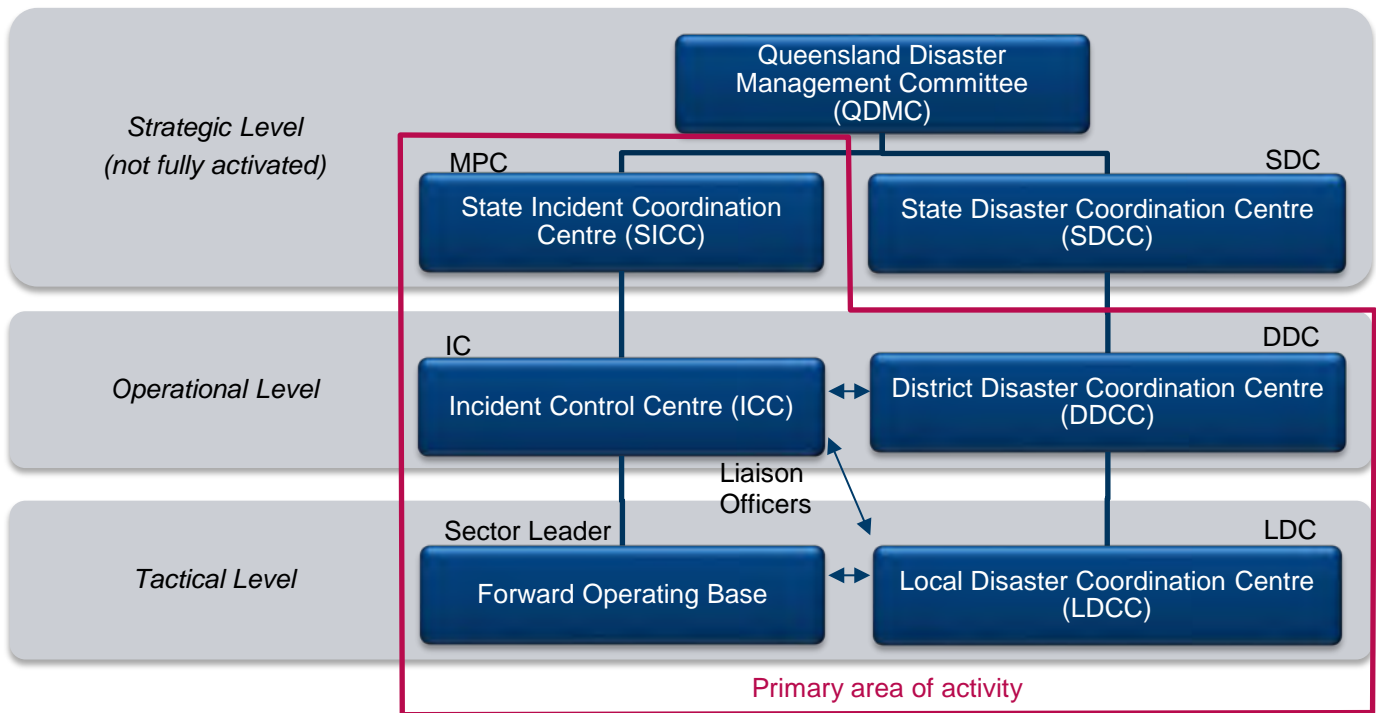


Figure 7 Level 2 Incident Response Command and Control Structure

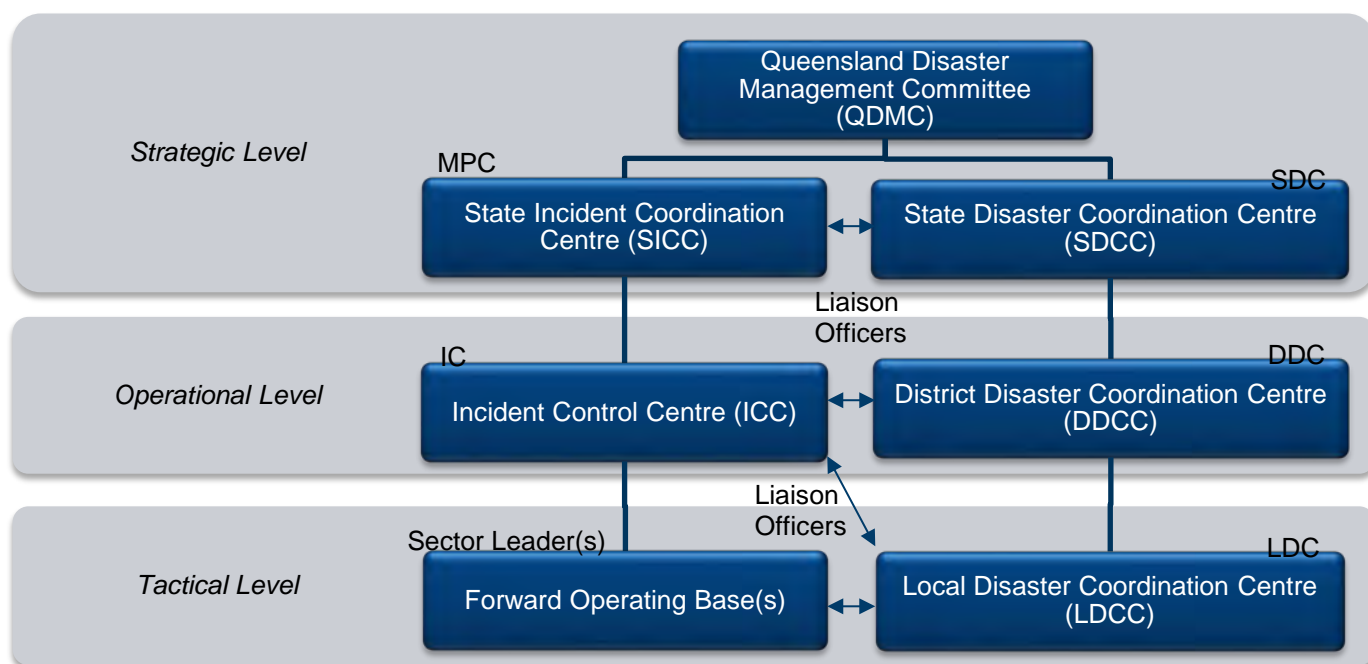


Figure 8 Level 3 Incident Response Command and Control Structure – full activation

Table 4 Command and Control Structure – Explanatory Notes

Control/Coordination Centres	
SICC	<ul style="list-style-type: none"> activated to provide strategic direction to the incident response manages strategic level liaison with Commonwealth agencies, other external stakeholders (e.g. Protection & Indemnity Club, salvors, vessel owners etc.) and coordinates involvement of marine pollution agencies in the incident response led by MPC collaborates with SDCC to coordinate strategic disaster management support to the incident response liaises with control agency as required
SDCC	<ul style="list-style-type: none"> activated to coordinate state-level resources in support of the incident response liaises with DDC to provide state-level resources and support operations, as required, to DDCC led by a nominated QPS Officer staffed by members of the State Disaster Coordination Group (SDCG)
ICC	<ul style="list-style-type: none"> activated to manage all operational aspects of incident response, including functions identified in the AIIMS-4 structure. led by the Incident Controller (IC) who liaises with DDC to coordinate operational and tactical level disaster management support resources staffed in accordance with the AIIMS-4 structure by members allocated from the marine pollution response agencies, DDMGs, LDMGs, other agencies as appropriate
DDCC	<ul style="list-style-type: none"> activated to coordinate regional disaster management resources to support operational response as requested by the ICC led by the DDC (nominated QPS officer) staffed by members of the DDMG maintains 'for information' communication links with SDCC

Control/Coordination Centres	
LDCC	<ul style="list-style-type: none"> activated to provide local disaster management support to the incident response, as requested by the ICC allocates resources to FOBs as required requests support from DDCC as required led by LDC (Local Council Chief Executive Officers or nominated officer) in collaboration with DDC staffed by members of LDMG as required may be amalgamated with (subsumed into) DDCC to centralise resources
FOB	<ul style="list-style-type: none"> implements operational plans developed by Planning Section in the ICC to undertake tactical operations within a defined geographic boundary (e.g. sector) provide reports to the Planning Section within the ICC to assist planning led by Sector Leader who reports to the Operations Manager in the ICC staffed by personnel from marine pollution response agencies, LDMGs/DDMGs, other agencies as appropriate (for example, RoadTek)

Table 5 Roles and Positions – Explanatory Notes

Roles/Positions	
QDMC	<ul style="list-style-type: none"> Chaired by the Premier of Queensland, or nominee. The Committee's purpose is to provide clear and unambiguous senior strategic leadership in relation to disaster management across all four phases in Queensland. The Committee facilitates communication between the Premier and relevant Ministers and Directors-General before, during and following disasters. The functions of the QDMC are prescribed in the Act (s18). These are: <ul style="list-style-type: none"> (a) to develop a strategic policy framework for disaster management for the State; (b) to ensure effective disaster management is developed and implemented for the State; (c) to ensure arrangements between the State and the Commonwealth about matters relating to effective disaster management are established and maintained; (d) to identify resources, in and outside the State, that may be used for disaster operations; (e) to provide reports and make recommendations that the State group considers appropriate about matters relating to disaster management and disaster operations; (f) to prepare, under section 49, the State disaster management plan; (g) to coordinate State and Commonwealth assistance for disaster management and disaster operations; (h) to perform other functions given to the group under this or another Act; (i) to perform a function incidental to a function mentioned in paragraphs (a) to (h).
SDC	<ul style="list-style-type: none"> Appointed by the Chairperson of the QDMC under s.21B of the <i>Disaster Management Act 2003</i>. By default the SDC will be a Deputy Commissioner of Police. When appointed, the SDC will: <ul style="list-style-type: none"> – coordinate disaster response operations for the QDMC – report regularly to the QDMC about disaster response operations – ensure, as far as reasonably practicable, that any strategic decisions of the QDMC about disaster response operations are implemented – provide strategic advice on disaster response operations to DDCs. Liaise with the Marine Pollution Controller
MPC	<ul style="list-style-type: none"> General Manager of Maritime Safety Queensland, appointed under Section 93A of TOMPA to direct and coordinate the state response to all marine pollution incidents Provides strategic direction to the incident response and to the IC/ ICC Is supported by the SICC Liaises with the SDC or nominated Senior QPS Officer/SDCC on strategic level disaster management support issues and requirements.

