



Department of Transport



South African
Maritime Safety Authority

SOUTH AFRICA'S NATIONAL CONTINGENCY PLAN **FOR THE PREVENTION AND COMBATING OF** **POLLUTION FROM SHIPS AND OFFSHORE** **INSTALLATIONS**

South Africa is situated at the interface of the southern Atlantic and Indian oceans and its 3000km coastline is one of the oldest navigation routes of the world. This route has a large volume of passing traffic that does not necessarily call at South African ports. In addition, about 19 million tons of crude oil is imported into South Africa annually, while approximately 120 million tons passes around the Cape bound for world markets. Furthermore, South Africa has ready access to the Southern Ocean.

Historically the Cape of Good Hope was named "Cape of Storms" for good reason, and many ancient and contemporary vessels have foundered off the hazardous South African coastline. One of the largest crude oil spills to have occurred anywhere in the world took place off Saldanha Bay in 1983 when the Spanish tanker "Castillo de Bellver" broke in half and sank with 224 000 tons of light crude on board. More recent spills have involved the release of heavy bunker fuels from dry cargo vessels.

All marine traffic, calling at South African ports or in transit about the coast, presents a risk of marine pollution resulting from collisions, groundings, oil cargo and bunker transfers, structural failure or any other number of maritime emergencies or accidents. Many cargoes carried by these vessels present an additional risk, as they may contain any number or combination of harmful substances and these marine pollutants generally threaten recreation areas, sea birds, marine life, coastal installations and fisheries.

Experience has shown that large oil spills are coupled with some form of a casualty such as a grounding, hull failure, collision, etc. No two casualties (incidents) are the same and so response actions may vary considerably depending on the nature of the casualty, the type of oil that has been spilled, the location of the spill, hazardous cargo spilled, sea conditions, etc. To date no major spill has occurred from an offshore installation.

The implementation of this Plan will ensure an effective response in the prevention and minimisation of pollution from ships and offshore installations.

It is therefore the intention of this Plan to specify the broad principles of South Africa's response policy and then allow the designated response personnel with their more specific response plans to deal with the incident as the circumstances dictate.

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PART I: SCOPE AND PURPOSE, DEFINITIONS AND LEGISLATION

1.1 SCOPE AND PURPOSE

The purpose of the National Contingency Plan (referred to throughout this report as ‘the Plan’) is to outline national policy for responding to a pollution incident originating from vessels and thereby minimising detrimental effects on the environment.

The primary Act dealing with the prevention and combating of pollution in the South African scenario is the *Marine Pollution (Control and Civil Liability) Act 6 of 1981*. In its preamble this Act states: “To provide for the protection of the marine environment from pollution by oil and other marine harmful substances, and for that purpose to provide for the prevention and combating of pollution of the sea by oil and other harmful substances; to determine liability in certain respects for loss or damage caused by the discharge of oil from ships, tankers and offshore installations; and to provide for matters connected therewith.”

Because the *Marine Pollution (Control and Civil Liability) Act 6 of 1981* provides for the protection of the marine environment from pollution by oil and other marine harmful substances, this Plan focuses on oil and chemical incidents, although the majority of incidents are oil pollution incidents.

The requirements of the *Marine Pollution (Control and Civil Liability) Act 6 of 1981* and the *South African Maritime Safety Authority Act 5 of 1998* determine the strategy laid out in this Plan and so the Plan delineates the responsibilities of the different parties involved in the national preparedness and response system, including both public and private sector for all harmful substances.

The fundamental and primary aims of the Plan are to:

- (a) Protect human health and safety;
- (b) Minimise detrimental environmental impacts; and
- (c) Provide for the restoration of the environment, as nearly as is practicable, to pre-spill conditions.

In the event of an incident, a response should be formulated according to the following priorities:

- (a) Human health and safety;
- (b) Natural environment;
- (c) Commercial resources; and
- (d) Amenities

The above priorities could be re-prioritised depending upon the circumstances surrounding the incident. However, safety of life always remains the first priority.

No two incidents are ever the same and therefore the level and intensity of a response varies from incident to incident. One incident may require a major response involving all stakeholders and role players and the next may only require a watching brief by SAMSA and DEA&T.

1.2 PHYSICAL EXTENT

The provisions of the *Marine Pollution (Control and Civil Liability) Act 6 of 1981* apply to ships and offshore installations within the prohibited area of South Africa. The prohibited area is defined in the Act as the area encompassing the internal waters, territorial waters and the exclusive economic zone of South Africa and those of the Prince Edward Islands.

The internal waters are waters connected to the sea on the landward side of the base lines as provided for in the *Maritime Zones Act 15 of 1994*. Internal waters cover harbours, estuaries and coastal lagoons. The Republic enjoys full sovereign rights over these internal waters and foreign ships are denied innocent passage in these waters unless they are specifically arriving or departing from a port in the Republic or are in distress. The most prominent internal water of South Africa is False Bay having as its base line the line joining Cape Point and Cape Hanglip.

The territorial waters of the Republic are measured seaward 12 nautical miles from the base lines and here foreign flagged ships enjoy the right of innocent passage.

The exclusive economic zone (EEZ) extends 200 nautical miles on the seaward side of the base lines. The Republic exercises full sovereign rights over both living and non-living natural marine resources in the EEZ. Furthermore, the Republic through the *Marine Pollution (Control and Civil Liability) Act 6 of 1981* exercises environmental protection in this area.

Therefore, for practical purposes, ships and offshore installations may not intentionally discharge harmful substances in the internal waters and EEZ of South Africa and the Prince Edward Islands in the southern Indian Ocean.

As far as the high seas are concerned, South Africa has no pollution jurisdiction beyond its EEZ, except as is provided for in the *Marine Pollution (Intervention) Act 64 of 1985*. In this Act the Republic may take action on the high seas when a maritime casualty or act related to the casualty results in or can result in the pollution of the coastline. Any action the Republic takes shall be necessary to prevent, mitigate or eliminate grave and imminent danger to the coastline from pollution or threat of pollution from harmful substances.

1.3 DEFINITIONS

“CRU” is the Casualty Response Unit of SAMSA, which is made up of cross section of SAMSA staff under the control of the SAMSA Operations Manager, who are on short notice to respond to dealing with a casualty causing pollution or threatening to cause pollution.

“Convention” means the *International Convention of Civil Liability for Oil Pollution Damage*, signed in Brussels on 29 November 1969 and published for general information under Gazette Notice No. 58 of 1978 in the Government Gazette No. 5867 of 27 January 1978, and includes any amendments thereof and additions thereto signed, ratified or acceded to by the Republic of South Africa.

“DEA&T” is the Department of Environmental Affairs and Tourism and more specifically the Sub-Directorate Marine and Coastal Management.

“DEA&T local coastal contingency plans” are plans compiled and maintained by DEA&T which set out the actions to be taken when there is a threat of oil impacting on the shoreline, or where an impact has occurred. The coastline from the Orange River mouth to the Mozambique border is divided into zones, each of which has its own specific local coastal contingency plan.

“Harmful substance” means any substance which, if introduced into the sea, is likely to create a hazard to human health, harm living resources and marine life, damage amenities or interfere with other legitimate uses of the sea, and includes oil and other substances subject to control by MARPOL 1973/78, and mixtures of such substances and water or any other substance.

“Incident” refers to a spill of oil or other harmful substance or a threatened spill of oil or other harmful substance.

“JOC” is the Joint Operation Centre where the JRC meets and where the stakeholders and role players can co-ordinate any activities regarding the incident.

“JRC” is the Joint Response Committee established by SAMSA in the event of a major incident, chaired by SAMSA and made up of the stakeholders and role players dealing with the prevention and combating operations in the event of such an incident.

“Offshore installation” means a facility situated wholly or partly within the prohibited area and which is used for the transfer of harmful substances from a ship or tanker to a point on land or from a point of land to a ship or tanker or from a bunkering vessel to a ship or a tanker, and includes any exploration or production platform situated within the prohibited area and used in prospecting for the mining of natural oil.

“Oil” refer to the definition of “harmful substances”.

“P&I Club” are the representatives of the ship owner’s protection and indemnity insurance.

“Prohibited area” means the internal waters, the territorial waters and the EEZ and, in relation to an offshore installation, includes the sea within the limits of the continental shelf.

“Role players” are the persons and/or organisations other than the stakeholders responsible for or assisting in pollution prevention or combating.

“SANCCOB” is the South African National Foundation for the Conservation of Coastal Birds.

“SAMSA” is the South African Maritime Safety Authority established in terms of the *South African Maritime Safety Authority Act 5 of 1998*, and more specifically the office of the Operations Manager.

“Sea” means the water and the bed of the sea and includes the land between the high- and low-water marks as well as any tidal lagoon or tidal river as defined in Section 1 of the *Sea-shore Act 21 of 1935*.

“Stakeholders” in this document means SAMSA, DEA&T and the organisation responsible for costs and losses, i.e. the polluter.

“Tanker” means any seagoing vessel or type whatsoever, actually carrying oil in bulk as cargo and in respect of which the provisions of the Convention are applicable.

Tiers 1, 2 and 3 are categories of response to an incident which require a local, national or international response, with Tier 1 being the lowest category of response.

“Vessel” in the context of this Plan, means any ship, tanker or offshore installation that could in the event of an incident, cause or threaten to cause pollution of the marine environment by a harmful substance.

1.4 LEGISLATION AND CONVENTIONS

- 1.4.1 *The Constitution (Act No. 108 of 1996): Section 24 of the Bill of Rights (Chapter 2)*: provides that everyone has a right to an environment that is not harmful to their health or well-being and to have the environment protected for the benefit of the present and future generations through reasonable legislative and other measures that (a) prevent pollution and ecological degradation (b) promote conservation and (c) secure ecologically sustainable development and the use of natural resources while promoting justifiable economic and social development. The section illustrates clearly that the government has a duty to protect the environment including providing for matters such as the Marine Pollution Contingency Plan.
- 1.4.2 *Marine Pollution (Control and Civil Liability) Act 6 of 1981*: This Act provides for the protection of the marine environment from pollution by oil and other harmful substances from ships. The Act is administered by SAMSA. Regulations relating to the prevention and combating of pollution of the sea by oil have been made and the Act grants SAMSA extensive powers to take a variety of steps to prevent pollution of the sea where a harmful substance is likely to or is being discharged. Moreover, there are regulations regarding criminal as well as civil liability after a “discharge” causing pollution of the sea has occurred, and to provide for matters related to it.
- 1.4.3 *Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986*: The Minister of Transport is assigned with a responsibility to provide for the protection of sea from pollution by oil and other harmful substances discharged from ships and for that purpose to give effect to the *International Convention for the Prevention of Pollution from Ships, 1973* as amended by the Protocol of 1978 (*MARPOL 73/78*) and to provide for matters incidental thereto. This Act is administered by SAMSA.
- 1.4.4 *Marine Pollution (Intervention) Act 64 of 1987*: This Act gives domestic effect to both the Intervention Convention relating to the *Intervention on the High Seas in Cases of Casualties Causing Oil Pollution* as well as the Protocol relating to *Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil, 1973*. This Act allows the Minister to take such measures on the high seas to prevent or mitigate or eliminate grave and imminent danger to the South African coastline or related interests from pollution or threat of pollution of the sea by oil or harmful substances following upon a maritime casualty or acts related to such casualty. This Act is administered by SAMSA.
- 1.4.5 *South African Maritime Safety Authority Act 5 of 1998*: The Act provides for the establishment of the South African Maritime Safety Authority (SAMSA) with the aim of implementing government maritime policy. SAMSA’s objectives as set out in the Act are:
- To ensure safety of life and property at sea;
 - To prevent and combat pollution of the marine environment by ships; and
 - To promote the Republic’s maritime interests.
- 1.4.6 *Dumping at Sea Control Act 73 of 1980*: brings into force domestically the provisions of the *London Convention on the Prevention of Marine Pollution by Dumping of Wastes, 1972*. It provides for the control of dumping at sea of various substances and structures, including vessels, platforms or other man-made structures, and bulky items constructed from steel, concrete, etc. South Africa is a signatory to the 1996 Protocol, which will eventually replace the current Convention. The Protocol introduces the precautionary and polluter pays principles and expands the objectives of the Convention to include the elimination of pollution where practicable. This Act is administered by DEA&T.