IC	<ul style="list-style-type: none"> • Relevant Regional Harbour Master or nominated person • Manages all operational aspects of the incident response including managing the marine casualty, ships owner liaison etc. • Leads the IMT and is supported by the ICC • Liaises with the DDC to coordinate operational level disaster management support to the incident response • Liaises with the LDC to task LDMG resources
DDC	<ul style="list-style-type: none"> • Liaises with IC to identify and coordinate disaster management support requirements • Leads the DDMG and provides support to the LDC/LDCC • Liaises with nominated Senior QPS Officer on disaster management support issues
LDC	<ul style="list-style-type: none"> • Leads the LDMG and assigns resources as requested by the IC to support incident response operations • Liaises with the DDC to source additional resources as required • Addresses issues local level and advises DDC and IC
Sector Leader	<ul style="list-style-type: none"> • Supervises all Forward Operations Base operations • Implements plans developed by the Planning Section of the ICC • Reports to the Operations Manager in the ICC
Liaison Officers	<ul style="list-style-type: none"> • Appointed to control/coordination centres to link disaster management and marine pollution response • Disaster management representative appointed to ICC (and SICC if appropriate) to advise on disaster management issues and to interpret requests going to SDCC/DDC/LDC • Pollution spill representative appointed to DDMG (and SDCC and LDMG if appropriate) to advise on pollution response issues and to interpret requests going to SICC/ICC

5.1.1 Coordination arrangements

Strategic level coordination

Subject to the level of incident, strategic level coordination is achieved by:

- the Queensland Police Service (QPS) and if appointed, the State Disaster Coordinator (SDC) officer responsible for disaster management coordination:
 - attending the SICC and participating in strategic direction setting and decision making
 - providing strategic coordination of disaster management resources, through liaison with the SDCC, to support the marine pollution incident response.
- the Marine Pollution Controller (MPC), Queensland Police Service (QPS) and if appointed, the State Disaster Coordinator (SDC) collaborating and communicating regularly to address:
 - strategic disaster management support issues to assist marine pollution response efforts
 - whole-of-event issues to assist the MPC to develop whole-of-event strategies and plans, as required
 - strategic disaster management support requirements, which are relayed to the SDC/senior QPS liaison officer appointed to the SDCC.

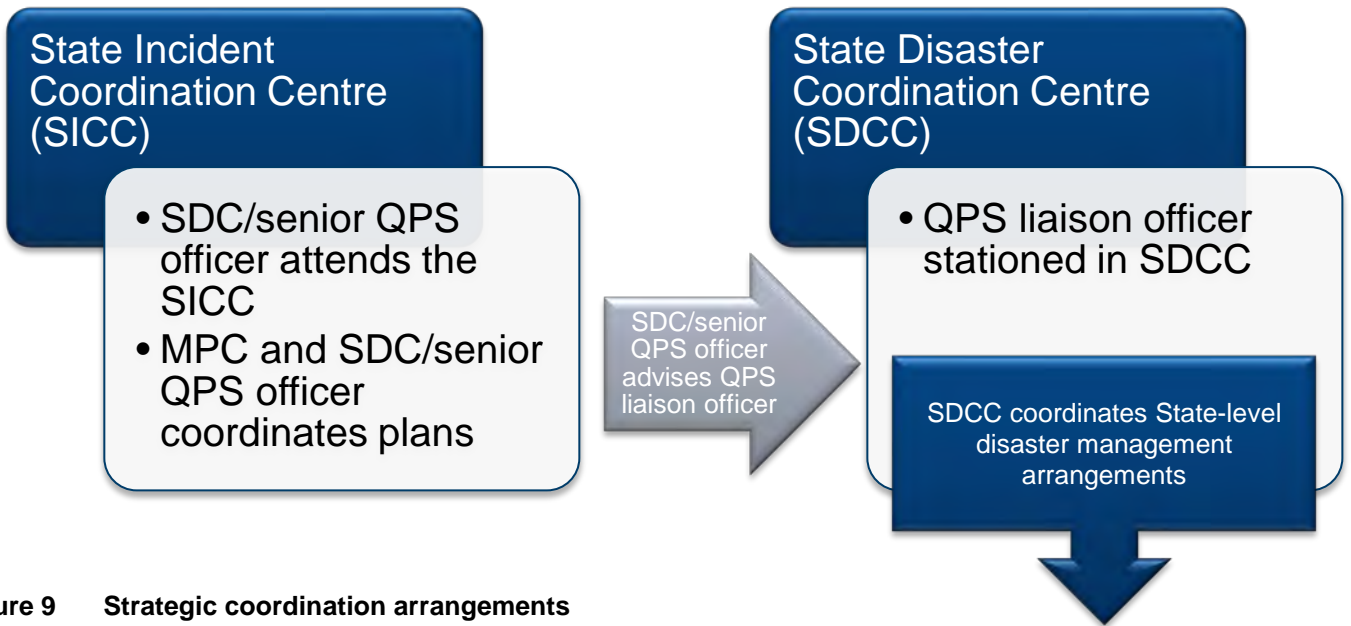


Figure 9 Strategic coordination arrangements

Operational level coordination

Operational level coordination is achieved by:

- a senior QPS liaison officer appointed to the ICC and a senior TMR liaison officer appointed to the DDCC to provide advice and ensure effective ICC/DDCC coordination and cooperation
- the DDC attending the ICC for critical meetings and the IC and DDC collaborating and communicating regularly to ensure effective coordination of disaster management support to the marine pollution response
- personnel performing specific functions in accordance with the AIIMS-4 structure.

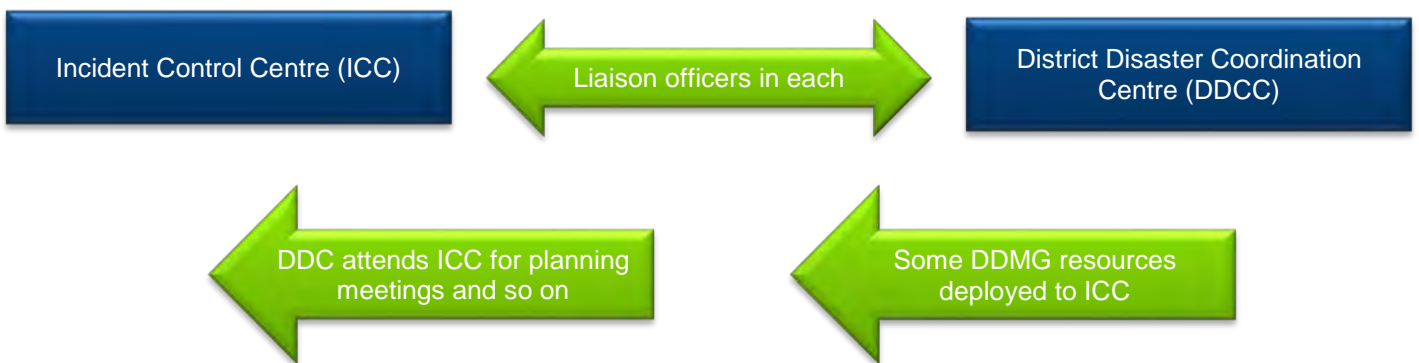


Figure 10 Operational coordination arrangements

Tactical level coordination

Tactical level coordination is achieved by:

- local resources including local government, SES and state government personnel assigned to geographic sectors, under the direction of the relevant Sector Leader in charge of the relevant Forward Operations Base, to implement plans developed by the ICC. Resource allocations are coordinated through the DDCC (DDC) in consultation with the ICC (IC).



Figure 11 Tactical coordination arrangements

5.2 Incident response process

The response to a marine pollution incident will usually involve a number of agencies and be based on a standard approach, tailored to suit the situation and associated circumstances. The generic incident response process is outlined in Figure 12 below, noting that the process is not linear, for example, many activities may commence concurrently and situational awareness is regularly updated.

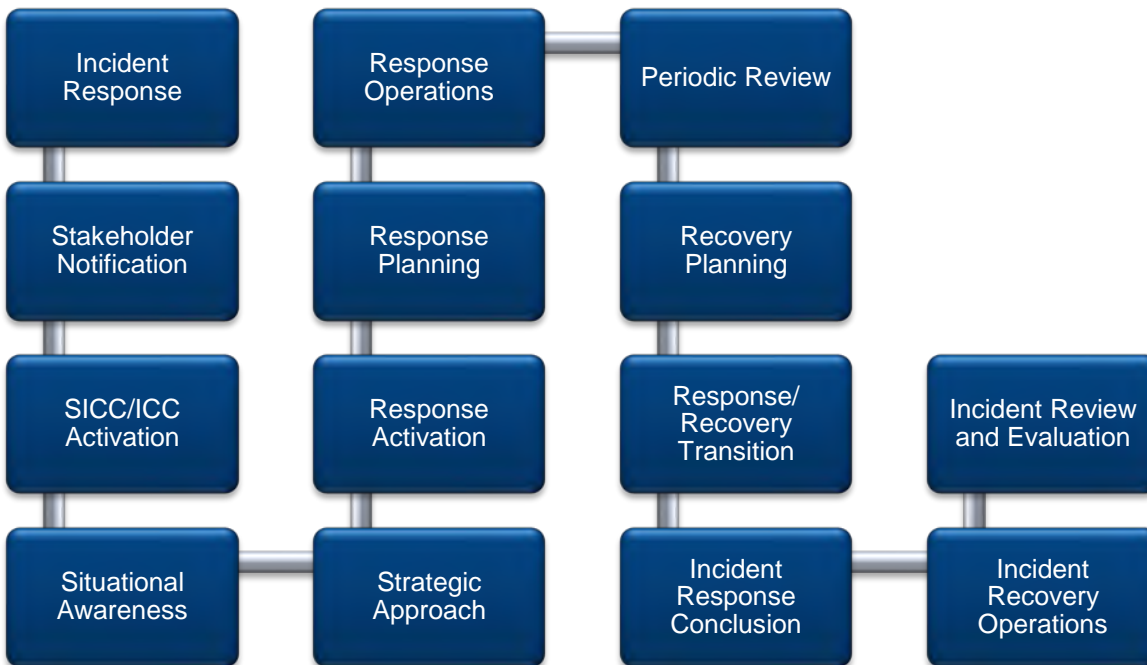


Figure 12 Incident response process

5.3 Incident reports

The MPC is responsible for the overall management of a marine pollution incident. The MPC may be notified of a marine pollution incident or potential marine pollution incident through multiple information channels (telephone call, Pollution Reports (POLREPs), issues alerts) from relevant stakeholders which could include:

- Joint Rescue Coordination Centre, AMSA
- REEFVTS
- Regional Harbour Master or Port staff
- members of the public
- Queensland's Disaster Management system
- other government agencies.

5.4 Stakeholder notification

On receipt of an incident report, the MPC/IC will immediately notify stakeholders and, if appropriate, initiate activation of the SICC and IC.

Once notified, stakeholders are expected to forward the notification of the marine pollution incident to their relevant stakeholders, as indicated in Figure 13.

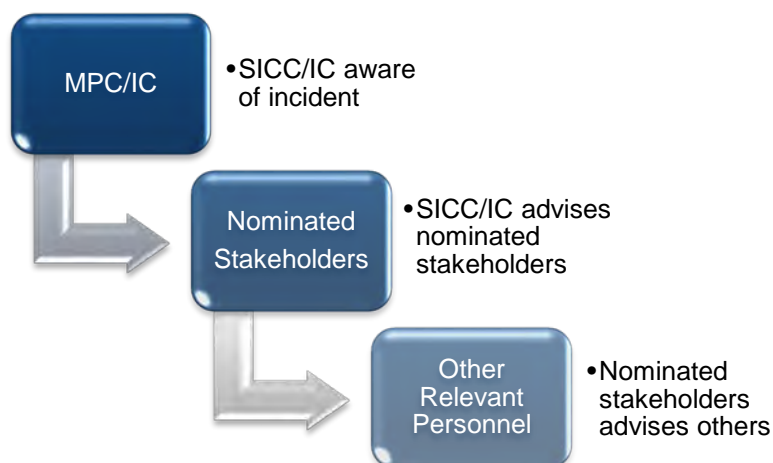


Figure 13 Stakeholder notification

Note:

Notification to relevant disaster management agencies will be via normal disaster management notification arrangements, initiated by the SDCC.

Notification of relevant local stakeholders will be via the ICC.

Some stakeholders may receive notification from multiple sources.

5.5 SICC and ICC Activation

As a general principle:

- Upon notification of a reported marine pollution incident or potential marine pollution incident (Levels 1-3) the relevant Regional Harbour Master will immediately assume the role of Incident Controller (IC) and activate an Incident Control Centre (ICC) as a precautionary measure. The degree of activation may be constrained (where the incident reports indicate a minor incident) until incident details are confirmed and may be subsequently scaled up or down as required.
- Upon notification of a significant marine pollution incident or potentially significant marine pollution incident (Levels 2-3) the MPC will activate the State Incident Coordination Centre (SICC) core group. For minor incidents (Level 1), the MPC will maintain a 'watching brief' and will activate the SICC (Core) in the event of an incident escalation.

5.5.1 State Incident Coordination Centre

The SICC is established for the duration of the incident response to provide strategic management of a marine pollution incident response. When activated, the SICC provides administrative, decision-making and communication support to the MPC, and is the focal point for the strategic oversight of the incident response and crisis management.

The SICC is generally located in a designated meeting room within MSQ's offices.

Membership of the SICC is scalable and will be expanded or contracted to suit the incident level and response phases. In general, the membership comprises a 'core' group which is activated for Level 2 incidents and is 'expanded' for Level 3 (see Figure 14).

If for any reason access to the designated SICC location is not possible a SICC can be established at either the MSQ marine operations base at Pinkenba or the State Disaster Coordination Centre at Kedron.

Core of SICC

- MPC (GM, MSQ)
- Principal Advisor (MSQ)
- strategic environmental adviser (DES/GBRMPA scientific adviser)
- Media Adviser (TMR Media Director)
- administrative support staff

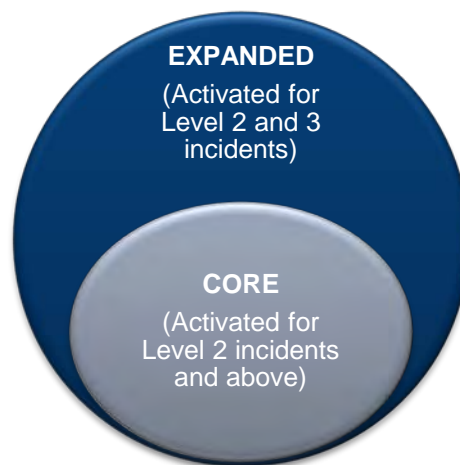


Figure 14 SICC Membership

Expanded SICC

- TMR liaison: Chief (Transport Network Security and Resilience)
- SDC (if appointed)/ Disaster Management Strategic Coordinator (nominated senior QPS officer)
- a representative of AMSA and/or GBRMPA
- legal advisers (TMR)
- Policy advisers (TMR)
- vessel owner representative (if appropriate)
- scientific advisory panel⁵ (if appropriate)
- chemical environmental adviser (QFES for chemical incidents), if required

5.5.2 Incident Control Centre

The ICC is established for the duration of the incident response in a suitable location (normally in a designated room in a relevant MSQ regional office) in close proximity to the incident, if possible. The ICC is led by the IC who is responsible for the management of all aspects of the incident response at the operational level.

5.5.3 Australasian Inter-Service Incident Management System

The IC is supported by the Incident Management Team (IMT). The incident management system used for the management of marine pollution events in Australia is consistent with the fourth edition of the Australasian Inter-service Incident Management System (AIIMS-4). The system is designed to be adaptable to the incident. AIIMS-4 lists seven major functions under which it is possible to group the tasks that need to be undertaken during a marine pollution incident:

⁵ Scientific Advisory Panel is a group of independent scientists convened as required, at the instigation of the MPC through liaison with the SDMG, to provide independent scientific advice to assist the incident response and recovery.

- planning - responsible for the preparation and delivery of plans and strategies, and maintaining a resource management system
- intelligence - responsible for the collection of and processing of information; organising and displaying intelligence in a Common Operating Picture
- public information - responsible for obtaining, assembling and preparing incident information in a manner suitable for dissemination to the public and other stakeholders; issuing warnings and alerts; liaising with local communities affected by the incident
- operations - responsible for managing resources allocated to resolve the incident
- investigation – responsible for identifying the investigating the cause of the incident, identifying the polluter, and collecting evidence
- logistics – responsible for obtaining and maintaining human and physical resources, facilities, services and materials
- finance – responsible for maintaining personnel records; and contract management and equipment record keeping

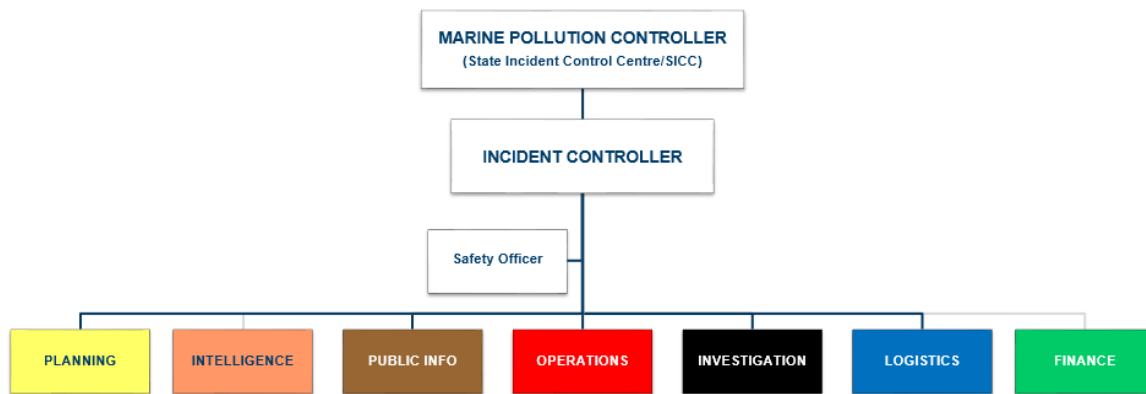


Figure 15 AIIMS-4 Structure

The number of staff required to fill positions in the AIIMS-4 structure can be varied according to the size and complexity of the incident. In a major incident, all functional area may be operational with numerous positions within each cell, but in a lesser incident one person may fill several positions (Figure 15).