- 1.4.7 *National Environmental Management Act 107 of 1998*: provides for “co-operative environmental governance by establishing principles for decision-making on matters affecting the environment.” Its most important principle relevant to the Plan is that the costs of remedying an environmental degradation must be paid for by those responsible for harming the environment. It further stresses that the effects of activities on the environment should receive adequate consideration before actions are taken, and where effects cannot altogether be avoided, they must be minimised and remedied. This Act is administered by DEA&T.
- 1.4.8 *Public Finance Management Act 1 of 1999*: gives effect to sections of The Constitution which require national legislation to establish a national Treasury, to introduce generally recognised accounting practices; to introduce uniform Treasury norms and standards; to prescribe measures to ensure transparency and expenditure control in all spheres of government; and to set the operational procedures for borrowing, guarantees, procurement and oversight over the various national and provincial revenue funds. The Act adopts an approach to financial management which focuses on outputs and responsibilities, rather than the rule-driven approach of the old Exchequer Acts.
- 1.4.9 *Disaster Management Act, No 57 of 2002*: provides for an integrated and co-ordinated disaster management policy that focuses on preventing or reducing the risks of disasters; mitigating the severity of disasters; emergency preparedness, rapid and effective response to disasters and post-disaster recovery; the establishment of national, provincial and municipal disaster management centres; disaster management volunteers; and matters incidental thereto. This Act does not apply to a disaster where such a disaster can be dealt with effectively in terms of other national legislation.
- 1.4.10 *International Convention on Civil Liability for Oil Pollution Damage, 1992 (CLC92)*: The Convention provides for the claims for compensation for oil pollution damage, which may be brought against the owner of the ship or his or her insurer, which has caused the damage. In addition it sets an international benchmark on which the ship owner can limit his or her liability. This limit is only applicable in the case of compensation resultant from a tanker cargo spill.
- 1.4.11 *International Oil Pollution Compensation Fund, 1992 (Fund 92)*: The fund makes provision for compensation to be paid for claims in excess of the liability limit provided for in CLC92. The CLC92 and Fund 92 relate to pollution damage caused in the territory or territorial sea of a State, which is party to the Convention in question and to pollution damage caused in the EEZ, or equivalent area of such a State.
- (NB. South Africa acceded to the last two above-mentioned conventions in October 2004 and they should enter into force in October 2005. In the interim, the Republic still subscribes to CLC69.)
- 1.4.12 *International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC)*: requires parties to the Convention, individually or jointly, to take steps to prepare for and respond to an oil pollution incident. It requires ships flying the flag of the party to have on board Shipboard Oil Pollution Emergency Plans (the SOPEP manual). Offshore units under the jurisdiction of the party are to have oil pollution emergency plans (the oil pollution safety certificate). It requires a party to establish a national and regional system to be able to respond to an oil pollution incident. Although South Africa is not a party to the Convention, it will on the publication of the Plan have complied with the above requirements except for the establishment of a regional system.

PART II: POLICY AND PLANNING

2 ORGANISATIONAL ARRANGEMENTS

2.1 NATIONAL ORGANISATIONS (SAMSA and DEA&T)

One of the SAMSA objectives listed in Section 3 of the *South African Maritime Safety Authority Act 5 of 1998* (the *SAMSA Act*) is to prevent and combat pollution of the marine environment by ships. Section 52 of the Act assigns the combat function to DEA&T.

This arrangement of split responsibility was established on 1 October 1985 when DEA&T was made responsible for matters relating to the combating of oil pollution with the then Department of Transport (DOT) retaining responsibility for prevention. The arrangement applied to functions in terms of the *Prevention and Combating of Pollution of the Sea by Oil Act 6 of 1981* (as it was originally called). With the establishment of SAMSA on 1 April 1998, the administration of this Act (now called the *Marine Pollution (Control and Civil Liability) Act 6 of 1981*) was transferred to SAMSA in terms of the schedule to the *SAMSA Act*. Section 52 of the *SAMSA Act* continued DEA&T's responsibility for combating oil pollution by assigning the function to them.

Therefore, SAMSA, as the legally designated party responsible for preventing and combating pollution will, in the context of this Plan, be the lead agency and have overall responsibility for responding to pollution incidents from ships. SAMSA will also be responsible for the overall implementation of the Plan.

SAMSA and DEA&T are the two stakeholders responsible for pollution prevention and combating.

2.2 RESPONSIBILITIES OF SAMSA AND DEA&T

Because of the assignment of oil pollution combating functions to DEA&T, the prevention and combating responsibilities are divided along the principles that SAMSA is responsible for preventing an oil spill and so has to:

- Take overall charge of the co-ordination of the prevention and/or combating of an incident;
- Take control of the technical aspects of shipping casualties;
- Supervise oil transshipments;
- Prosecute parties guilty of the deliberate discharges of oil;
- Draw up contingency plans relating to the control of shipping casualties or potential casualties;
- Administer the Acts relating to oil pollution;
- Take charge of the legal and financial aspects relating to oil spill incidents and casualties;
- Control the use of the standby oil pollution prevention tug; and
- Issue pollution safety certificates for offshore installations.

And

DEA&T being responsible for combating oil spills has to:

- Co-ordinate and implement coastal environmental protection and clean-up measures;
- Control the use of the pollution combating vessels and surveillance aircraft;
- Control the use of oil spill dispersants;
- Maintain and supply oil dispersant stocks and other oil spill equipment;
- Draw up and maintain the DEA&T local coastal contingency plans to combat oil spills for local authorities; and
- Approve in consultation with SAMSA the contingency plans of offshore installations.

The above-mentioned assignment does not limit any additional duties and/or functions which may be DEA&T's responsibilities under other environmental legislation.

The Provincial Departments of Environmental Affairs shall assist:

- The DEA&T in updating the local coastal contingency plans;
- In building capacity and awareness in the local authorities; and
- Local authorities in the implementation of the DEA&T local coastal contingency plans.

2.3 GENERAL APPLICATION OF THE DIVISION BETWEEN DEA&T AND SAMSA

The above split in responsibilities has led to the following division in response to an incident:

The pollution prevention response:

SAMSA, as the lead agency, will, as soon as it obtains knowledge of an incident, intervene to ensure steps are taken to prevent pollution occurring. This is not always possible as some casualties are catastrophic and nothing done will prevent pollutants entering the sea. However, it is SAMSA's policy that the first intervention will be that which will endeavour to keep the pollutants contained in the ship until the ship can be physically removed to a safe place. Alternatively, when the pollutants have been effectively contained, they can be transferred to another ship or means of containment.

SAMSA manages on behalf of the Department of Transport a deep-sea salvage tug stationed permanently on the coast. This is South Africa's first line of defence in preventing pollution and the tug is readily available to tow away from the coast a ship that is polluting or threatening to pollute. As DEA&T and SAMSA are both responsible for pollution prevention and combating, SAMSA will, in the case of a pollution prevention operation only, keep DEA&T closely informed as DEA&T and other role players could be affected.

The pollution combating response:

DEA&T is responsible for co-ordinating the response actions to contain and clean-up pollution that has been released to the sea from the ship. In co-ordinating these combating actions, DEA&T's role is to ensure that all actions taken do not result in a greater environmental, social or economic impact than would have been the case should no action to combat the spill have been taken. DEA&T will, in consultation with SAMSA, initiate, approve, oversee and co-ordinate all activities taken by other role-players in responding to the containment and clean-up action. This is to ensure that all response activities are carried out in a co-ordinated manner and that they result in a net environmental benefit.

2.4 FINANCE AND COMPENSATION

South Africa has no dedicated State pollution contingency fund. The State's policy regarding costs or losses arising from an incident is that the polluter pays. Where the polluter cannot be identified, the State has to bear the cost of the clean-up.

In any incident where there is a ship involved the owner could impose a limit on the funds available for costs incurred in the prevention and combating roles. The ship owner can within the contents of the liability Convention or the *Merchant Shipping Act* limit his or her liability. This limitation of liability is a major deciding factor on the amount of money available for the prevention and clean-up activities. Where the polluter cannot be identified, the State is responsible for the costs incurred and this would most certainly be a major factor in deciding how much money is available for combating operations.

In a tanker incident the State has recourse to the Fund (*International Oil Pollution Compensation Fund, 1992*) for compensation to be paid in excess of the liability limit provided for in the *Marine Pollution (Control and Civil Liability) Act 6 of 1981*.

There is no limitation applicable to an incident resulting from an offshore installation.

Initially, because the Republic has no dedicated State pollution contingency fund, the costs of such operations fall to those involved in the operations and in line with the "polluter pays" principle may subsequently be claimed as costs and damages from the owner of the ship. It is however accepted that small service providers cannot be expected to carry the costs of providing services to the State for any time and SAMSA, as the responsible authority, will assist in enabling a response to get under way, by way of underwriting such actions as it considers necessary in the early phases of any response. This undertaking is severely limited and a better

arrangement regarding underwriting the costs will have to be made in the event. In many cases the owner will be identified and have P&I Club insurance cover, making the recovery of costs and damages a strong probability, especially if the claims are reasonable and any expenditure has been properly audited and controlled. It is important to bear in mind the limitation of liability regime that is in place in the Republic. It is quite possible however that there might be no response from the owner and any interventions and clean-ups must be carried out nonetheless. These actions need to be tempered however with the reality that these costs may not be recoverable from the owner and that the State would need to be approached for compensation. SAMSA will make every effort to secure assets or funds associated with the owner in cases such as this in order to mitigate the cost to the State.

In any case, an independent auditor should be designated at a very early stage of the incident so that there is no confusion as to the accuracy of claims or exactly what has to be compensated for. He/she should keep records and audit actions approved by the JRC (SAMSA) during the operation. These records will be required to support the claims for cost recovery and to show that any action taken was a reasonable step without which the operation would not have been a success.

A clean-up exercise can be very expensive and funds are required during operations. Reimbursement of costs incurred shall be made following procedures as set out in international conventions and according to the suggestions of an independent auditor. The independent auditor and a SAMSA designated officer must keep records of the operation and costs involved. Such records will assist to support the claims for costs incurred and to show that any action taken was a reasonable step without which the operation would not have been a success. The auditor must confirm that the action taken was solely meant to prevent or combat pollution that could end up being a threat or hazardous to the safety and health of the marine environment

2.5 THE JOINT RESPONSE COMMITTEE (JRC).

In the event of a major incident, SAMSA will bring together a JRC, made up of stakeholders and role players, the function of which will be to consult, inform, and co-ordinate activities in dealing with the incident. The stakeholders in the JRC are SAMSA and DEA&T and because of the “polluter pays principle”, the ship owner or person or organisation responsible for costs and losses incurred by the incident.

Any role player having a responsibility for some part in the pollution prevention or combating operation and who could or will incur costs, should attend the meetings of the JRC for the simple reason that costs incurred outside the decisions agreed to in the deliberations of the JRC will not be easily honoured by the polluter.

In any prevention or combating operation there is a limit on the budget available for costs incurred and the JRC will agree to an activity keeping in mind the priority of the activity and the balance of funds available in the budget.

So it becomes imperative then that the stakeholders and role players participate in the discussions of the JRC so as to prevent any disputes arising when payment is requested for costs incurred. As it is, SAMSA requires that during an incident, an independent auditor be appointed to check on work assigned and completed so as to ensure that there are no disputes when claims are settled.

SAMSA as the agency responsible for the implementation of the requirements of the *Marine Pollution (Control and Civil Liability) Act 6 of 1981* has the right to veto any activity agreed to by the JRC or any activity agreed to unilaterally by any other stakeholder or role player.

2.6 SUPPORT AGENCIES, STAKEHOLDERS AND ROLE PLAYERS

In addition to the major stakeholders already mentioned, other stakeholders and role players that may be involved in the prevention and combating operation are:

2.6.1 Local Authorities

Local Authorities are guided by the DEA&T local coastal contingency plans which require their actions to be co-ordinated by DEA&T.

The local coastal contingency plans contain important information regarding action procedures, equipment lists with locations, role-player contact details and expertise, and responsibilities.

These are elaborated on at Annex 1.

2.6.2 South African internal and territorial waters

The DEA&T shall, in consultation with SAMSA, as soon as notified of an oil pollution incident, undertake protection and/or clean-up actions irrespective of the origin and circumstances of the pollution. Where spills occur in territorial waters and they impact or threaten to impact on the coast, the relevant local authority assisted by the Provincial Department of Environmental Affairs shall, under the supervision of DEA&T, be responsible for the protection and clean-up activities in their respective areas. The DEA&T local coastal contingency plans are specifically designed to cover clean-up and recovery of oil in an incident of this nature.