The full AIIMS-4 structure is at Appendix 2.

5.6 Forward operating bases

Forward Operations Bases (FOBs) are established, as required, by the Operations Officer in the ICC, in consultation with the IC, to implement Incident Action Plans developed by the ICC, within a defined geographic sector. Multiple FOBs can be established, if appropriate, to conduct operations over a wide geographical area. FOBs are led by Sector Leaders who report to the Operations Officer in the ICC. FOBs are tasked by, and resourced through, the ICC and are staffed by relevant personnel from local government (LDMGs), SES, Queensland’s Government agencies, NRT, etc.

5.7 Situational awareness

The ICC (in conjunction with the SICC, if activated) will establish early situational awareness of the marine pollution incident as a priority. This may include a combination of the following:

- receiving reports from:
 - relevant marine agencies, for example AMSA, GBRMPA, harbour masters, REEFVTS
 - relevant disaster management agencies, for example DDCC, local governments, TMR, QPS
 - other key stakeholders, for example vessel master or ship's owner
 - media and members of the public.
- deploying resources to survey the incident site, for example chartering surveillance aircraft or surface vessels, deploying MSQ vessels.

5.8 Strategic approach

As a priority, the MPC (in conjunction with the SDC, if appointed) will engage members of the SICC and relevant stakeholders in a strategic assessment of the incident, to identify issues and to develop a strategic approach to the incident response, including the development of incident response objective(s).

A collaborative, multi-agency, team-based approach to developing the strategic approach (particularly in large-scale, complex incidents) will generate commitment and help to identify all issues to be addressed in the incident response.

5.8.1 Strategic assessment

A strategic assessment will include:

- identifying the possible and likely scenarios that may unfold during the incident response
- identifying the impacts, stakeholders and issues associated with the most likely scenarios
- identifying strategic resource requirements of the incident response

Appendix 3 provides a guide to the strategic assessment process.



Figure 16 Strategic assessment

5.8.2 Incident management strategy

The information developed in the strategic assessment will inform the development

- of a high-level overview of how the marine pollution response will be managed (strategic approach) which is articulated in an Incident Management Strategy document.
- The incident management strategy will provide a common understanding of the:
 - incident context and stakeholders impacted
 - issues, risks and proposed mitigations
 - agreed incident response objectives and priorities
 - agency activation levels
 - high level command, control and coordination arrangements (including liaison arrangements and identification of control, support and supporting agencies)
 - level of disaster management support anticipated.

An Incident Management Strategy template is at Appendix 4.

The Incident Management Strategy should be endorsed by the jurisdictional authority and disseminated to all stakeholders of the marine pollution incident response.

The Incident Management Strategy should be periodically reviewed and updated/re-promulgated, as required, to reflect changes to the incident response context.

5.8.3 Protection priorities

The strategic approach should be cognisant of the protection priorities outlined below in priority order:

- (1) preservation of human life, health and safety
- (2) preservation of cultural resources
- (3) preservation of habitat
- (4) protection of threatened flora and fauna
- (5) protection of commercial resources
- (6) protection of amenity resources.

The chosen strategic approach should be guided by the protection priorities, balanced against the probability of success; noting that in some circumstances resources may be best applied to lower priority areas with a high likelihood of success, rather than higher priority areas where there is little or no chance of success.

5.9 Response activation

The MPC will formally activate the incident response by advising the Director-General, Department of Transport and Main Roads, the jurisdictional authority and other relevant stakeholders including AMSA, SDCC, DES and GBRMPA.

The MPC is responsible for determining the degree of incident response activation and the high level command and control structure to be implemented for the incident response. This may be decided in collaboration with the IC, and SDC (if appointed)/senior QPS nominated officer, and will be informed by the strategic assessment process.

Response agencies will be activated in accordance with the four phase model used in Queensland's disaster management arrangements.

Table 6 Levels of activation

Level	Definition
Alert	A heightened level of vigilance and preparedness due to the possibility of an event in the area of responsibility. Some action may be required and the situation should be monitored by staff capable of assessing and preparing for the potential threat.
Lean forward	An operational state prior to 'stand up' characterised by a heightened level of situational awareness of a disaster event (either current or impending) and a state of operational readiness. Disaster coordination centres are on stand-by; prepared but not activated.
Stand up	The operational state following 'Lean Forward' whereby resources are mobilised, personnel are activated and operational activities commenced. Disaster coordination centres are activated.
Stand down	Transition from responding to an event back to normal core business and/or recovery operations. There is no longer a requirement to respond to the event and the threat is no longer present.

The SICC will confirm activation arrangements with relevant stakeholders through the promulgation of the Incident Management Strategy document.

Response agencies will mobilise resources to their required activation status as soon as practicable, and report to the SICC when their activation status is achieved.

5.9.1 Resource allocation

The MPC, in consultation with the SDC (if appointed)/senior QPS officer, IC and DDC will ensure key roles are filled within the command and control structure.

Early activation and appropriate resourcing of the ICC and DDCC (including liaison arrangements) is critical to expedite incident response operations. The ICC will be resourced in accordance with the AIIMS-4 structure at Appendix 2.

Where possible, personnel should be allocated positions within the AIIMS-4 structure, based on their incident management qualifications, skill-sets and experience.

Positions in the ICC's AIIMS-4 structure will be allocated although some positions may remain dormant. For minor incidents, an individual may be assigned multiple positions (for example, the Planning Officer may also be responsible for Intelligence functions).

5.10 Response planning

Planning the incident response is critical to ensure resources are allocated appropriately, activities are coordinated, and responding agencies and personnel have a collective and common understanding of the incident response intent and approach. Planning must be a priority, even when an incident demands immediate action.

Multi-agency engagement in incident response planning is recommended to ensure all aspects of the incident response are appropriately addressed, and stakeholders share a common view of the plan of action.

Incident response planning is undertaken on two broad levels (see Figure 17):

- **Strategic level:** the SICC, in consultation with the jurisdictional authority and other key stakeholders, develops the over-arching strategic approach which is articulated in the Incident Management Strategy document.
- **Operational level:** the ICC develops the strategic approach into a series of Incident Action Plans (IAPs) which detail short-term actions and resource allocations.

5.10.1 Incident Action Plans

The Planning Section within the ICC develops IAPs. These can be time-based, for example for next 24 hours; location-based, for example Sector 1; functionally-based, for example oiled wildlife; or a combination of the above depending on the response context.

IAPs will detail:

- specific objectives for the time period
- geographic boundaries to which the IAP applies
- actions to be undertaken, when and by whom
- resource allocations
- sector responsibilities (where applicable).

The IC is responsible for approving the IAPs and will forward copies to the SICC for information.



Figure 17 Incident Response Planning

5.10.2 Response planning support tools

Oil Spill Response Atlas

The National Plan Oil Spill Response Atlas (OSRA) is a GIS based environmental database for the Australian coastline that identifies marine and foreshore ecosystems and biological resources to assist the determination of protection priorities.

OSRA can be accessed by contacting the Marine Environment Protection Unit, MSQ.

Spill Trajectory and Dispersion Models

The Oil Spill Trajectory Model (OSTM) is a computer based program designed to help predict the fate and effect of oil spills in the marine environment. It is a valuable tool that may be of assistance to response planners during oil spill incidents.

AMSA manages the provision of the Oil Spill Trajectory Model (OSTM). The model identifies speed and direction of oil movement, weathering and spreading characteristics of the oil under the influence of prevailing currents and weather conditions. This system models water movement in the coastal continental shelf region of Australia based on tides, bathymetry and wind. The movement of spilled oil is then modelled, taking into account the amount and type of oil spilled. On-scene visual observations obtained from aircraft over flights should be used to confirm the accuracy of OSTM predictions. This information should then be entered into the model to update predictions.

During an incident response, initial requests for OSTM are to be processed through the Joint Rescue Coordination Centre, AMSA. Requests for activation of OSTM should be initiated by the ESC in liaison with the IC, and be accompanied by a completed OSTM Proforma that can be sent to AMSA by email (OSTM@amsa.gov.au). Predictions from OSTM can be returned by facsimile or supplied in the form of a .dbf file for incorporation into OSRA or other GIS applications.

The Chemical Discharge Modelling System also known as CHEMMAP is a decision support tool used to predict the fate and trajectory of chemicals in the water column and atmosphere. It is designed to model chemical movements in three dimensions based on physical and chemical properties, together with current and wind data. CHEMMAP simulates various chemical components including surface and subsurface dynamics; atmospheric transportation; dissolution,

adsorption and sedimentation, and shoreline fate. In addition, CHEMMAP has a probability component that may be used in contingency planning to predict the most likely fate of chemicals based on historic wind and current data.

CHEMMAP may be used as a decision support tool in:

- marine chemical spill response
- exercises, drills and contingency planning
- spill risk assessment and assessment of probable contaminant concentrations
- environmental and human impact assessment.

Note: CHEMMAP will only track one chemical per output (no chemical mixtures). In addition, CHEMMAP will not model degradation products, and will not model reactions with water, oxygen, acids/bases or other chemical/constituents in the water.

During an incident response, initial requests for spill modelling are to be processed through the Joint Rescue Coordination Centre, AMSA. Requests for activation of the spill modelling should be initiated by the ESC in liaison with the IC, and be accompanied by a Spill Trajectory Modelling Proforma:

The Spill Trajectory Modelling Proforma is available from AMSA's website at: <https://www.amsa.gov.au/forms/national-plan-spill-trajectory-modelling-request>

Response planning considerations

Table 6 outlines recommended strategies for oil spill response based on oil type.

Table 7 Strategies for different oil types

Oil type	Monitor	Contain recover	Protect resources	Shoreline clean-up	Aid natural dispersion	Apply dispersant
Group 1 Oils Specific Gravity = <0.8 Petrol, Kerosene, Naptha	Yes	No	Yes	No	Yes	No
Group 2 Oils Specific Gravity = 0.8 – 0.85 Diesel Fuel, Gas Oil, Light Crude	Yes	Yes	Yes	Yes	Yes	If viable
Group 3 Oils Specific Gravity = 0.85 – 0.95 Lube Oils, Fuel Oil (180 cSt)	Yes	Yes	Yes	Yes	Yes	If viable
Group 4 Oils Specific Gravity = > 0.95 Fuel Oil (380 cSt) Heavy Crude	Yes	Yes	Yes	Yes	No	No

5.11 Response options

Table 7 below outlines oil spill response options for oil type and quantity of spill.

Table 8 Response options

Spill types	Response options
Group 1 oils	SG <0.8 (Petrol, Kerosene, Naptha)
Uncontained spills < 50 litres	Investigate and monitor – Small spills of non-persistent oils spread, weather and degrade rapidly. There may be a risk of fire and explosion within the first four hours following a spill. Investigate the incident.
Contained spills < 50 litres	Investigate, aid natural dispersion and monitor – Larger slicks of non-persistent fuels can be dispersed by using fire hoses or prop wash. Take care to avoid the risk of fire and explosion. Investigate the incident.
All spills > 50 litres	Investigate, secure the area and monitor – The main hazard associated with large spills of Group 1 oils is fire and explosion. The inhalation of toxic or narcotic vapours also poses a significant threat. Monitor the slick and call the fire brigade for assistance if required. Investigate the incident.
Group 2 Oils	SG 0.8 – 0.85 (Diesel Fuel, Gas Oil, Hydraulic Oil, Light Crude Oil)
Uncontained spills < 20 litres	Investigate and monitor – Small spills of semi-persistent oils spread rapidly, weather and degrade within seven days. Monitor the slick and aid natural dispersion. Sorbents may also be used to remove oil from the sea surface. Investigate the incident.
Contained spills < 20 litres	Investigate, recover spill and/or aid natural dispersion – Response teams may use sorbent booms or pads to recover the oil. Any remaining residue should be dispersed with fire hoses or prop wash. Investigate the incident.
All spills > 20 litres	Investigate, contain and recover the spill and/or aid natural dispersion – Use all available resources to contain and recover the oil. In open sea conditions aid natural dispersion with prop wash or apply chemical dispersants. Investigate the incident.
Group 3 Oils	SG 0.85 – 0.95 (Lube Oils, Fuel Oil 180 cSt)
All spills	Investigate, contain and recover or apply chemical dispersants – Group 3 oils are slow to break down and can remain in the marine environment for between seven and fourteen days. Use all available resources to either chemically disperse or contain and recover the oil slick. Investigate the incident.
Group 4 Oils	Specific Gravity > 0.95 (Heavy Fuel and Crude Oils)
All spills	Investigate, contain and recover, effect shoreline clean-up and monitor – All Group 4 oils are extremely persistent in the marine environment and may take many weeks, months or years to break down. Use all available resources to contain and recover the slick and/or clean oiled shorelines. Dispersants may also be effective within the first twelve to twenty-four hours following a spill. Long term monitoring may also be required. Investigate the incident.

5.11.1 Use of dispersants or other agents

Dispersants or other spill control agents used to disperse, solidify, neutralise or control releases of oil and chemicals can be an efficient means of mitigating the effects of ship-sourced pollution on the marine environment. Using chemical countermeasures during pollution response, however, requires careful consideration. The IC, after consulting with the ESC, may authorise the use of chemical dispersants in accordance with the National Plan's Protocol for Obtaining Approval for the Application of Oil Spill Control Agents to Oil at Sea or on Shorelines⁶. This use must be subject to regular review.

⁶ <https://www.amsa.gov.au/forms/application-new-listing-oil-spill-control-agent-osca>

The IC may authorise the use of dispersants outside the scope of the Protocol for Obtaining Approval for the Application of Oil Spill Control Agents to Oil at Sea or on Shorelines, after consulting with relevant environmental or scientific agency representatives.

The application of dispersants within the GBRMP must be approved by an officer prescribed within the *Great Barrier Reef Marine Park Regulations 1983*.

However, in exceptional circumstances the IC may authorise, without consultation, the use of dispersants to reduce any threat to human life from fire or explosion.

Only dispersants that have been approved by AMSA are to be used in Australian waters during spill response operations.

5.11.2 Wildlife response

Marine pollution events have the capacity to impact on a range of coastal birds, marine reptiles (including turtles, crocodiles and sea snakes) and marine mammals (including dolphins, dugong and whales). Responses to wildlife may include protective measures to habitats (preventing wildlife being contaminated in the first instance), hazing approaches (deterring wildlife away from contaminated sites), pre-emptive capture techniques (collecting wildlife before they are contaminated) and collecting, cleaning and rehabilitating contaminated wildlife. DES are responsible for all wildlife matters during a marine pollution event. DES has a system of contingency plans, trained staff and preliminary equipment resourcing to support wildlife response actions. The primary plan used by DES to guide wildlife response is The State Oiled Wildlife Response Plan which is provided Appendix 5.

5.11.3 Disposal of oil and chemical pollutants

Disposal of oily and/or chemical waste will be managed by the Waste Management Unit within the ICC. Waste management plans will be developed in consultation with the ESC and DES/QFES as required.

Volumes of pollutant waste can be significant, particularly oily waste. As a guide, indicative oil waste volumes are:

- oil recovered at sea (volume of oil recovered x 5) = waste
- oil recovered from a shoreline (volume of oil recovered x 10) = waste

Noting the complexities associated with pollutant waste disposal, the IC may decide to outsource the disposal of pollutant waste to specialist waste management contractors.

5.11.4 Chemical response

The Scientific Unit within the QFES will provide technical advice to the IC and jurisdictional authority regarding marine chemical spills (under a MoU). Some equipment used for oil spill response may be applicable to a marine chemical spill response but before it is used advice on any adverse reactions and potential safety concerns should be sought from the QFES Chemical Unit,

5.11.5 Personnel management

Duration of work

Personnel involved in the incident response should operate in accordance with their employer's workplace hours and guidelines.

Where guideline limits are exceeded, a risk assessment should be undertaken to identify and manage risks. This should be undertaken in consultation with the WHS Unit in the ICC.

Staff rotation

Management of fatigue is critical during a marine pollution incident response and, incident responders should be rotated every seven days, with a maximum period of continuous engagement of 10 days.

Volunteers

Depending upon the type of incident, there may be a role for volunteers to assist with the cleaning and rehabilitation of oiled wildlife or with the clean-up of oil impacted beaches and foreshores.

People wishing to assist with the clean-up of oiled wildlife may be engaged by DES under formal arrangements and will be covered with appropriate insurance cover as of volunteers or non-government employees.

The arrangements for people wishing to assist with the clean-up of oil from beaches and foreshores are similar but will be managed by Volunteering Queensland under direction of the SICC. People wishing to volunteer will be requested to register with Volunteering Queensland where their physical fitness, skill sets, availability and proximity to the spill site will be recorded. If required and available, suitable volunteers will then be assigned to specific areas under the control of volunteer managers provided by local government with task specific inductions and mentoring carried out by oil spill response specialists from TMR or the NRT.

Workplace Health and Safety

The IC, assisted by the Workplace Health and Safety Unit, is responsible for ensuring that appropriate workplace health and safety arrangements are implemented to ensure the health and safety of incident responders.

Management of workplace health and safety arrangements will be commensurate with the incident response and may include a workplace health and safety adviser being assigned to advise the MPC and IC on workplace health and safety issues. Workplace Health and Safety arrangements must be in accordance the Queensland *Work Health and Safety Act 2011*.

Personal protective equipment

The IC should ensure that all response personnel have appropriate personal protective equipment (PPE) to prevent toxic exposure and other hazards. Examples include:

- full length overalls, either cotton or disposable
- chemical suits or wet weather gear manufactured from Polyvinyl Chloride (PVC) or similar materials
- steel capped work boots, gum boots or waders
- leather or PVC oil and chemical resistant gloves
- respiratory protection suitable for use with oil spill dispersants and other chemicals
- sun hat, sun screen and sun glasses
- personal flotation devices
- warm clothing to prevent cold stresses.