The relevant local authority shall include South African National Parks; Robben Island Museum, South African National Defence Force and the Prince Edward Islands Management Committee for areas which are administered by these authorities.

The stakeholders and role-players are responsible and are accountable for their functions as set out herein. SAMSA will still have functions in respect of the administration of other duties under the *Marine Pollution (Control and Civil Liability) Act 6 of 1981*, e.g. controlling and accepting responsibility for costs of clean-up through the mechanism of the JRC.

2.6.3 Waters beyond the territorial seas

It is DEA&T policy that where an oil slick does not threaten or is not likely to threaten coastal or marine resources, it will only monitor the slick and will not do anything to contain, disperse or retrieve the oil. Aircraft will be used to monitor the slick and if the slick is made up of persistent oil, DEA&T may use vessels with breaker boards to break up the slick. In most instances it will rely on sea action to naturally disperse the oil.

Again, administration duties under the requirements of the *Marine Pollution (Control and Civil Liability) Act 6 of 1981* require SAMSA's participation in the functions required to monitor or break up the slick.

2.6.4 Ports

Port authorities and facilities that handle oil or harmful substances shall be responsible for combating spills within their own areas under the supervision of DEA&T and a watching brief by SAMSA.

In cases where the spills exceed the capacity of the contingency organisation in the port or any other handling facility, external assistance shall be requested according to their relevant contingency plans. All spills, even though they can be taken care of by the port authorities or facilities alone, shall be reported to SAMSA and DEA&T. There is nothing preventing the establishment of a JRC if in the opinion of SAMSA and DEA&T, it is required. Requests for external assistance will then be made through the JRC.

2.6.5 Terminals

The relevant company or terminal operator shall be responsible for combating oil, chemical and other spills within their own areas in line with their contingency plans under the watching brief of DEA&T and SAMSA. All spills, even though they can be taken care of by the terminal operator, shall be reported to SAMSA and DEA&T. There is nothing preventing the establishment of a JRC if in the opinion of SAMSA and DEA&T it is required. Requests for external assistance will then be made through the JRC.

2.6.6 Spills from Offshore Installations

An offshore installation is required to hold a *Pollution Safety Certificate* issued by SAMSA. The issue of the certificate is subject to the operator:

- a) Having in place an approved contingency plan for combating the pollution caused by any discharge of oil from a ship or tanker or from any other source in the immediate vicinity of such offshore installation, and for preventing the pollution of the sea by any further discharge of oil; and
- b) Accepting direct financial responsibility for any clean-up and pollution prevention operation.

The contingency plans are to be drawn up by the operator and they are required to have the approval of SAMSA and DEA&T before the issue of the pollution safety certificate. In the event of a discharge, SAMSA has to ensure that the plan is properly executed.

All spills, even though they can be taken care of by the offshore installation operator, must be reported to SAMSA and DEA&T.

Should the oil impact or threaten to impact on the shore, the requirements of the local authorities, as spelt out in paragraph 4.1.1 must be observed.

The establishment of a JRC is dependant on the scale of the incident. It would most probably be implemented if the incident required a response at Tiers 2 or 3. (See paragraph 4.2)

2.6.7. Spills of any other harmful substances

SAMSA has a specific responsibility to prevent and combat the threat of pollution arising from any harmful substances emanating from a ship. Due to the diverse nature and endless possible combinations of harmful substances carried by vessels, any response will be determined by the situation as it presents itself and the real time availability of suitable combating measures.

The mechanism for solving any developing situation will be a JRC responsibility i.e. SAMSA and the DEA&T, including any affected authorities in consultation with relevant experts and service providers. They will respond to any particular situation in the manner deemed fit but under SAMSA chairmanship.

2.6.8 Other stakeholders and role players.

The involvement of the stakeholders and role players listed below will be dependant on the type and extent of the pollution incident and resultant threat.

Stakeholders	Functions	Represented by
South African Petroleum Industry Association (SAPIA). (Where an oil spill is related to local oil company interests.)	- Facilitate communication between oil companies and authorities. - Participate in the JRC. - Provide personnel to advise and equipment as required. - Facilitate the provision of manpower for clean up operations under the supervision of DEA&T. - Arrange, as required, for additional response equipment from international oil spill response organisations. Assist with any aspect of the response as requested by DEA&T or SAMSA.	Oil Industry Environmental Advisor
Ship Owner	- Inform SAMSA of the incident. - Take steps to minimise pollution or threat of pollution. - Participate in the JRC. - If applicable, appoint salvors. - If applicable, inform P&I Club or underwriters. - Appoint on site representative	Master or designated person or salvor or P&I Club representative
Terminal operator or installation operator	- Inform SAMSA of the incident. - Take steps to minimise pollution or threat of pollution. - Participate in the JRC. - If applicable inform underwriters. - Appoint on site representative	Manager or designated person
Provincial Departments of Environmental Affairs; South African National Parks; South African Museum; South African National Defence Force; Prince Edward Islands Management Committee	- Provide assistance in the implementation of the local coastal contingency plans. - Provide specialist advice in respect of waste disposal treatment transportation and provincial legal requirements. - Facilitate communication between local authorities and the major role players. - Assist the local authorities where no capacity exists. - Participate in the JRC. - Capture oiled and orphaned birds, mammals and turtles. - Restrict or relocate (where necessary) birds, mammals and turtles to prevent them becoming oiled.	Pollution and waste manager

Stakeholders	Functions	Represented by
Local authorities which include among others, provincial, municipal, parks, environmental, museum, traffic, health, labour, etc.	• Organise clean-up operations within their area of jurisdiction under the supervision of DEA&T. • Provide advice and assistance based on local knowledge. • Participate in the JRC. • Assist with providing access to polluted areas. • Provide equipment and labour in terms of the local /coastal contingency plan. • Assist in sourcing local labour and equipment. • Assist with crowd and traffic control. • Provide emergency medical services if required. • Provide security personnel to safeguard equipment if required.	Representatives of the local authorities
Disaster management authorities	• Assist in the provision and manning of a JOC. • Provide support services to the operational functions.	Municipal, district municipal or provincial disaster manager
National Ports Authority (NPA).	• Take charge of a Tier 1 spill clean up within port limits. • Provide local assistance and manpower when requested. • Participate in the JRC. • Provide information when requested and if available. • Provide containment and combating equipment when requested.	Local harbour master and the port environment advisor or specialist
Chemical industry	• Provide personnel to advise and equipment as required. • Participate in the JRC. • Facilitate communication between chemical industries and authorities. • Provide product related information to assist with prevention, containment or clean-up. • Assist with any other aspect of the response as requested by DEA&T or SAMSA.	Advisor from the Chemical and Allied Industry Association (CAIA)
National Nuclear Regulator (NNR)	• Advise SAMSA and DEA&T during a pollution incident concerning nuclear pollutants. • Provide the appropriate specialist to assist and advise. • Participate in the JRC.	Advisor of the NNR
Salvors	• Under contract to the owner (or alternatively under instruction from SAMSA) salvage the ship and/or take the necessary action to prevent or minimise pollution from the casualty. • Participate in the JRC.	Salvage master

Stakeholders	Functions	Represented by
Smit Amandla Marine	• Provide, as instructed by SAMSA, a salvage tug as first line of defence in preventing a pollution incident. • Provide as instructed by DEA&T pollution abatement vessels. • Participate in the JRC.	Smit operations manager
Department of Water Affairs and Forestry	• Provide specialist advice in respect of waste disposal, treatment and facilities.	Pollution manager
South African Defence Force	• Provide support with transport and manpower as assistance in a clean-up operation. • Participate in the JRC.	Local commanding officer
South African Police Services	• Provide support in the investigation as to the cause of the incident. • Enforce the recommendations of the SAMSA investigation unit. • Provide manpower for crowd control and protection of property. • Participate in the JRC.	Local station commander
SANCCOB	• Co-operate with provincial environmental agencies to rescue, transport, clean and rehabilitate oiled birds. • Participate in the JRC. • Clean and rehabilitate oiled birds. • Rear orphaned chicks.	SANCCOB operations officer
Local environmental agencies, wildlife organisations and related NGOs	• Provide advice and assistance based on local knowledge. • Provide specialist advice with regard to the local area, terrain, etc. • Supervise clean-up operations within their area of jurisdiction. • Participate in the JRC. • Manage the rehabilitation activities for affected species. • Rescue and transport oiled birds. • Co-ordinate the rescue and transportation of oiled birds in consultation with SANCCOB.	Representative of the various listed organisations
South African Weather Service	• Provide weather forecasts and weather history as required for pollution prevention and combating operations.	Manager, Weather Forecasting in the Pretoria office
Home Affairs	• Facilitate the entry of personnel provided through international assistance or contract. • Provide assistance with the repatriation of distressed seamen.	Senior local immigration officer

Stakeholders	Functions	Represented by
Customs and Excise	- Facilitate the entry of equipment provided through international assistance or contract. - Take charge of salvaged goods pending determination and payment of duties (if applicable). - Assist with clearances for the disposal of pollutants and wreck.	Senior local customs officer
Service providers, such as, OPCSA, Drizit, HAZMAT, Oil Spill Response Ltd. (OSRL), the International Tanker Owners Federation (ITOF), etc.	- Provide equipment, materials and specialist manpower under contract to contain, recover and remove pollutants. - Provide equipment, materials and specialist manpower under contract to rehabilitate effected areas.	Local or international representative

PART III: PREVENTION STRATEGY

3 POLLUTION PREVENTION

3.1 Casualty management

SAMSA's strategy in respect of casualty response can be described as "*risk based casualty management*". Ship casualties are an unfortunate and inevitable side effect of sea-based trade and as both the largest trading country on the sub-continent as well as being a strategically placed coastal trade State (geographically), South Africa can expect more than its fair share of ship casualties. Risk based casualty management is based on a practical real-time evaluation of the benefits versus the risks, as the event unfolds, and where necessary and possible, active intervention.

IN TERMS OF SOUTH AFRICAN MARINE POLLUTION LEGISLATION AND THE WRECK AND SALVAGE ACT, SAMSA HAS THE CLEAR AUTHORITY TO TAKE ANY ACTION DEEMED NECESSARY TO PREVENT POLLUTION OF THE MARINE ENVIRONMENT, AND THIS INCLUDES THE AUTHORITY TO OVERRIDE A SALVOR'S DECISION.

SAMSA's priorities in managing a casualty are:

- Safety of life (saving the lives of people on board or otherwise threatened by the casualty);
 - The preservation of the vessel, or removal of the vessel from the shore, with harmful substances contained and intact, in order to prevent pollution;
 - The removal of oil and other harmful substances, by the most practical means, from the vessel to prevent pollution, should the option in (b) above fail;
 - The preservation of property (coastal properties, cargo and/or ship); and e)
- The removal of the wreck.

It is envisaged, and it is indeed current practice (after considering, inter alia, the risks of pollution and financial implications presented by any particular damaged vessel) for SAMSA to allow the vessel to carry out repairs in the South African territorial waters or even carry out cargo transfers (under supervision) in a designated bay, where the benefits far outweigh the risk profile. (See Places of Refuge in paragraph 3.2). Benefits in this context also mean assisting a vessel while there is opportunity and means, as opposed to dumping a developing situation on a neighbouring State that may not be afforded the same opportunity and may not even have the means. A major pollution incident in neighbouring States has a possibility and is almost certain to affect South Africa in due course. Where there is an imminent or possible threat of such an incident, SAMSA will engage with DEA&T and other relevant authorities in the process of assessing the risk profile. If necessary, this will be via the JRC.

SAMSA's strategy is therefore to ensure that its various legislated responsibilities and duties are carried out. In effect, this means that whenever there is a spill of oil or any other harmful substance from a ship or offshore installation, SAMSA will ensure that:

- a) There is an effective initial response, including communication with DEA&T;
- b) That there is effective communication and co-operation with affected authorities and parties by way of a JRC;
- c) That the methods and costs of carrying out the combating are in accordance with international practice and the *Public Finance Management Act 1 of 1999*;
- d) That costs and expenses of such combating are audited throughout. This is in order to expedite any subsequent claims made in terms of *Act 6 of 1981*; and
- e) That State expenditure in respect of pollution combating is recovered from the owner in the most expeditious manner.

[Note; In the case of offshore installations, an acceptable, effective and practical contingency plan, as well as the acceptance of direct financial responsibility for any clean-up, has already become part of the procedure for obtaining the statutory Pollution Safety Certificate from SAMSA]

3.2 PLACES OF REFUGE

South Africa has, for a number of years, allowed ships in distress to seek a place of refuge along the South African coastline. As no two incidents are the same, each request is considered on its merits and as a result SAMSA has developed the following policy principles:

- a) The first place of refuge considered is alongside a quay in a port in South Africa. However, this is subject to the approval of the National Ports Authority (NPA) which has its own safety, financial and commercial responsibilities and may well refuse entry to a ship in distress. Consultation between SAMSA, DEA&T and the harbour master of the port is a requirement for a ship that seeks refuge in a port; alternatively, practice has shown that places of refuge are limited to Algoa Bay, False Bay and on occasion, St Helena Bay and Saldanha Bay;
- b) There will be consultation between SAMSA and DEA&T as to the best place to moor the ship taking into account the environmental impact that might result from her sinking;
- c) Disclosure of all the relevant facts is expected from the owner/operator. Failure by the owner/operator to disclose all the facts or to participate in an open manner with SAMSA and any other relevant authority will of course produce a negative response to the request for a place of refuge;
- d) A guarantee to cover losses and costs in the event of a pollution incident or for a wreck removal may be required. In any event, insurance cover is a prerequisite;
- e) If the vessel has suffered structural damage or failure, SAMSA will require the owner to enter into a salvage agreement with a local salvor to deliver the vessel to a safe place;
- f) The owner/operator will be expected to place on standby a suitably powered salvage tug with the appropriate towing gear and expertise;
- g) In considering the request, SAMSA, in order of priority, will give consideration to the following:
 - Safety of the crew;
 - Pollution prevention;
 - Type of cargo; and
 - The value of the ship and her cargo;
- h) SAMSA may establish a JRC which will function in a pollution prevention capacity; and
- i) SAMSA has the authority to order the removal of the distressed ship at any time it considers it necessary.

3.3 REPORTING AND ALERTING

Marine Notice No. 16 of 2007 as may be amended from time to time, deals with the reporting of spills and shipping casualties, which may be reported to SAMSA, DEA&T or any contracted tug at the time. The initial report may come from any number of sources and be directed to whomever that source deems fit i.e. SAMSA or DEA&T. The notice and any subsequent amendment can be found on the SAMSA website under Marine Notices and more specifically under the title of "Reporting of oil spills and shipping casualties threatening pollution".

Any SAMSA employee who receives a report, hears or overhears any communication which indicates a possible incident (whether a spill or a ship with problems) is duty bound to ensure that the information is transmitted to the Operations Manager, or his stand in. The said officer must ensure that the report is investigated until he is reasonably certain that the report or rumour is substantiated and verified or repudiated.

3.4 SAMSA'S ACTION PLAN

The Operations Manager on notification of the incident, will take all possible steps to confirm the incident. In addition, wherever practicable and subject to safety and logistical considerations, he shall send a surveyor or a Principal Officer out to the vessel or the site of the incident to make an on site inspection and a report. The first-hand information received from qualified persons on site is critical to any reasonable risk assessment process.

The on-site inspection will be delegated to experienced ship surveyors. It is SAMSA's responsibility to allocate a budget for airfares, helicopter hire, hotels, etc., to facilitate the intervention by surveyors and other officers whenever there is a reported incident.

In addition, the SAMSA CRU team shall be tasked, as the Operations Manager determines, with carrying out among others the following actions:

- a) Determining the name and contact details of the vessel's owner;
- b) Inquiring into the insurance status of the vessel and the name of the P&I Club, if any;
- c) Requesting details of the fuel oils and other harmful substances on board;
- d) Evaluating the specific threat of the pollution posed by the vessel in respect of her bunkers and/or cargo on board;
- e) Obtaining any additional particulars, calculations or considerations required by the Operations Manager;
- f) Convening a JRC and establishing a JOC with communications and facilities;
- g) Obtaining a cargo manifest for the ship;
- h) Preparing press releases;
- i) Informing affected authorities and parties; and
- j) Where appropriate, representing SAMSA as part of any active intervention aboard the ship casualty.

3.5 SAMSA CASUALTY RESPONSE UNIT

The Unit consists of:

- a) Operations Manager;
- b) Four senior surveyors;
- c) Legal officer;
- d) Public relations officer;
- e) Naval architect; and
- f) An administration officer.

The officers are volunteers from the existing cadre. They are available at short notice. They are prepared for casualties, and are instructed and carry out exercises periodically in preparation for emergencies and interventions.

3.6 THE JOINT RESPONSE COMMITTEE

The JRC is established on the instruction of the SAMSA Operations Manager and it usually comes into operation after consultation between the major role players.

The JRC is chaired by SAMSA's Operations Manager or a senior SAMSA staff member who is appointed to the chair in writing by the Operations Manager. His or her function is to bring together all the major role players to discuss, instruct, inform, formulate and agree to plans on preventing and combating the pollution. SAMSA's participation in the JRC is closely linked to its CRU.

Participation in a JRC is important. It ensures a co-ordinated operation in dealing with the situation. It provides a forum where concerns can be tabled, discussed and then be allocated to the correct authority to

deal with it. It ensures that action taken is agreed to by the major role players, which in turn, ensures prompt payment for services rendered. Pollution scenarios change all the time and a JRC allows the role players to stay on top of the changing situation.

Not every incident will require the establishment of a JRC. However, for any incident where the committee is not established, a Principal Officer or a surveyor appointed by a Principal Officer will maintain a watching brief over the incident and resultant clean up.

A JRC will meet regularly, usually daily, sometimes twice a day depending on the incident. It is important to keep in mind that the time of the role players must not be consumed by committees. As the urgency about an incident decreases, the frequency of the JRC meetings may be reduced.

SAMSA has the responsibility of briefing the press. An advantage of a JRC is its ability to provide a co-ordinated and factual response to the media. Practice has shown a combined daily press release from the stakeholders works very well. In addition, specific stakeholders and role players could be (with their consent) briefed to meet with the press in a media conference. (See paragraph 5 for “Media Response”).

The JRC will meet at the most convenient disaster management JOC or alternatively in a location which is most convenient to the incident. It is the duty of the officer in the CRU who is tasked with the function to ensure that the JRC has the appropriate communication systems available. To this end SAMSA has available a budget to deal with these expenses if necessary.

TERMINATION OF THE RESPONSE

SAMSA, as the lead agency, has the function of terminating the response and it will only do this when it is satisfied that effective completion of the response is achieved based on expert advice. This advice will be obtained in consultation with the major role players. The JRC provides the platform for this consultation to take place and to ensure that all parties have signed off with regard to their various responsibilities. SAMSA will be responsible for announcing the termination of the response.

PART IV: COMBATING STRATEGY

4.1 LEVELS OF RESPONSE

In the Plan a combating response shall be organised according to incidents which are oil or chemical or hazardous substances spills from a casualty or from a bunker or cargo or oil related activity associated with ship operations at a terminal, a refinery or around waterside storage tanks, etc. These incidents result in the following categories of response:

- a) A **Tier 1** response is where the containment, clean-up and rescue of contaminated fauna can be dealt with within the boundaries of the vessel, berth or a small geographical area where the incident has no impact outside the operational area but poses a potential emergency condition. Such an incident is a small spill that can be contained and cleaned-up by the ship, terminal or port authority staff using their own resources. The most common type of Tier 1 response deals with an incident occasioned during a ship bunkering operation.
- b) A **Tier 2** response is where the nature of the incident puts it beyond the containment, clean-up and rescue of contaminated fauna capabilities of the ship or terminal operator and the containment or clean-up requires the use of some of or all the government and industry resources. It could be near or some distance from operational centres. The incident is usually associated with shipping activities in ports or harbours, estuaries, coastal waters, pipelines, tank failures or near shore explorations and production operations.
- c) A **Tier 3** response is where the nature of the incident puts it beyond containment, clean-up and rescue of contaminated fauna capabilities of a national or regional response. It is usually a large spill which has the probability of causing severe environmental and human health problems. The response will require assistance from other African States and/or specialised overseas response organisations. Such incident becomes a major international affair involving almost every aspect of government. When responding to an incident of this nature, only strategies outlined in the Plan should be engaged.

4.2 RISK ASSESSMENT

SAMSA and DEA&T will continue considering and assessing the risk factors in the South African marine environment. The random, infrequent occurrence (human error, mechanical failure, weather, etc.) and acute nature of these spills, leads to events that tend to defy methodical prediction. However, events themselves are evidence of justification for the need for a national response preparedness and capability.

4.3 PROTECTION PRIORITIES

South Africa's coast line is surrounded by high energy seas. In the majority of incidents regarding oil, these high energy seas disperses the oil so reducing the need for a large commitment of oil retrieving equipment held on standby. Therefore, the procedure for combating a slick is often a monitoring one. However if the slick should threaten a high risk estuary area, South Africa is geared to closing the estuary with booms or man-made sand bars.

In responding to an incident, the response officer in charge of a clean-up operation will have to give consideration to protection priorities to be employed during the response. They are, in order of preference, the following:

- a) Human health and safety;
- b) Rare, threatened and near-threatened fauna and flora;
- c) Habitat and cultural resources;
- d) Commercial resources; and
- e) Amenities.

However, in assessing protection priorities, it is necessary to maintain a balanced view of the potential successes of the particular response strategies. This is of particular importance when it is unlikely that such strategies will be successful in protecting a higher sensitive resource, but could be successful in the protection of less sensitive resources.

4.4 RESPONSE STRUCTURE

The DEA&T has a responsibility of setting up a response team and to ensure that the whole operation is running smoothly. This will be done in consultation with SAMSA and more specifically the JRC. Depending on the scale of the incident, the DEA&T response unit shall comprise of:

- a) On-scene coordinator;
- b) Shore controller;
- c) Logistics officer;
- d) Environmental liaison officer; and
- e) Communications officer.

In addition, where shoreline protection and clean-up measures are implemented, a shore logistics officer from the relevant local authority(s) will be appointed to liaise with the DEA&T response team.

4.5 OPERATIONS AND PROCEDURES

4.5.1 Surveillance

If coastal or marine resources are not threatened or likely to be threatened, it may be best to do nothing other than continue to monitor the slick and its movements. If the oil is diesel or light crude, and it is far offshore, the majority of it will evaporate and disperse within 24 to 48 hours, and it will therefore have minimal impact. A fixed wing maritime surveillance aircraft shall be contracted to the checking and monitoring of the movement of the slick during an incident. Furthermore, pilots of the surveillance aircraft are required to report any sight of any substance in the sea for immediate onward transmission to DEA&T or SAMSA and to monitor the movement and behaviour of the spill. If the assessment shows that another State is likely to be

threatened, SAMSA will, through the Department of Foreign Affairs, inform the authorities in the threatened State.

4.5.2 Containment and recovery

Oceanographic conditions off the South African coastline are not generally conducive to the containment and recovery of oil at sea. Under exceptional circumstances though, this strategy can be attempted in some coastal bays. Experience with spills in other parts of the world has shown that in the majority of cases it is unlikely that more than 20% of the spilled oil can be recovered at sea. Booms and skimmers are utilised in sheltered ports and coastal areas in an attempt to protect sensitive areas using vessels with a weir skimmer incorporated into its structure.

Attempts should be made to prevent oil reaching the landing beaches of African Penguins and the rocks on which cormorants land because previous experience has shown that when oil reaches such localities very large numbers of birds, or a large proportion of birds in a colony, become oiled.

4.5.3 Dispersion

a) Mechanical dispersion

For relatively small spills resulting in sheens, the speed of dispersion can be increased by steaming through the slick, where turbulence created by the passage of the vessel will break up the oil. This can also be improved by dragging devices known as breaker boards, or nets behind the vessel. These further agitate the surface of the water and break up the slick. Sometimes the natural dispersion by the waves could be a solution.

b) Chemical dispersion

The most common method of dispersion is achieved using chemical dispersants. Oil spill dispersants have frequently been used during response operations. However, certain dispersants are only effective on certain types of oil and only within a limited time span after the spill. Recent oil spill dispersant formulations have been designed to treat more viscous and weathered oils which could not be effectively treated by the earlier formulations. Dispersant application may have both advantages and disadvantages. Disadvantages include the fact that application of the dispersants result in increased concentrations of oil in the water column, and oil dispersant mixtures are generally more toxic than the oil itself. It is very important therefore that their use is properly controlled; that they are used only when physical containment and removal is not possible, and that their use results in a net environmental benefit.