5.12 Expenditure

Maintaining accurate and appropriate records of expenditure related decisions is an essential aspect of ensuring costs associated with an incident response can be recouped from the polluter. The IC will authorise all expenditure-related activities and acquisitions related to the incident response, and records will be retained by the Finance and Administration Team in the ICC. Finance officers in the ICC and the DDCC should establish and maintain close liaison throughout the incident response, and reconcile all expenditure periodically. The IC should liaise with the Protection and Indemnity (P & I) Club regularly to advise them of current and anticipated expenditure. Each agency is responsible for monitoring and managing costs and submission of claims to the relevant reimbursement agency.

5.13 Communication

5.13.1 Pollution Report

A Pollution Report (POLREP) is to be raised following a report from the public or from any other source about a confirmed or suspected marine pollution incident. Electronic copies of the standard POLREP (Form 3968) may be downloaded from the MSQ website, Corporate Forms Database or copied from the POLREP form shown at Appendix 6 to this document. A POLREP is to be sent by email to pollution@msq.qld.gov.au at the earliest opportunity.

5.13.2 Situation Report

Regular Situation Reports (SITREPs) provide a common operating picture to assist in incident response planning and reporting. A SITREP schedule (detailing when SITREPs are required) will be decided by SICC and promulgated in the Incident Management Strategy document. A SITREP synthesises information from various levels of the incident response, as shown in Figure 18.

Tactical level

- Tactical level SITREPs will be provided by Sector Leaders (verbal reports, for example, radio or telephone, or emailed dot points to the relevant Unit Coordinator in the Operations Section and passed to the Situation Unit (Planning Section) for compilation.
- Tactical level reports should be succinct to ensure that resources at the tactical level can remain focused on response activities.
- Relevant LDCC supporting activities will be reported through the relevant FOB.

Operational level

- Operational level SITREPs will be developed by the Situation Unit within the Planning Section of the ICC.
- Operational level SITREPs provide a précis of tactical activities and operational issues and intentions.
- The Logistics Officer will liaise with the liaison officer in the DDCC to compile the logistics component of the Operational level SITREP.
- Operational level SITREPs will be in a standardised format consistent with the template at Appendix 7 (available on MSQ website).
- Operational level SITREPs will be distributed broadly (emailed where possible) to incident response stakeholders.

Strategic level

- Strategic level briefing notes will be developed by the SICC, using information from Operational level SITREPs.
- These will be forwarded to specific strategic stakeholders as required, for example, QDMC members.

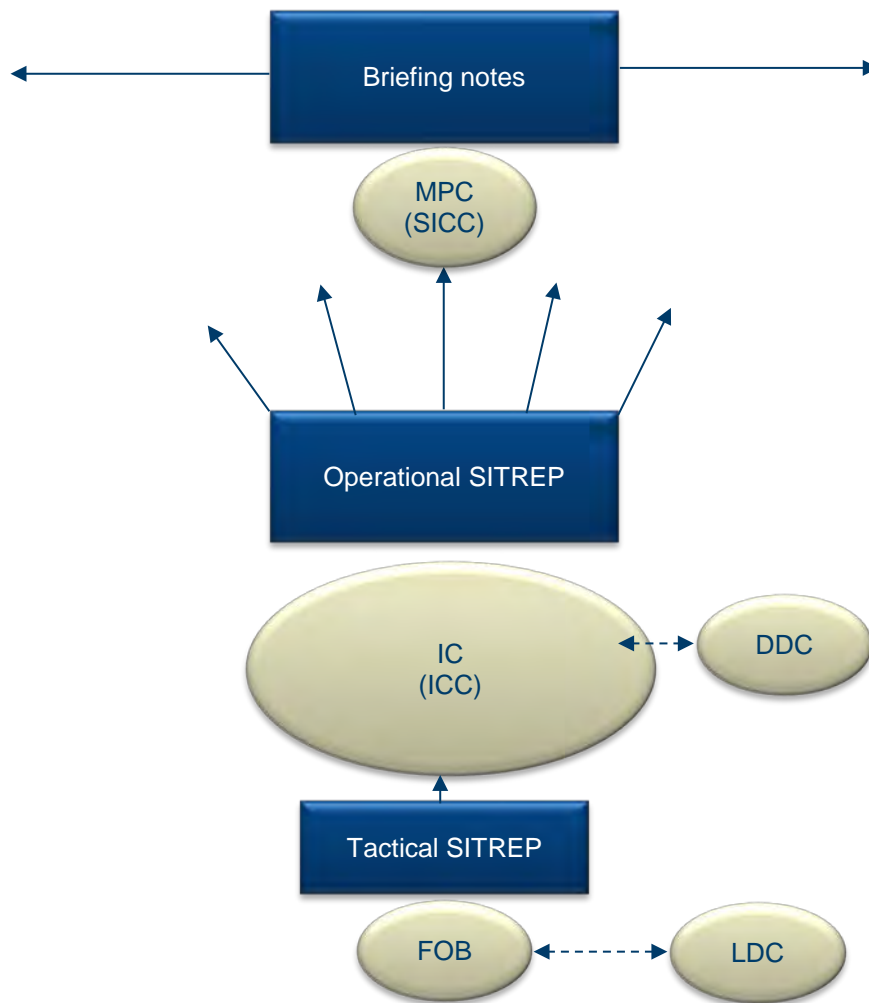


Figure 18 Incident communication

Teleconferences

The SICC and ICC (in conjunction with the SDC, if appointed) will develop a teleconference program for designated key stakeholders to share information and discuss issues. Teleconferences will be managed through the Finance and Admin Section in the ICC. Where appropriate, teleconference protocols will be developed to ensure the integrity of teleconferences and to maximise their benefits.

Status Boards

Status Boards are a visual display of the incident log as it happens in 'real time'. Where possible, the Situation Unit in the ICC should set up and manage Status Boards in the ICC to provide a common 'real time' picture to ICC personnel.

Briefings

Leaders of control/coordination centres, for example MPC, IC, DDC, Sector Leader, should conduct briefings at the beginning of each shift to advise staff of the situation, progress of the response, relevant objectives and issues, and anticipated activities for the shift. At the tactical level, pre-start briefings should also address safety hazards and safety risk mitigation measures. It is recommended that briefings follow the briefing structure as follows:

- Situation
 - Incident details as per the IAP
 - Weather forecasts and any other information considered appropriate
- Mission
 - Expected tasks for the day as outlined in the IAP

- Description of the area of operations for the day
- Execution
 - Overview of how the mission is to be carried out
 - Description of the resources and equipment to be used
- Administration
 - Availability of logistics support available
 - Welfare of personnel (food, drinking water, first aid and decontamination measures)
 - Situation reports, reporting schedules and time sheets
- Command, Control and Communications
 - Identification of key personnel including supervisors and team leaders
 - Overview of the Incident Management Structure
 - Communications plan including phone numbers and radio frequencies and reporting schedules
- Safety
 - Identification of overview of the site safety assessment including any known hazards
 - Requirement for Workplace Health and Safety Officers for regular tool box safety meetings to discuss safety issues
 - Procedures for reporting of safety incidents

5.14 Public information

The effective management of public information is often a critical component of a marine pollution response.

The management of media and the provision of public information will be based on a centralised approach to provide a 'single point of truth'. The SICC will develop a media management strategy tailored to the incident circumstances and will coordinate media liaison for the incident response.

The resource requirements for the provision and management of public information will depend on the incident size and complexity. Core communication resources will be provided by the Department of Transport and Main Roads, augmented by additional communications resources sourced through state government agencies under the coordination of the QDMC, as required.

As a general principle, the MPC and/or the SDC (if appointed) will be the primary spokesperson for significant incident responses, with the IC being the spokesperson for lesser incidents. Where appropriate, the relevant scientific control agency representative (GBRMPA, DES or QFES) will support the MPC in the provision of public information.

The SICC will liaise with media and public information counterparts in relevant local, state and federal government agencies to ensure consistent and accurate public information is communicated in a coordinated way.

The ICC will manage on-scene media presence through a forward based TMR media officer and whenever operationally possible IC will provide timely media briefings.

5.15 Record management

All Control/Coordination centres will maintain Incident Response Logs to record key decisions, actions and events.

These records will inform post incident debriefs, reviews and evaluations, cost recovery analysis, incident investigations and subsequent inquiries.

The ICC Incident Response Log will be managed and maintained by the Information Section within the ICC.

At the conclusion of the incident response phase, all Incident Response Logs are to be returned to MSQ for retention.

5.16 Investigation and sampling

It is MSQ's policy to investigate all 'reportable incidents' as described in Section 67(1) of the TOMPA. Where there is a reasonable chance that a prima facie case can be established, MSQ will, seek advice from Crown Law before launching a prosecution. Investigations may only be carried out by a person who is authorised to do so under Section 72 of the TOMPA.

Other agencies such as AMSA, GBRMPA, DES and the Australian Transport Safety Bureau may also have an interest in investigating certain aspects of an incident. The IC is to be made aware of all agencies' requirements in regard to investigating various aspects of the incident and all investigation activity is to be coordinated by the jurisdictional authorities.

Investigative sampling

The investigating officer should take samples of the suspected pollutant from the sea and from all suspect ships in the vicinity of the spill. Sampling must be done carefully and methodically to ensure that the evidence provided by the samples is not compromised for any court action. Guidelines to assist officers take evidentiary samples are included in dedicated oil sampling kits which are located in all MSQ's regional offices.