South Africa's national oil spill dispersant policy sets out the criteria necessary for making rational decisions on the non-use of dispersants. The policy can be found on the SAMSA website in *Marine Notice No. 14 of 1997* under the title: "Policy on the use of oil spill dispersants in South African waters" and any amendment made thereafter. The decision to use dispersants should only be taken by the government authority responsible for the co-ordination of oil spill combating i.e. DEA&T. In short the policy on dispersant usage requires and prohibits their use in water depths of less than 30 metres and within five (5) nautical miles of the coast unless a net environmental benefit analysis suggests otherwise. The patrol vessels of DEA&T and the vessels that work the Durban SBM are dedicated to carrying dispersant. Additional dispersant stocks are located in the ports of Cape Town and Durban (including 20 tons of Type III concentrate dispersant in Cape Town, formulated to disperse heavy emulsified oils). Type I dispersants should not be used on emulsified or other viscous oils as they are not effective on these types of oils.

A dedicated aerial dispersant spraying resource is not available in South Africa. Aerial dispersing could be provided through the use of crop spraying aircraft which are available locally.

Note: Naturelink at Wonderboom airport in Pretoria provides aircraft with dispersant equipment capable of carrying 2 tons of dispersant with a 200 nautical mile range under contract to OSRL in West and Central Africa

4.5.4 Shoreline protection and clean-up

a) Coastal protection

Sometimes clean-up efforts contribute to environmental damage and for that reason it is often better to leave it to natural clean-up processes. In situations where some clean-up must be attempted, it is important that methods selected are those which are the least damaging to the environment. Decisions about clean-up will depend on the type of oil, degree of contamination and the type of habitat affected. Specific guidelines for the protection and clean-up of coastal and marine resource areas are clearly outlined in the DEA&T local coastal contingency plans.

Booms and barriers can be used to protect coastal features such as estuaries, marinas, harbours and water intakes either by closing off entrances to these features or if this is not feasible, by deploying them so as to deflect or divert the oil away from the area of concern. In the latter case the oil should be directed towards a sacrificial area where it can be collected and recovered. These sacrificial areas are identified in the local coastal contingency plans. In cases where the oil has already come ashore, booms may be used to trap the oil for collection and to protect adjacent areas from becoming contaminated. In general though, it is not feasible to successfully place booms along straight sections of beach. When floating booms are used to close off certain areas, they can be backed up by absorbent booms to pick up any oil, which might penetrate the barrier. Bubble barriers are popular for the protection of yacht basins and marinas as they do not inhibit the movement of boats in and out of the facility.

Booms or barriers can also be improvised using “materials of opportunity” such as wood, bamboo, fishing nets and natural absorbents such as straw bales, coconut husks, reeds and sugar cane. In some cases bulldozers can also be used to construct sand bars across estuaries or lagoons to prevent oil from entering them. In such cases it may be necessary to insert pipes into the barrier to prevent a build up of water in the lagoon or estuary.

b) Coastal clean-up

If due to weather and sea conditions, response at sea is not feasible or protection of sensitive areas is not possible, or these have already been affected, appropriate clean-up priorities and other response measures should be determined. Priorities for clean-up methods will depend on a number of factors including the following:

- a) The use by wildlife of beaches as access to breeding/roosting localities;
- b) The ecological sensitivity of the area concerned;
- c) The importance of the beach for recreational purposes;
- d) The amenability of the beach to natural cleansing;
- e) The degree of oiling;
- f) The accessibility of the beach; and
- g) Seasonal considerations.

Depending on the season, priority will normally be given to heavily contaminated beaches that are either of ecological significance or of high recreational value giving special consideration to the risk of substantial, perhaps irreversible or reversible only in the long term, damage to wildlife populations. The timing of the commencement of the clean-up operation also depends on a number of factors. In the early stages heavy concentrations of stranded oil which may be refloated only to contaminate other areas, should be cleaned up as soon as possible. This is also true if the oil is likely to become buried on the beach as a result of cyclical movements of sand on to and off the beach. On the other hand, if it is not likely to refloat or be buried, then it may be preferable to wait until all the oil has come ashore to avoid having to clean the same area twice. This is particularly true for contaminated rocks.

Manual clean-up methods are generally preferred for sandy beaches, especially in environmentally sensitive areas although where there are huge accumulations of oil and oily debris it may be necessary to use mechanical equipment such as bulldozers and front-end loaders.

In either case it is important to remove as little as possible of the sand itself both to limit the volume of waste for disposal and to avoid creating erosion problems on the beach. Clean-up teams need to be closely supervised as much as possible.

4.5.5 Bioremediation

Bioremediation of oiled shorelines in South Africa is considered an optional clean-up strategy for a percentage of areas, and a relatively narrow range of the shoreline. However, types of substrate beaches are also areas of considerable importance as wildlife habitat, biological diversity, and recreation and subsistence resources. In these areas bioremediation would be considered a valuable option in the case of a spill to accelerate the natural bioremediation of the oil. This strategy would also apply to a narrow range of oil conditions and works best on moderately oiled shorelines. Even on beaches of the appropriate substrate, bioremediation would be used as a secondary strategy after mechanical clean-up if the oil was deposited in heavy concentrations. In addition, natural recovery may be the appropriate strategy on shorelines with only a light coating of oil.

Previous experience has shown that marine vertebrates that breed on land, especially seabirds, are sensitive to oil pollution. Without intervention, large numbers of these animals will often die after becoming oiled, with severe consequences to their populations. Where possible, it is necessary to rescue animals that become oiled, for rehabilitation and subsequent return to the wild. Because rehabilitation, which requires intensive capacity to provide care, is often limited, it may be necessary to restrict or locate animals to prevent them from becoming oiled. The removal of breeding animals from their breeding areas for rehabilitation or relocation may separate them from their young, therefore it may be necessary to collect such young for captive rearing.

4.5.6 Rocky shoreline clean-up

Oil washed up on to rocky shorelines will collect in rock pools from where it can be removed by using pumps or vacuum trucks. If the areas are inaccessible by road, the oil can be removed by mixing it with absorbent materials, which can then be removed manually using forks or rakes to take it to a collection point. Once the liquid oil has been removed, it may be necessary to clean those rocks which have been left with a surface film of oil. This is generally true for heavily utilised amenity areas, although in more remote areas the oil could be left to weather naturally.

Cleaning up can be undertaken using high-pressure hoses with cold or hot water depending on the nature of the oil. In the case of very viscous oil it may even be necessary to use steam cleaning and to apply detergents or dispersants to the rocks prior to cleaning.

In extreme cases where oil has been baked onto the rocks, rocks may have to be sand-blasted. Whichever method is selected, provisions should be made to collect the oil that is removed either using booms and pumps or absorbent materials.

In selecting the clean-up method, consideration must be given to the fact that the more aggressive the method, the less likely that any of the marine organisms on the rocks will survive the treatment. Their use should therefore be restricted to amenities. As indicated above, the activities which are to be undertaken in the event of an oil spill impacting or threatening to impact any particular section of the coastline are outlined in the DEA&T local coastal contingency plans.

4.6 OIL COMBATING EQUIPMENT

The national oil pollution combating equipment is under the maintenance and care of DEA&T. Arrangements can be made through the DEA&T representatives for the lease of the equipment. The oil industry and port authorities have stocks of oil spill equipment at various locations around the coast..

In contrast to the above, the equipment and materials used in beach clean-up operations are, for the most part, not specifically for oil spills. They are provided by local authorities themselves or are available from private contractors.

4.7 DISPOSAL OF POLLUTANTS AND DEBRIS

Clean-up operations can generate substantial quantities of oily debris. Temporary storage, transportation and final disposal methods shall be arranged to comply with the Department of Water Affairs and Forestry disposal approvals. This will usually be facilitated by the responsible local authority. In the case of an oil spill, the DEA&T coastal oil spill contingency plans contain information on the disposal of oily debris. This should include any pre-designated arrangements for disposal sites and approved contractors. Ideally, disposal sites should be identified as close as possible to those areas where oil pollution could most likely occur.

PART V: ANCILLARY ACTIVITIES

5 MEDIA RESPONSE

5.1 Press conferences

As the major pollution incident is usually of immediate interest to both local and international media, it is in the public's interest to keep the media fully informed and as regularly as possible. Failure to do so at an early stage could result in seriously distorted information circulating both nationally and internationally. The media should receive reliable information timeously. It is the responsibility of SAMSA to make information available as soon as possible. It is good practice to ensure that the JRC has a media office in place. A media team and designated public relations officers should take control of the media office and liaise with relevant Ministries and the press as soon as required. They should arrange press conferences when instructed to do so by the JRC. No journalists should have direct contact with the response team during the operation as this can disturb the urgent processes of the operation.

5.2 Ministerial and VIP visits

It is usual that when a major incident occurs, the Ministers concerned wish to visit the scene. He/she is usually accompanied by Senior Officers and other VIPs. The public relations officers from such Ministries shall make the necessary arrangements for such visits and also try by all means to accommodate journalists when requested to do so on condition that the Minister agrees.

6 PROSECUTIONS

SAMSA is responsible for securing evidence for possible use in court if SAMSA's principal officer or its Operations Manager have reason to believe that an offence has been committed and there is no admission of contravention on the part of the polluter. The gathering of such evidence must not interfere with operational activities of the salvors and other emergency services.

7 REPORTING

Each government department or agency responsible for the prevention and combating of pollution shall on the termination of a response compile a report detailing their actions related to the incident and the results achieved. Lessons learnt shall be documented and be made available to all role players for training purposes and in preparation of any future incidents.

8 TRAINING AND EXERCISES

SAMSA and DEA&T are to conduct regular training programmes and exercises for stakeholders and role players. The training programmes are designed to enable South Africa to have sufficient numbers of trained personnel to mount a credible and effective response to a pollution incident. Training programmes shall be conducted on three levels, and which recognise the overall technical complexities of managing a spill response and that the associated knowledge required by personnel varies depending on their levels of responsibility.

The following shall be the three levels of training to be conducted:

- (1) Senior Management: Level 3: The focus of training shall be on the requirements of members of the national authorities from DEA&T and SAMSA responsible for high level decision making.
- (2) Middle management: Level 2: The focus shall be on the requirements of middle management personnel including designated shore logistics officers and area controllers responsible for the preparation of contingency and response plans and the management and conduct of effective spill response operations and associated logistics, administrative and financial tasks.
- (3) Operator: Level 1: The focus shall be on the requirements of operational personnel, those undertaking on-site clean-up operations and operating spill response equipment.

The cost of Level 3 training shall remain with SAMSA while that of Levels 1 and 2 will be the responsibility of DEA&T. It must be emphasised that offshore installations, terminals and industrial stakeholders must ensure adequate investment in the training and exercising of their personnel.

Exercises should validate the effectiveness of the plan and the readiness of stakeholders and role players who should be part of these initiatives so they can learn their roles, develop relationships and improve the plan where necessary. The equipment should be tested to ensure that it is in good working condition. Lessons learnt should be noted and improvements in the plan should follow. For the purposes of sharing responsibility DEA&T and SAMSA should share the responsibility and cost of an exercise as this could be very expensive. One should note that a real-time scenario is envisaged as part of the exercise.

9 MAINTENANCE AND REVIEW OF THE PLAN

Contingency plans are evolving documents and as such require regular updating. The Plan shall be subject to a bi-annual review taking into account policy changes and experience gained from incidents and exercises. The JRC should assess the relevance, adequacy, and effectiveness of the Plan after each incident. Should there be corrective or improvement areas identified, they should be reviewed immediately and communicated to all stakeholders and role players. Amendments will be handled by a SAMSA/DEA&T liaison committee according to suggestions by concerned and affected parties. An urgent need to review certain parts immediately should only be done in the interest of improving effectiveness. Information for updating the Plan should be forwarded on a regular basis to the SAMSA Operations Manager.

ANNEX 1

The local coastal contingency plans cover the following:

- a) Legal aspect of the oil spill response including liabilities, claims and costs;
- b) Reporting procedures and activation of the Plan;
- c) Organisational structures during an incident and job descriptions of role players;
- d) Available facilities and resources;
- e) Geographical boundaries of responsibility;
- f) Site-specific protection and clean-up measures required during an incident;
- g) List of available equipment; and
- h) Contact details of all role players.