Operational sampling

Samples of oil and chemicals are also required for operational reasons, like testing the effectiveness of oil spill dispersants or chemical neutralising agents or analysing oils or chemicals to gauge their potential toxic or hazardous effects on the marine environment or on people who are responding to incidents. While the chain of custody for operational sampling is not as critical it is recommended that dedicated oil sampling equipment is used and that applicable guidelines are followed.

5.17 Place of refuge

A place of refuge is a place where a ship that is in need of assistance can find favourable conditions enabling it to take action to stabilise its condition, protect human life and reduce the hazards to navigation and to the environment.

Australia has in place a set of detailed guidelines for the assessment of requests from ships masters' for a place of refuge. A copy of the National Maritime Place of Refuge Risk Assessment Guidelines may be found on the AMSA website (see Section 11 List of Resources).

5.18 Salvage and towage

Most incidents that involve a damaged or disabled ship are likely to require the services of a salvage contractor. It is also likely that the salvage contractor will become involved in the very early stages of an incident.

The most common type of salvage contract is the Lloyd's Open Form (LOF). The LOF may also include a Special Compensation Protection and Indemnity Clause (SCOPIIC) that allows the salvage contractor to seek compensation from the ship's insurers for action taken to protect the marine environment from pollution.

5.19 Emergency towage vessels

As part of the National Plan's casualty management system a number of emergency towing vessels are strategically located along the Australian coastline within eleven designated regions. The purpose of the emergency towage vessels is to prevent or minimise the discharge of marine pollution from a shipping incident by assisting ships that are incapacitated and in danger of grounding, sinking or otherwise causing pollution.

The National Plan's emergency towage capability is managed by AMSA and is supported by authorities who manage the risks within their respective jurisdictions. It involves three levels of capability:

- a dedicated emergency towage vessel operating in Far North Queensland and the Torres Strait provided by the vessel *Coral Knight*, based in Cairns
- contracted port towage around the other major Australian ports capable of undertaking open water towage operations
- vessels of opportunity that can be directed or contracted to assist, when required.

The emergency towage vessels can only be activated by AMSA. Requests for activation must be made in accordance with the Guideline for Activation of the Emergency Towage Capability found on the AMSA website.

5.20 Oil industry engagement

The oil industry may be called upon to provide resources during a response operation.

A master service contract is in place between AMOSC and AMSA. This agreement enables AMSA to hire equipment and personnel from AMOSC on behalf of the National Plan. AMOSC's stockpile of oil spill response equipment includes oil spill dispersant and containment, recovery, cleaning, absorbent and communications equipment.

All requests for use of AMOSC resources must be channelled through the IC to AMSA.

5.21 Periodic review

Periodic reviews should be undertaken during every incident response to:

- ensure that the assumptions underpinning the strategic approach remain valid
- assess that the chosen strategic approach remains appropriate
- confirm that the strategic approach is being implemented effectively
- verify and quantify the results of the response efforts
- identify emerging issues or trends which need to be addressed in the coming period
- identify opportunities to improve incident response arrangements.

The frequency for periodic reviews will depend on the incident duration. For example:

- for a Level 1 incident response (with a duration of hours or days), it may be appropriate for the IMT to undertake a periodic review of at the end of each shift
- for protracted Level 3 incident responses (with a duration of weeks or months) it may be appropriate for the SICC and the IMT in the ICC to undertake weekly periodic reviews.

5.22 Response termination

The jurisdictional authority agency is responsible for terminating and announcing the termination of a marine pollution incident response. This decision will be made in conjunction with the MPC (where the jurisdictional authority and control agency are different entities) SDC (if appointed) and relevant stakeholders, including AMSA, QDMC and the SDC and SRC, if appointed.

Response operations should be terminated when the pollutant has been substantially recovered or addressed to the point that clean-up operations are no longer returning tangible benefit. However wildlife response operations may go beyond clean-up operation time frames – specifically, contaminated wildlife may require extended rehabilitation times that go beyond clean up termination but still form a part of the response and part of the response cost recovery process.

5.23 Demobilisation plan

A demobilisation plan describing how and when operations will be scaled down and the arrangements for debriefing of personnel and the cleaning, maintenance and return of response equipment is to be compiled by the Planning Officer in advance of the expected response termination date.

5.24 Stand down procedures

On announcement of the response termination, the MPC will formally 'stand down' the SICC and notify the IC to stand down the ICC. Following 'hot debriefs', incident response logs shall be finalised and forwarded to MSQ for safe keeping. Administrative arrangements for deactivation of control centres will be followed.

5.25 Debriefing

At the conclusion of the incident response, debriefs should be undertaken as follows:

Hot debriefs

On termination of the incident response and prior to stand down of the Control/Coordination Centres, the MPC, IC and relevant Unit Coordinators and Sector or Team Leaders should initiate separate hot debriefs with key personnel to capture and record the lessons from their respective areas regarding the incident response.

Relevant disaster management agency representatives should be included in these debriefs. For example, the DDC and key DDCC personnel should be included in the ICC debrief.

Lessons from these hot debriefs should be forwarded to MSQ to inform improvements in incident response operations in future marine pollution response incidents.

Incident debrief

Within one month of the incident response termination, the MPC should initiate a whole-of-incident coordinated debrief for representatives of relevant agencies who contributed to the incident response.

This debrief will focus on all aspects of the response at the strategic, operational and tactical levels, identifying potential improvements to policy and coordination arrangements. This could include:

- notification arrangements
- incident response activation
- situational awareness and the strategic approach
- command, control and coordination
- incident response operations
- suitability of equipment
- health and safety
- communications
- stakeholder management
- disaster management support
- administrative arrangements

The findings from incident debriefs will be recorded to inform improvements in policy and arrangements.

5.26 Return of equipment

All equipment used or activated during an incident response shall be recovered to a suitable staging area, cleaned and returned to the relevant owner/custodian as soon as practicable. The owner/custodian shall ensure equipment is serviced in accordance with the planned maintenance schedule and the National Plan Equipment Loan Agreement, and the costs of servicing and cleaning included in claims for reimbursement from the polluter.

6. Recovery

6.1 Response and recovery transition

Planning for the recovery should commence during the response phase, to ensure a coordinated transition from the response to recovery. Post incident recovery will be led by disaster management organisations, in accordance with the State Disaster Management Plan.

The MPC will liaise with appropriate stakeholders during the incident response, to identify likely incident recovery requirements and arrangements, and to initiate incident recovery planning and transition arrangements.

6.2 Managing Recovery

For smaller incidents (Level 1 and 2 responses) the relevant DDMGs, led by the DDC, will plan for and manage the recovery phase in conjunction with appropriate stakeholders. For significant marine pollution incidents (Level 3 and 4 responses) a State Recovery Coordinator may be appointed to oversee the recovery, reporting to the QDMC, supported by the State Recovery Committee.

6.3 Post spill monitoring

There are two types of post spill monitoring:

- Type I monitoring can include all studies relating to spill response and can be considered a response activity.
- Type II monitoring includes all other monitoring activities. This will normally be funded by the agency initiating the Type II monitoring.

Generally, only Type I monitoring, undertaken during a spill response, will be funded under the National Plan cost recovery arrangements.

6.4 Cost recovery

Response and recovery is funded on the basis of the polluter pays principle. Australia is signatory to three international conventions for recovery of costs associated with the combat and clean-up of oil spills from ships:

- *International Convention on Civil Liability for Oil Pollution Damage 1992* (CLC) (for spills originating from oil tankers)
- *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992* (Fund Convention) (for spills originating from oil tankers)
- *International Convention on Civil Liability for Bunker Oil Pollution Damage 2000* (Bunkers Convention). This convention applies only to ships greater than 1000 gross tons.

The *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious and Substances by Sea 1996*, as amended by the 2010 Protocol is not yet in force internationally. However, once in force the same principles will apply for HNS spills as oil spills.

Under the Commonwealth *Protection of the Sea (Civil Liability) Act 1981*, ships of 400 gross tons or more, and less than 1000 gross tons, carrying oil as cargo or bunkers are required to have appropriate insurance in place when entering an Australian port. As such, these ships are covered by general liability regimes operated by Protection and Indemnity Clubs (P&I Clubs).

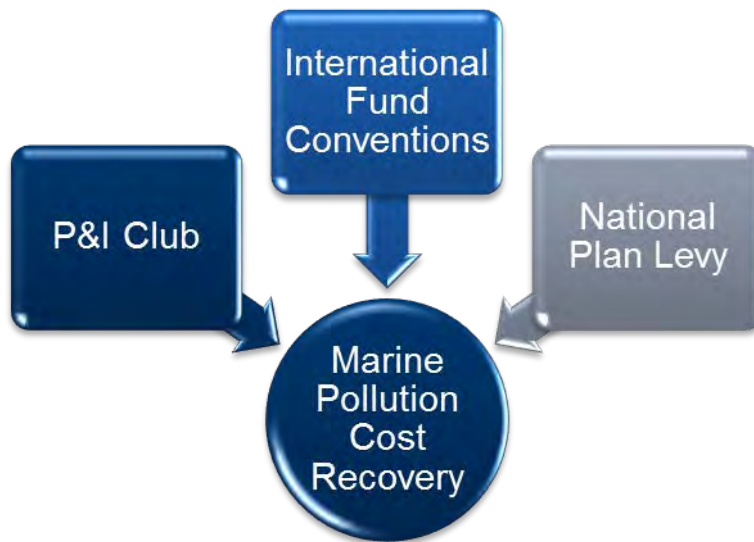


Figure 19 Cost Recovery

The IC must ensure that the relevant P&I Club or insurance company representative is notified as soon as possible following an incident. Likewise, it is in the best interests of all involved for the IC to keep the P&I Club and/or insurance company advised of all response strategies and general operations during an incident.