The plans contain the following information which could be of assistance during a major incident:

- a) Guidance on what equipment and personnel would be at the disposal of the national response unit when needed;
- b) Arrangements for establishing accommodation and catering for members of the response team who would be usually away from their base;
- c) Arrangements for communication purposes;
- d) Arrangements for accommodating press conferences;
- e) Temporary, intermediate and final storage site and routes for disposal of waste; and
- g) Maps clearly showing access points, terrain types, etc.

ANNEX 2

TELEPHONE LIST FOR OIL SPILL REPORTING

The Principal Officer (PO) stationed closest to the incident should be the first contact				
Organisation/Location	Office	Fax	After hours	Cell
SAMSA Durban				
Mr Ferron Hartzenberg (PO)	(031) 307 1501	(031) 306 4983	(031) 764 3823	084 5871051
SAMSA Cape Town				
Capt D Colly (PO)	(021) 421 6170	(021) 419 0730	(021) 712 0758	083 412 8861
Capt G Louw	(021) 4216170	(021) 4190730		084 240 3170
SAMSA Richards Bay				
Mr G Conway (PO)	(035) 788 0068	(035) 788 0067	(035) 753 1373	082 449 6350
SAMSA Saldanha Bay includes the Port Nolloth Harbour Master				
Mr NA van Niekerk (PO)	(022) 714 1612	(022) 714 3635	(022) 713 1488	082 445 3161
Capt W Hoogendijk	(022) 714 1612	(022) 714 3635	(022) 713 4151	082 445 3162
Mr M Slabbert	(022) 714 1612	(022) 714 3635	(022) 714 1427	082 789 6764
Mr J Coraisen (Port Nolloth)	(027) 851 7695	(027) 851 7699		082 386 2141
SAMSA East London				
Capt P Kroon (PO)	(043) 722 4120	(043) 722 2264	(043) 726 5857	082 445 3166
SAMSA Mossel Bay				
Mr D Manley (PO)	(044) 690 4201	(044) 691 1206	(044) 695 1844	082 477 1813
SAMSA Port Elizabeth				
Mr B Colenutt (PO)	(041) 585 0051	(041) 582 1213	(041) 360 3744	082 445 3167
Capt N Campbell	(041) 585 0051	(041) 582 1213	(041) 368 7528	083 309 6053
SAMSA Head Office				
Capt S Modak (GM Operations)	(021) 402 8980	(021) 421 6109	(021) 422 0795	083 257 5931
Capt S Modak (CEO – Acting)	(012) 366 2600	(012) 366 2601		083 257 5931
Maritime Rescue Coordination Centre-MRCC				
Duty Controller	(021) 938 3300	(021) 938 3309	(021) 938 3300	
Department of Environment Affairs and Tourism (Marine and aquatic pollution control), Cape Town				
Dr Y Peterson (DD)	(021) 402 3158	(021) 402 3340		083 530 3127
Smit Marine Cape Town				
Mr D Murray	(021) 507 5777	(021) 507 5885	(021) 797 2711	082 909 9948
Mr D Main	(021) 507 5777	(021) 507 5885	(021) 794 6662	082 907 2775
National Ports Authority of South Africa				
Cape Town Senior Vessel Traffic Control	(021) 449 1009		(021) 449 1009	
Saldanha Bay Senior Vessel Traffic Control	(022) 703 5310		(022) 703 5310	
Durban Senior Vessel Traffic Control	(031) 308 8262		(031) 308 8262	
East London Senior Vessel Traffic Control	(043) 700 2142		(043) 700 2142	
Port Elizabeth Senior Vessel Traffic Control	(041) 507 1910		(041) 507 1910	
Richards Bay Senior Vessel Traffic Control	(035) 905 3401		(035) 905 3401	
Mossel Bay Senior Vessel Traffic Control	(044) 604 6287		(044) 604 6287	

ANNEX 3

PROCEDURE FOR RESPONDING TO CHEMICAL OR HNS SPILLS		
WHO	STEP	ACTIVITY
ANYONE	1	Report initial incident to MRCC or SAMSA Port Office
MRCC or SAMSA (PO)	2	Collects all possible information and completes initial report as per Appendix 1
MRCC or PO	3	Informs General Manager: Operations (SAMSA)
GM: Ops	4	Mobilize SAMSA Casualty Response Unit(CRU) to investigate, assess and report
CRU	5	Investigate, assess and report to GM: Ops Report as per Appendix 2
GM: Ops	6	Consult DEA&T and makes decision: A. No further action B. Implement response and form Joint Response Committee (JRC)
JRC	7A	Decides on response (informs and consults with specialized agencies)
	7B	Execute response
	7C	Arrange for disposal or storage of contaminated wastes recovered (in compliance with legal requirements)
GM: Ops	8	Terminates action on satisfactory completion of JRC response.
GM: Ops	9	Initiates de-briefing with role-players

APPENDIX 1

INITIAL CHEMICAL/HNS SPILL REPORT

(-CHEMICAL/HNS SPILL REPORT)

DATE:

TIME OF SPILL:

TIME REPORTED:

TO WHOM:

LOCATION:

DESCRIPTION OF INCIDENT:

A. VESSEL DETAILS (COMPLETE PORT STATE INSPECTION FORM)

- | | | |
|-----------|---|------------------------|
| 1. | NAME:
CALL SIGN: | TYPE OF VESSEL: |
| 2. | P.O.R: | YEAR BUILD: |
| 3. | O.N.:
IMO NO: | CLASS: |
| 4. | GROSS:
NETT: | |
| 5. | OWNER: | |
| 6. | OPERATOR: | |
| 7. | AGENT: | |
| 8. | P&I CLUB:
P&I attends: (name) | |
| 9. | OBTAIN CREW LIST | |

C. CHEMICALS

- 1. PRODUCT/CHEMICAL NAME(S):**
- 2. UN NO.:**
- 3. POLLUTION CATEGORY:**
- 4. TANK/CONTAINER DETAILS:**
- 5. ACTION:**
- 6. OTHER INFORMATION:**

D. OTHER INFORMATION

- 1. ACTION MASTER/CREW:**
- 2. MASTER'S EXPLANATION:**
- 3. WEATHER:**
- 4. SHIP - REPORTED TRIM:** **LIST:**
- 5. SOUNDING/TRIM TABLES/PLANS AVAILABLE:**
- 6. P & A MANUAL DETAILS (for chemical tankers)**
APPROVAL DATE:
WHO:
- 7. CERTIFICATE OF FITNESS (for chemical tankers)**
ISSUED:
EXPIRE:
LAST ANNUAL:
BY WHOM:

CARGO RECORD BOOK:

UP TO DATE:

8. SHIP/SHORE AGREEMENT/CHECKLIST (IF IN PORT)

CARGO LOADING PLAN	:
AGREED RATE	:
ACTUAL RATE	:

9. OUTSIDE CONTRACTORS:

10. DEPOSIT:
RECEIPT NO.:

11. DETENTION:
RELEASE:

12. PRINCIPAL OFFICER OR SURVEYOR'S COMMENT:

APPENDIX 2

HARMFUL SUBSTANCES REPORT FORMAT

(Sections of the ship-reporting format, which are inappropriate, should be omitted from the report)

This report is for use when reporting discharge or potential discharge of noxious liquid substance carried in bulk.

- A Ship name, call sign / ship station identity and flag
- B Date and time of events (LT)
- C Position: latitude and longitude; or
- D Position: true bearing and distance, or location
- E True course
- F Speed in knots and tenths of knots
- L Route information/intended track
- M Radio communications: full names of stations (including INMARSAT)
- N Time of next report (LT)
- P**
 - 1. The correct technical name of the noxious liquid substances on board
 - 2. UN number or numbers
 - 3. Pollution category (A, B, C or D) for each noxious liquid substance *(Note: In the case of a probable discharge, item P should be included)
- Q
 - 1. Condition of ship, as relevant
 - 2. Ability to transfer cargo/ballast/fuel

- R
1. The correct technical name of the noxious liquid substance discharged into the sea
 2. UN number or numbers
 3. Pollution category (X,Y,Z and OS) for each noxious Liquid substance
 4. Names of manufacturers of substances or consignee or consignor
 5. An estimate of the quantity of each substance
 6. Whether lost substances floated or sank
 7. Whether loss is continuing
 8. Cause of loss
 9. Estimate of the movement of the discharge or lost substances giving current conditions, if known
 10. Estimate of the surface area of the spill
- S Weather conditions (give brief details of weather and sea conditions prevailing)
- T Name, address, telex and telephone numbers of the ship's owner and representative
- U Ship size and type
- X
1. Action being taken with regard to the discharge and to the movement of the ship
 2. Assistance of salvage efforts which have been requested or to which have been provided by others

ANNEX 4

PROCEDURE FOR SETTING UP JOINT RESPONSE COMMITTEE		
WHO	STEP	ACTIVITY
GM: Ops	1A	Consults with stake-holders and role-players and constitutes a Joint Response Committee (JRC)
	1B	GM: Ops shall be the chair or GM: Ops shall appoint in writing a SAMSA official (Senior Surveyor) to be chair
Chair: JRC	2	Instructs the Casualty Response Unit (CRU) to set up a Joint Operations Centre (JOC) with an appropriate communication system and at a convenient location
JRC	3A	JRC shall meet regularly (as often as is required)
	3B	JRC shall discuss, inform, formulate and agree on plans to prevent and combat the pollution (in a transparent manner) and instruct the CRU and other role-players accordingly
	3C	JRC shall conduct its business as per Annex 5 (The JRC Management and Media Protocols)
Chair: JRC	4	After consultation with committee may terminate the response (in writing)

THE JRC MANAGEMENT PROTOCOL AND MEDIA RESPONSE PROTOCOL

A THE JRC MANAGEMENT PROTOCOL

- 1 Members of the JRC shall be appointed by the General Manager Operations, assisted by the DEA&T, on the basis of any of the following:
 - extensive knowledge of matters relating to management of response operations in a pollution incident;
 - expertise in marine salvage matters;
 - expertise in ship construction;
 - extensive knowledge of the spilled substance, including its behaviour in the environment;
 - knowledge of law relating to any aspect of the incident;
 - shipowner, terminal operator and / or agent;
 - representative of the defence force, police services, wildlife organisation/s;
 - representatives of the major stakeholders (SAMSA and the DEA&T);
 - representative of a role-player having a responsibility for some part in the prevention or combating operation, and who could or will incur costs;
 - representative of NPA;
 - representative of the Local Authority;
 - representative of Provincial Departments of : Environmental Affairs; South African Defence Force; South African National Parks; South African Museum; Prince Edward Island Management Committee; and
 - representative of any other body considered to have specialised knowledge or expertise with regard to the incident at hand.
- 2 The JRC shall conduct its business in an open manner with the overall aim of mitigating the effects of the incident.
- 3 The JRC shall decide on what preventive and / or combating measures to be taken in order to mitigate the impact of the pollution incident on the environment, keeping in mind the priorities set out in the Plan and the balance of funds available in the budget.
- 4 The JRC is responsible for making a request for external assistance, should it become necessary.
- 5 The JRC shall meet regularly, usually daily, sometimes twice a day depending on the incident. As the urgency of the incident decreases, the frequency of the JRC meetings may be reduced.
- 6 The JRC approves the independent auditor nominated by SAMSA, whose responsibility is to keep records of the operation and costs involved.
- 7 The JRC shall provide a coordinated and factual response to the media, for SAMSA to use in briefing the press.
- 8 The JRC shall advise the Chairman to order termination of response after it is satisfied that the operation has been effectively completed.

B MEDIA RESPONSE PROTOCOL

- 1 A media office shall be established, as part of the JOC, by the CRU.
- 2 The JRC, led by the Chairman, shall appoint a media team, and designated public relations officers to take control of the media office and liaise with the relevant ministries and the press.
- 3 The media team shall arrange press conferences when instructed to do so by the JRC.
- 4 SAMSA has the responsibility to brief the press. Typically, the contents of the briefing will be a coordinated and factual response compiled by the JRC.
- 5 When need arises, specific stakeholders and role-players will be (with their consent) briefed by the JRC to meet with the press in a media conference.
- 6 Should the Minister/s and / or VIP's from the relevant ministries wish to visit the incident scene, the public relations officers from those ministries shall liaise with the designated public relations officers at the incident scene to make the necessary arrangements for such visits.
- 7 The public relations officers from the ministries shall try to accommodate journalists when requested to do so, on condition that the Minister agrees.
- 8 Journalists shall not be allowed to have direct contact with the response team during the operation, as this can disturb the urgent processes of the operation.

END OF PROTOCOLS

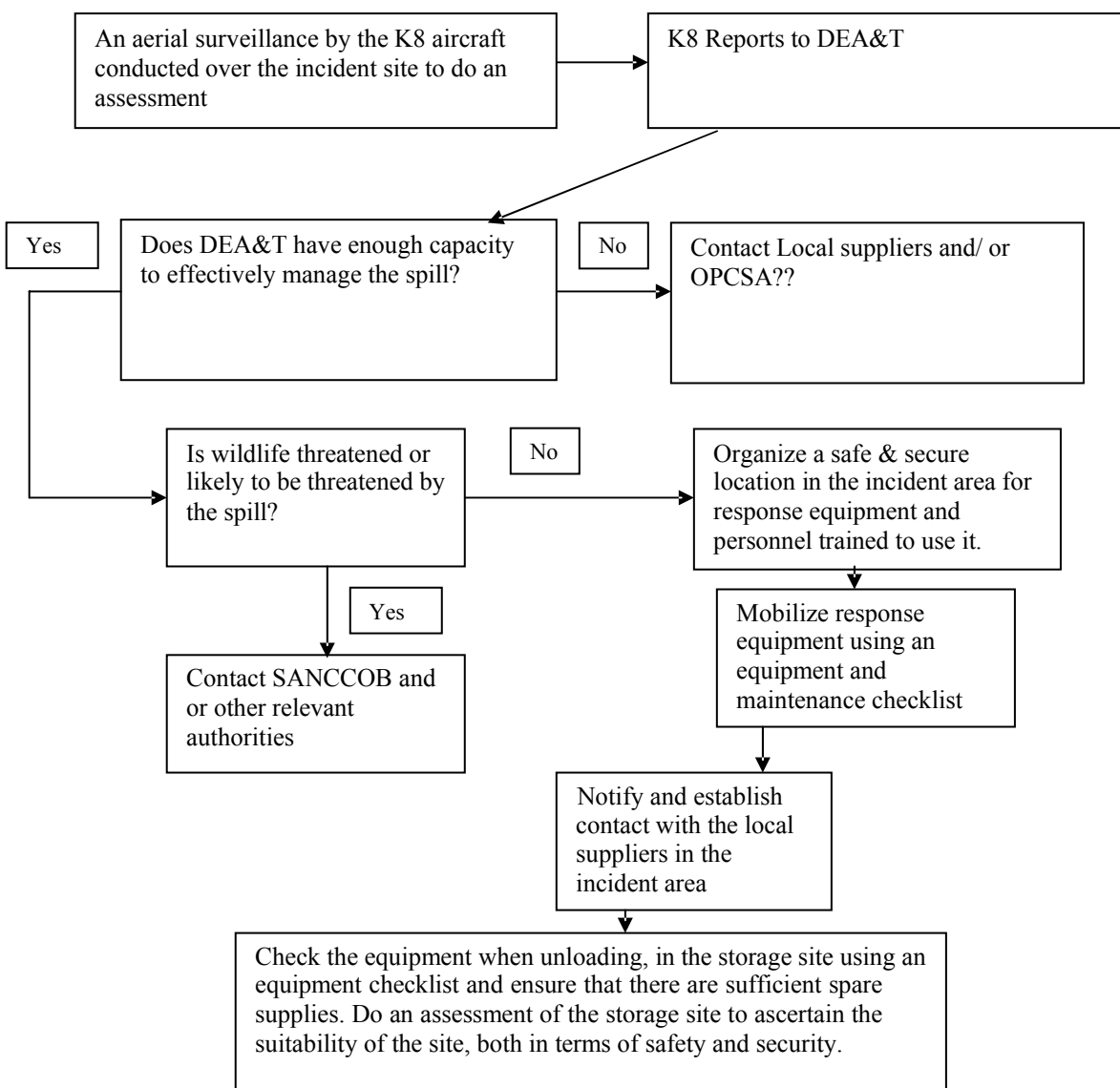
ANNEX 6

DEA&T PROCEDURE FOR THE MOBILISATION OF EQUIPMENT

Figure 1: The following schematic diagram shows the Equipment Mobilization Procedure (EMP) in response to an oil spill.

N.B.: Please note that this procedure may vary (from incident to incident) based on the assessment report from the incident site.

EMP: Tier 2 & Tier 3 Spills



ANNEX 7

PROCEDURE FOR INTEGRATING ‘LESSONS LEARNT’ INTO THE PLAN

ANNEX 7A PROCEDURE FOR INTERGRATING “LESSONS LEARNED” INTO THE PLAN AND AMENDMENT THEREOF		
TRAINING EXERCISE		
WHO	STEP	ACTIVITY
GM: Ops	1	In consultation with DEA&T appoints coordinator(s) and evaluator(s)
Coordinator(s)	2A	Set key objectives of exercise (communications, equipment and/or response readiness)
	2B	Determine scope of exercise (where, how long and/or who to involve)
	3A	Control exercise (monitor, control and facilitate)
	3B	Collect data
	3C	Document findings (report)
Evaluator(s)	4A	Observe response and compare with objectives
	4B	Measure performance
	4C	Document findings (report to coordinator)
Coordinator(s)	5	Collect data from all participants and role-players, analyse data and report findings and recommendations to GM: Ops
GM: Ops	6A	Reviews report and, where appropriate, consults with SAMSA/DEA&T liaison committee on amendment(s) to the Plan
	6B	Submit the proposed amendment(s) to the bi-annual review workshop for formal adoption
GM: Ops	7	Amends the Plan and disseminates these amendment(s)

ANNEX 7B PROCEDURE FOR INTERGRATING “LESSONS LEARNED” INTO THE PLAN AND AMENDMENT THEREOF		
INCIDENT REVIEW		
WHO	STEP	ACTIVITY
GM: Ops	1	Deal with incident as prescribed in this Plan
GM: Ops	2A	Collect data, reports and other information from all role-players
	2B	Convene a de-briefing session with all role-players and analyse all relevant data.
	2C	Document findings (report)
GM: Ops	3A	Reviews report and, where appropriate, consults with SAMSA/DEA&T liaison committee on amendment(s) to the Plan
	3B	Submit the proposed amendment(s) to the bi-annual review workshop for formal adoption
GM: Ops	4	Amends the Plan and disseminates these amendment(s)

ANNEX 8

ANNEX 8

SAMSA INITIAL RESPONSE CHECK-LIST

1. Has the initial pollution incident report from an observer been received by the Principal Officer, stating:

- .1 Name of person reporting the incident? ☐
- .2 Telephone number or other means of contact? ☐
- .3 Date and time of observation? ☐
- .4 Details of observation? ☐
- .5 Location (e.g. latitude and longitude or the position relative to the coastline? ☐
- .6 Source and cause of pollution (e.g. name and type of vessel, collision or grounding)? ☐
- .7 Type and estimated quantity of oil spilled and the potential and probability of further pollution? ☐
- .8 Has the master been requested to submit the cargo manifest (for a vessel other than a bulk carrier with homogenous cargo.)? ☐
- .9 Weather and sea conditions at the time of observation? ☐
- .10 Action taken or intended to respond to the incident? ☐

2. Has the PO informed the General Manager Operations of the pollution incident? ☐

3. Has the General Manager Operations issued instructions to mobilize the CRU? ☐

If so, Date & time:

4. Have the CRU members:
- .1 Read the initial pollution incident report? ☐
 - .2 Read the Operations Manager's instructions issued through the P.O.? ☐
 - .3 Prepared the appropriate protective clothing? ☐

5. Have the CRU members obtained the arranged, amongst other things:
- .1 Hiring appropriate mode of transport to the pollution incident scene? ☐
 - .2 Air travel bookings to the pollution incident scene and accommodation? ☐
 - .3 Any necessary expenses during the extent of the operation? ☐
6. At the pollution incident scene the CRU is, among other things, to carry out the following actions:
- .1 Determine the name and address of the vessel's owner; ☐
 - .2 Inquire into the insurance status of the vessel
and the name of the P & I Club, if any; ☐
 - .3 Obtain the cargo manifest for the ship; ☐
 - .4 Request details of the fuel oils, and other harmful substances on board:
 - . HFO ☐
 - . DO ☐
 - . LO ☐
 - . Any other harmful substance/s ☐
 - .5 Evaluate the specific threat of the pollution posed by the vessel in respect
of her bunkers and/or cargo on board; ☐
 - .6 Obtain any additional particulars, calculations (such as damage stability)
or considerations required by the General Manager Operations; ☐
 - .7 Convene a Joint Response Committee (JRC) on instructions from the
General Manager Operations, and establish a Joint Operations Centre
(JOC) with appropriate communication systems; ☐
 - .8 Prepare press releases; ☐
 - .9 Inform affected authorities and parties. ☐

ANNEX 9

DEA&T INITIAL RESPONSE CHECK-LIST

INITIAL CHECKLIST (OIL SPILL RESPONSE)

1. SPILL DATA:

A. Name of incident: _____

B. Date & Time of Incident: _____

C. Type of incident: Grounding ☐; Explosion ☐; Collision ☐;
Transfer Operations ☐; Other ☐

D. Spill Location: _____

E. Distance to nearest land _____(Nm or km);
nearest town _____(Nm or km)

F. Did source burn? Yes ☐ ; No ☐

G. Spill location: Longitude Latitude

H. Estimated volume of product released: _____(l or tonnes)

I. Release Status: Stopped ☐; Continuous ☐; Unknown ☐

J. Is Spill: Contained ☐; Spreading ☐; Unknown ☐

K. If continuous, average rate of product being released: _____(l or tonnes/hour)

2. Weather & Water Conditions (At the time & location of the spill)

A. Temperature: Air °C; Water °C

B. Weather: Clear ☐; Partly Cloudy ☐; Overcast ☐
Rain ☐; Snow ☐; Fog ☐

C. Tidal State: Slack Tide ☐; Incoming ☐; Outgoing ☐

D. Wind Speed: _____(knots); Direction _____

E. Sea State: Calm ☐; Choppy ☐; Swell ☐

Waves: < 1 m ☐; 1-3 m ☐; > 3 m ☐

F. Water Depth (m): 0-3 ; 3-5 ; 5-10 ; 10-30 ; >30

3. Environmental Data

A. Biological Resources at Risk:

Habitats: Intertidal areas ☐; Estuaries ☐; Coral reefs ☐;
Beaches ☐;

Organisms:

SPECIES	STATUS (INDICATE WITH A TICK)	DISTRIBUTION	ESTIMATED NUMBER OF INDIVIDUALS

Name	Threatened	Not threatened	General	Concentrate	1-10	11-50	51-100	>100
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

B. Human Resources at Risk:

Commercial facilities and Enterprises ☐;
Public facilities and Enterprises ☐

ANNEX 10

LIMITATION OF LIABILITY

As highlighted in section 2.4 of the plan, the owner has the right to limit his Liability for oil pollution damage. (The owner has a right to Limit its Liability under other circumstances which will not be discussed here.)

Consequently there are limited funds to support costs incurred while dealing with preventing and combating of pollution.

Section 09 (5)(b) of the Marine Pollution (Control and Civil Liability) Act 6 of 1981 defines the actual limits of liability :

“(5) If the owner of any ship, tanker or offshore installation incurs a liability in terms of the provisions of subsection (9)(1) for any loss or damage suffered or costs incurred as a result of an incident which occurred without such owner's actual fault or privity—

(a) the provisions of section 261 of the Merchant Shipping Act 57 of 1951 shall not apply in respect of such liability;

(b) the aggregate of all amounts payable by such owner in respect of such liability, in so far as it relates to a particular incident, shall not exceed—

*(i) in the case of a ship or a tanker, **one hundred and thirty-three units of account for each ton of the ship's or tanker's tonnage, or fourteen million units of account, whichever is the lesser;***

(ii) in the case of an offshore installation, a sum determined by the Minister, but not exceeding fourteen million units of account.”

“ **"unit of account"** means a Special Drawing Right as defined by the International Monetary Fund, and the value of such Special Drawing Right in South African currency shall be calculated in accordance with the method of valuation applied by the International Monetary Fund and which is in effect at the time when payment is made, or, in the event of an application in terms of section 12(1), at the time when such application is considered by the court;

(b) the tonnage of a ship or a tanker shall be its net tonnage with the addition of any engine room space deducted for the purpose of ascertaining its net tonnage.”