All reasonable costs (Discharge Expenses) incurred as a result of response to incidents that occur within Queensland's coastal waters may be recovered under sections 111 and 122 of the TOMPA. These costs include:

- investigating a discharge of pollutant
- preventing or minimising the effects of a discharge of pollutant
- treating flora and fauna affected by a discharge of pollutant
- rehabilitating or restoring Queensland's marine and coastal environment
- any amount of compensation reasonably paid by the State (section 110 of the TOMPA).

To recover costs associated with response to incidents that occur within the scope of this plan, the IC should ensure that the IMT keeps detailed financial records and supporting documentation of all operations, as all claims will be assessed to ensure that the costs are reasonable, and that they are supported by satisfactory documentation. Each response agency will initially meet all costs and is responsible for keeping detailed records and supporting documentation. Each response agency is responsible for providing a claim for costs.

All agencies responding to and incurring costs in relation to ship sourced pollution incidents where the polluter is not identified, or costs are not recoverable, may be able to recover their costs from AMSA under the Protection of the Sea Levy. The National Plan's Claims Management Guidelines provides guidance for seeking reimbursement from AMSA.

MSQ will coordinate the recovery of costs from the polluter or AMSA.

7. Glossary of Terms

Oil	Under the <i>International Convention for Prevention of Pollution from Ships (MARPOL 73/78)</i> 'oil' means petroleum in any form and includes crude oil, fuel oil, sludge, oil refuse, and refined products (other than petrochemicals that are subject to the provisions of Appendix 11 of MARPOL 73/78) and also includes the substances listed in Appendix 1 to Appendix 1 of MARPOL 73/78.
Coastal waters	The coastal waters of the state (as defined in the <i>Acts Interpretation Act 1954</i> , section 36). It includes all waters extending to 3 nautical miles seaward of the Baseline or within 3 nautical miles of islands that are outside of the Baseline but within the area adjacent to the state of Queensland as defined in Schedule 2 of the <i>Petroleum (Submerged Lands) Act 1967</i> . It also includes all waters of the state that are subject to the ebb and flow of the tide.
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. The Control Agency will have responsibility for appointing the Incident Controller. This is the equivalent of Responsible Agency or Control Authority under AIIMS.
HNS	A Hazardous and Noxious Substance (HNS) is a term used to describe a substance other than oil which, if introduced into the marine environment, is likely to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea The term also applies to substances that are listed in Chapters 18 and 19 of the International Bulk Chemicals Code.
Jurisdictional Authority	Agencies that have jurisdictional or legislative responsibilities for maritime environmental emergencies are obligated to work closely with the Control Agency to ensure that incident response actions are adequate.
Maritime casualty	A collision of vessels, stranding or other incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo.
Ship	For the purposes of this contingency plan the term 'ship' has the meaning given by MARPOL 73/78. Under MARPOL 73/78 'ship' means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air cushion vehicles, submersibles, floating craft and fixed or floating platforms.
Ship-sourced Pollution	Refers to spills of oil, noxious and hazardous substances and harmful packaged substances as described in the <i>Transport Operations (Marine Pollution) Act 1995</i> and in Appendixes 1, 2 and 3 of the <i>International Convention for the Prevention of Pollution from Ships</i> which is commonly known as MARPOL.

8. Table of acronyms

AIIMS-4	Australasian Inter-Service Incident Management System, 4 th edition
AIP	Australian Institute of Petroleum
AIS	Automatic Identification System
AMOSC	Australian Marine Oil Spill Centre
AMSA	Australian Maritime Safety Authority
AtoN	Aids to Navigation
BLIA	Bulk Liquids Industry Association
CHEMMAP	Chemical Discharge Modelling System
CLC	International Convention on Civil Liability for Oil Pollution Damage 1992
DCS	Department of Community Safety
DDC	District Disaster Coordinator
DDCC	District Disaster Coordination Centre
DDMG	District Disaster Management Group
DEHP	Department of Environment and Science
DPC	Department of the Premier and Cabinet
DWT	Dead Weight Tonnage
ECDIS	Electronic Chart Display and Information Systems
ENC	Electronic Navigational Charts
ESC	Environmental and Scientific Coordinator
FOB	Forward Operating Base
FWADC	Fixed Wing Aerial Dispersant Capability
GBRMP	Great Barrier Reef Marine Park
GBRMPA	Great Barrier Reef Marine Park Authority
GBRWHA	Great Barrier Reef World Heritage Area
GIS	Geographic Information System
GM	General Manager
GCWA	Gold Coast Waterways Authority
HNS	Hazardous and Noxious Substances
IAP	Incident Action Plan
IC	Incident Controller
ICC	Incident Control Centre
IGA	Inter-governmental Agreement
IMT	Incident Management Team
INF	International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships
LDC	Local Disaster Coordinator
LDCC	Local Disaster Coordination Centre
LDMG	Local Disaster Management Group
LGAQ	Local Government Association of Queensland
LO	Liaison Officer
LOF	Lloyd's Open Form
MARPOL	<i>International Convention for the Prevention of Pollution from Ships, 1973</i>
MEHRA	Marine Environment High Risk Area
MERCOM	Maritime Emergency Response Commander
MOU	Memorandum of Understanding
MPC	Marine Pollution Controller
MSQ	Maritime Safety Queensland
NRST	National Response Support Team
NRT	National Response Team
OH&S	Occupational Health and Safety

OPRC 90	International Convention on Oil Pollution Preparedness, Response and Cooperation 1990
OSRA	National Plan Oil Spill Response Atlas
OSTM	Oil Spill Trajectory Model
P&I Club	Protection and Indemnity Club
PACIA	Plastics and Chemicals Industries Association
POLREP	Pollution Report
PPE	Personal Protective Equipment
PSC	Port State Control
PVC	Polyvinyl Chloride
QDMC	Queensland Disaster Management Committee
QCCAP	Queensland Coastal Contingency Action Plan
QFES	Queensland Fire and Emergency Service
QPS	Queensland Police Service
REEFVTS	Great Barrier Reef and Torres Strait Vessel Traffic Service
SCOPIC	Special Compensation Protection & Indemnity Clause
SDC	State Disaster Coordinator
SDCC	State Disaster Coordination Centre
SDCG	State Disaster Coordination Group
SES	State Emergency Service
SICC	State Incident Control Centre
SITREP	Situation Report
SMEACS	Briefing format - Situation, Mission, Execution, Administration, Command, Control, Communications, Safety
SOPEP	Shipboard Oil Pollution Emergency Plan
SRC	State Recovery Coordinator
TMR	Department of Transport and Main Roads
TOMPA	<i>Transport Operations (Marine Pollution) Act 1995</i>
TOMPR	<i>Transport Operations (Marine Pollution) Regulation 2008</i>
VHF	Very High Frequency
WHS	Workplace Health and Safety

9. List of resources

Commonwealth *Protection of the Sea (Civil Liability) Act 1981*

<https://www.legislation.gov.au/Details/C2013C00342>

Disaster Management Act 2003

<https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2003-091>

Great Barrier Reef Marine Park Act 1975 and Regulations 1983

<https://www.legislation.gov.au/Details/C2016C00058>

<https://www.legislation.gov.au/Series/F1996B01950>

International Convention on Civil Liability for Bunker Oil Pollution Damage 2000

[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Civil-Liability-for-Bunker-Oil-Pollution-Damage-\(BUNKER\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Civil-Liability-for-Bunker-Oil-Pollution-Damage-(BUNKER).aspx)

International Convention on Civil Liability for Oil Pollution Damage 1992

[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-\(CLC\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-(CLC).aspx)

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992

[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Establishment-of-an-International-Fund-for-Compensation-for-Oil-Pollution-Damage-\(FUND\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Establishment-of-an-International-Fund-for-Compensation-for-Oil-Pollution-Damage-(FUND).aspx)

Lloyd's Open Form 2000 (LOF 2000)

<http://www.lloyds.com/~media/files/the%20market/tools%20and%20resources/agency/salvage%20arbitration%20branch/agencylof2000.pdf>

Maritime Safety Queensland

www.msq.qld.gov.au

National Maritime Place of Refuge Risk Assessment Guidelines

<https://www.amsa.gov.au/marine-environment/maritime-casualty-response/place-refuge-guidelines>

Oil Spill Trajectory Model (OSTM and CHEMMAP)

<https://www.amsa.gov.au/environment/marine-pollution-response/STM/Documents/AMSA95oc.doc>

State Disaster Management Plan

<https://www.disaster.qld.gov.au/cdmp/Documents/Queensland-State-Disaster-Management-Plan.pdf>

Transport Operations (Marine Pollution) Act 1995 (TOMPA)

<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1995-002>

Transport Operations (Marine Pollution) Regulation 2018 (TOMPR)

<https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2018-0106>

Work Health and Safety Act 2011

<https://www.legislation.qld.gov.au/view/html/inforce/current/act-2011-018>

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- Appendix 7 – SITREP form
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