1 SDR = R 11.10 (as at 30 August 2007)

However for tankers the State has recourse to the Fund (CLC Protocol 1992) should the Liability limit of Act 6 of 1981 be exceeded.

Article V of the 1992 CLC Protocol explains the Limits of Liability in respect of any one incident:

“1. The owner of a ship shall be entitled to limit his liability under this Convention in respect of any one incident to an aggregate amount calculated as follows:

*(a) **3 million units of account** for a ship **not exceeding 5,000 units of tonnage**;*

*(b) for a ship with a tonnage in excess thereof, for **each additional unit of tonnage, 420 units of account** in addition to the amount mentioned in subparagraph (a); provided, however, that this **aggregate amount shall not in any event exceed 59.7 million units of account** “.*

For the purpose of this Article the ship's tonnage shall be the gross tonnage calculated in accordance with the tonnage measurement regulations contained in Annex I of the International Convention on Tonnage Measurement of Ships, 1969.

The Fund can be constituted by depositing the sum equivalent to the Limit of Liability, producing a bank guarantee or any other guarantee that may be acceptable to SAMSA or a Court.

ADDENDUM RSA POLLUTION EQUIPMENT

SOUTH AFRICAN MARINE OIL SPILL RESPONSE EQUIPMENT (updated July 2006)

DEPARTMENT OF ENVIRONMENTAL AFFAIRS & TOURISM

Contact:	Yazeed Petersen (o) 021-402 3158 © 083 5303 127
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Unless otherwise indicated, all equipment is held in Cape Town.

- 3 x 47m inshore patrol vessels fitted with 5 000 lts dispersant tanks, carrying Chemserve OSE 970 concentrate and breaker boards
- 1 x 83m offshore patrol vessel fitted with 50 000 lt dispersant tanks, carrying Chemserve OSE 750
- Oil spill dispersant stocks (lts):
 - Cape Town tanks: 59 200 (Chemserve OSE 750)
20 000 (Chemserve OSE 970)
 - Durban tanks: 39 350 (Chemserve OSE 750)
- One patrol/reconnaissance aircraft (Kuswag 8).
- Booms
 - 14 x 25m Portboom
 - 30 x 25m Seaguardian boom
 - 5 x 25m Shoreguardian boom
 - 7 x 10m Shoreguardian boom
 - 1 x 20m Riverboom on reel
- Skimmers
 - 2 x T-disc skimmers
 - 1 x Rotadisc 15 skimmer
 - 1 x Desmi Ocean skimmer (detachable Desmi DOP 250 Archimedes screw pump).
- 1 x 25m³ Aristock inflatable floating tank
2 x 10m³ Fastanks

1 x 4m inflatable boat with 2 x 60hp engines
1 x Drum-vac unit

- 1 x Karcher high pressure water washer

OIL POLLUTION CONTROL SA (OPCSA)

Contact: Andro Jacobs (o) 021-914 3434 © 082 552 4518

(All equipment is held at the oil jetty, Saldanha Bay)

- Vessels
 - 1 x 16,5m oil recovery & boom deployment vessel
 - 1 x 13,5m shallow draft work boat
 - 3 x 7m boom maintenance boats
 - 4 x 3,5m work boats
 - 1 x 10m oil recovery barge
- Booms
 - 1 200m fence boom
 - 300m Vikoma Shoreguardian boom
 - 3 500m Expandi boom 4300
 - 1 500m Expandi boom 7000
- Skimmers
 - 2 x OPEC rope-mop units
 - 4 x Komara K12 disc skimmers
 - 1 x Desmi Destroil skimmer
 - 1 x Vikoma Sea Devil disc skimmer
 - 2 x Vikoma Delta floating skimmer heads
- 4 x Vactank units
- 2 x 10m³ Fastanks
 - 6 x Aqua tanks
 - 1 x 15 000m³ Tankcontainer
 - 3 x 100m³ flexible floating tanks
- 3 x Archimedes screw pumps
 - 2 x Helical rotor pumps
- 1 x Mobile operations & communications centre
- 2 x High-pressure water washing units
- 2 x 220V petrol generators & lighting sets

NATIONAL PORTS AUTHORITY

Cape Town

Contact: Alan Stewart – (o) 021-449 5166 © 083 452 6674

- 1 x Komara K12 disc skimmer
1 x Desmi Predator skimmer
2 x Rope-mop skimmers
- 200m fence boom
300m Portboom
- 1 x 49m³ oil reception barge
2 x 10m³ Fastanks
4 x 1m³ Fastanks
1 x Water Witch debris/oil collection barge
- 2 x generators
6 x light sets

Port Elizabeth

Contact: Thabo Ndlovu – (o) 041-507 1951 © 083 5000 405

- 1 x T-disc skimmer
- 1 x 750 rope-mop skimmer
- 525m Portboom
- 50m Riverboom
- 1 x 10m³ Fastank

East London

Contact: Anton Scheepers – (o) 043-700 2396 © 083 283 3182

- 375m Portboom

Durban

Contact: Eddie Mpungose – (o) 031-361 6475 © 083 283 3506

- 1 x Desmi Predator skimmer
- 1 x Komara K12 skimmer
- 1 x disc skimmer

- 2 x 200m fence boom
- 1 x 10m³ Fastank
- 1 x Water Witch debris/oil collection barge
- 1 x 8m³ vacuum truck

Richards Bay

Contact: Gerry Schroeder – 035-905 3132 © 083 656 5043

- 2 x Komara 12K skimmer
- 500m Portboom
- 2 x 10m³ Fastanks

OIL INDUSTRY

Contact Anton Moldan – 021-4198054 © 082 801 6215

Cape Town

- | | |
|---------------------------------|------------------------------|
| • 4 x 75m Portboom | (NPA harbour store) |
| 2 x 25m Portboom | (DEA&T Paarden Eiland store) |
| 2 x 25m Beachboom | (“ “) |
| • 1 x 750 Rope-mop skimmer | (Portnet harbour store) |
| 1 x Desmi DOP 250 skimmer | (Portnet harbour store) |
| • 2 x 10m ³ Fastanks | (DEA&T Paarden Eiland store) |
| • 1 x Ro-vac unit | (“ “) |

Mossel Bay (NPA harbour store)

- 3 x 25m Riverboom
- 5 x 20m Portapack booms
- 1 x 750 Rope-mop skimmer
- 1 x 10m³ Fastank

Port Elizabeth (NPA harbour store)

- 4 x 75m Portboom
- 2 x 25m Portboom
- 2 x 10m Beachboom

- 1 x 750 Rope-mop skimmer
- 2 x 10m³ Fastank

East London (Engen depot)

- 4 x 75m Portboom
2 x 10m Beachboom
- 1 x 750 Rope mop skimmer
- 1 x 10m³ Fastank

Durban (Sapref oil pollution store at Island View)

- 4 x 75m Portboom
2 x 10m Beachboom
2 x 25m Portboom
1 x 10m & 1 x 15m Riverboom
- 1 x Desmi DOP 250 skimmer
- 1 x Ro-vac vacuum unit
- 2 x 10M³ Fastank

* 1 x ?l dispersant spray pod for aerial use (SAPREF refinery)

Richards Bay (NPA harbour store)

- 4 x 75m Portboom
2 x 10m Beachboom
- 1 x 750 Rope-mop skimmer

Langlaagte (Engen depot)

- 2 x 25m Portboom
1 x 10m & 1 x 15m Riverboom
- 2 x 10m³ Fastant
- 1 x Ro-vac unit

Bloemfontein (BP depot)

- 2 x 25m Portboom
1 x 10m & 1 x 15m Riverboom
- 2 x 10m³ Fastank

PetroSA

Brian Oliver 044-601 © 082 855 6540

- 200m Portboom
- 150m Riverboom
- 2 x disc skimmers
- 2 x weir skimmers
- 2 x 1500 rope mop skimmers
- 3 x 10m³ Fastanks
- Sorbent materials

SA NAVY – SIMONSTOWN

Cpt Knox (Harbour Master) 021-786 1616, 084 686 1384

- 2 x 20.5m tugs fitted with 4 000l dispersant tanks & side arm spray booms.
- 1 x 20t/hr Ro-clean rope-mop skimmer (Seamop 5060)
- 1 x 20t/hr Ro-clean disc skimmer
- 400m Ro-clean roboom 1000 (0.43 x 0.36m) on reels with powerpack

CONTRACTORS

Durban

Drizit Environmental

Greg Parton 031-579 4211 © 083 775 6992

- 3 x rope mop skimmers (750, 1 500 & 3 000)
- 3 x floating weir skimmers (75mm & 40mm)
- 1 x Rotabrush 5 skimmer
- 250m Riverboom
- 250m Portboom
- 40m Beachboom
- 3 x Fastanks (2 x 9m³, 1 x 5m³ & 1 x 1,5m³)
- Sorbent materials

ABZorbit Hazmat Support Services

Doug Carmody 083 269 8790

- 2 x 750 rope mop skimmers
- 5 x 70mm floating weir skimmers

saequip

- 1 x disc skimmer
- 200m Riverboom
- 2 x 10m³ vacuum tankers
- 3 x 3m³ Rapide Fastank
- Sorbent materials

Cape Town

Oil Spill Control

John Britz 082 455 7832

- 100m Riverboom
- 1 x 750 rope mop skimmer
- 1 x 9m³ Fastank
- 2 x 3m³ Rapide Fastank
- Sorbent materials

24 hour Spill Response

Dave Marock 082 551 1305

- 100m Portboom
- 2 x 800mm floating weir skimmers
- 5 x 10m³ vacuum trucks
- Sorbent materials

SMIT MARINE South Africa (Pty) Limited

Dave Main – 021 507 5777 (c) 082 907 2775

OIL POLLUTION ABATEMENT EQUIPMENT

Description	Quantity
Storage Tank-tainers 20 m ³	5
Storage Tanks 35m ³	2
Hoses	
a. Rigid camlock	3" 89 x 1210 m
b. Rigid camlock	4" 21 x 63 m

c. Flanged	6" 41 x 290 m
d. Flanged	8" 29 x 300 m
e. Flanged	10" 16 x 158 m
f. Flanged	12" 12 x 140 m
g. Flanged	6" layflat 11 x 300 m
h.	Kanaflex 2" 19 x 190 m
	Kanaflex 3" 33 x 420 m
	Kanaflex 4" 33 x 635 m
	Kanaflex 6" 44 x 360 m
Diesel / Hydraulic Powerpacks	4 x 120 kw 10 x 25 kw 2 x 46 kw
Hydraulic submersible pumps	3" 4 4" 3 6" 3
Hydraulic Oil Transfer pumps	3" 8 4" 3 6" 6
Hydraulic Hoses for Hydraulic Pumps	37 x 860 m
Yokohama Fenders with cradles	7m x 3m 6 2m x 1, 5 m 2
Yokohama Fender Pressure test tank	1
Tripods	15
STS Cages	3
Includes reducers & Blanks	16" ; 12" ; and 10"
STS Toolboxes	4
Reducers	
a.	6" – 4" 8
b	6" - 8" 13
c	6" – 10" 2
d	8" - 12" 1
e	8" - 4" 1
f	8" - 8" 2
g	8" – 10" 6
h	10" – 10" 9
i j	10" - 12" 9
k	10" - 16" 1
l	12" - 12" 1
m	12" - 8" 1
Blank & Pulling Flanges	4" 1 6" 15

	8"	14
	10"	25
	12"	15
	14"	1
	16"	2
	18"	1
Ropes	96 mm	5
Full coils	88 mm	7
	64 mm	2
	56 mm	4
	44 mm	1
Part Coils with eyes 36 - 96 mm		103
Seaslug Floating Storage Dracone Capacity 94 600 litres	1	
Floatation Bags Lifting capacity 760 kgs	36	
Bladder Tanks Capacity 22000 litres	8	
Emergency Response Pollution Containers	3	
Oil absorbent Peat Bags	65	
Oil absorbent Booms	8	
Chemical Safety Suits	50	
Aluminum Skimmer unit, manual	1	
Storage Tanks, Plastic Cap 1m ³	4	
Air Drills	2	
HP Water Washing machines with Foam attachments Capacity	5	
Chemical Drum Pumps with Hoses	4	
EX Safety Lamps (Air-driven)	4	
Spray Booms	2	
Breaker Boards	20	
Rapid Response Trailer	1	
SMIT Towing Brackets	2	
Sludge storage tank 2,5m ³	1	