EXECUTIVE COUNCIL RESTRICTED

Title of Report: Review of Ocean 8

No: 115/09

Date: 25 May 2009

Report of: Chief Executive

1. **PURPOSE**

This report reviews the approach taken by the Government to the fire, sinking and subsequent oil pollution of the Ocean 8 in May 2008 and highlights the lessons learned to improve the response to similar events in the future.

2. **RECOMMENDATION**

Honourable Members are invited to consider the recommendations in the body of this report.

3. FINANCIAL IMPLICATIONS

There are no financial implications arising directly from this report.

4. **BACKGROUND**

- 4.1 The Ocean 8 was a Korean fishing vessel which caught fire in Berkley Sound on 4 May 2008 and subsequently sank on 19 May. After this an on-going seepage of fuel oil impacted on the environment in the Sound and caused some damage to wildlife. An operation to remove the oil was undertaken in October 2008 which was largely successful though it is thought some fuel oil remains which could pose a continuing environmental threat.
- 4.2 The protracted nature of the fire and sinking in addition to the environmental damage resulting from these events have given rise to a high degree of public concern that the response of the Government may have been less than optimal and that in any event there may be scope to learn from the incident to improve future responses. His Excellency the Governor requested the Chief Executive to undertake a review of the event and Government response: this report is the outcome of that review.
- 4.3 The Governor requested that the terms of reference include (but should not be limited to):
 - whether we have sufficient powers to re-locate a vessel with or without the owners' consent in order to prevent it from becoming an obstacle to shipping and/or to minimise

potential pollution (and whether we can make the vessel owners/insurers pay for its removal and/or scuttling);

- whether we have sufficient legislative powers to prevent such pollution in future (and to make the vessel owners pay for its clear-up);
- what international practice is to deal with such events and whether we can draw on best practice;
- whether we should place restrictions on ships carrying such oil within our coastal waters (as we are considering for S Georgia) or charge them considerably more for the privilege;
- whether our oil pollution control and clearance equipment (and training in its use) is adequate why, for example, did we not deploy the containment boom?
- whether our procedures for controlling fires on board ship are satisfactory and whether further training or equipment purchase is necessary;
- whether we should bring ships into shallow waters in order more easily to contain and dispose of oil spill or whether we should take them out to deeper waters; and
- did we get our decision-making in this instance right and if not, what could we have done better? Should we, for example, have set up periodic meetings of Silver Command to deal with the reception and repatriation of the crew and then the subsequent fire control or at least established a steering group to oversee decision-making? If so, whose call should it have been to propose or set up such a group?".
- 4.4 The Chief Executive conducted the review in three stages:
 - 1. Immediate emergency response to incident including fire, police and port operations
 - 2. Post incident damage limitation
 - 3. Legal and regulatory issues including the Governor's or the Government's powers
- 4.5 Each stage centred on a meeting of key participants in the events and interested parties including Falklands Conservation and the Falkland Islands Company (agents for the vessel owners). Falkland Islands Government Members and officers involved in the review were Councillor John Birmingham, the Attorney General, Director of Fisheries, Marine Officer, Environmental Planning Officer, Chief Police Officer, Chief Fire Officer and the Commanding Officer of the Falkland Islands Defence Force (responsible for emergency planning and incident management).
- 4.6 This report will present a basic time-line of the sequence of key events before providing a summary analysis of each of the three stages of the review, having regard to the Governor's terms of reference. Each analysis will include specific recommendations. A concluding section will address each of the terms of reference specifically before drawing some overall conclusions.

Summary time-line

4.7 This summary time-line provides an overview only to help provide a context. A detailed time-line submitted by the Director of Fisheries to the Chief Executive is contained at Appendix One.

4 May, 1935 hours	Fire on Ocean 8 reported to Fishops duty officer; contacts Police at 1940 and requests deployment of fire service	
4 May, 2030 hours	Crew confirmed as having abandoned ship (to reefer vessel): from this point on, there is no longer a safety of life issue	
4 May, 2035	Fire crews depart FIPASS by launch to vessel; commence dousing operations	
5 May	Fire appears abated, owners contacted to discuss plans for vessel. Military contacted re deployment of tug Geissenstroom.	
5 – 7 May	Incipient fire continues with continuing action from fire crews, vessel begins to list (7 May) Geissenstroom deployed (7 May)	
	Discussions underway between Fisheries and AG's re legal powers; clarified that a range of legal powers potentially available to move vessel without consent.	
8 May	Fire appears to be extinguished; surveyor and Fisheries staff board and conclude can be towed to FIPASS and is salvageable.	
	Report received of further fire outbreak	
9 May	Fire breaks out and spreads, by afternoon is intense. Plans to move to FIPASS abandoned	
10 May	Fire continues Geissenstroom attempts to tow Ocean 8 out of the sound; abandoned as practically too difficult.	
11 – 15 May	On-going attempts to extinguish fire; vessel continues to list.	
15 May	Fire appears to be stabalised, list reduced and towing to FIPASS again considered.	
16 – 18 May	Vessel appears stable. Poor weather 17 and 18 May precluded further visits	
19 May	Fire re-ignites and vessel begins to list. Firefighters deployed.	
19 May, 1008 hours	Ocean 8 sinks.	
22 May	First dive by SAMS – video produced	
23 May	Meeting organised by Fisheries including Falklands Conservation and Environmental Planning to review the position; SAMS video viewed.	
27 May	Meeting at Government House – focuses on legal position in relation to requiring owners/insurers to deal with pollution threats. Spraying of oil commences	
28 May	Details received from P&I Club re fuel on board P&I Club formally requested to plug vessel and then remove oil	
29 May	SAMS begin plugging operation	
4 June	Meeting at Government House to review legal position and corrresondence with insurers	
13 June	Last obvious leak plugged	
15 October	Oil removal operation commenced	
28 October	Oil removal operation completed.	

5. <u>Immediate emergency response to incident including fire, police and port operations</u>

- 5.1 During the first fifty five minutes after the initial report to Fishops of the fire (at 19.35 hours) until it was confirmed that all crew had abandoned ship (at 20.30 hours) there could well have been a major threat to lives. Examination of the Police incident log suggests the response at this stage was confused and less than perfect, for example:
- There appears to have been confusion about how to request helicopter support from the military, with a search for an up to date number of Helicopter Operations. A call was not made to Heliops until 2007 more than 30 minutes after the incident was first reported
- No other contact with potentially relevant emergency services (such as Health) or more senior staff appears to have been made (such as the Chief Executive responsible for co-ordinating the response to a major incident through Silver Command).
- 5.2 The Chief Police Officer has said he considered whether to declare a major incident but did not consider this necessary as the initial report suggested a fire which was being fought by the crew and by the time it became clear that the incident was more dangerous, the crew were reported as having abandoned ship successfully. By this time in the Chief Police Officer's view the incident did not meet the category of a major incident as there was no threat to life but rather a vessel fire which the fire service were addressing.
- 5.3 Nonetheless, police officers tried to contact Heliops at 20.07 so at this point it must have seemed to at least some that a potential major threat to life existed such as to necessitate a request for helicopters.
- 5.4 The point at which such an incident is declared is defined as when the incident is "in excess of that which can be dealt with by the public services operating under normal conditions, and requiring a co-ordinated response from two or more of the emergency services." (FIG Emergency Planning Manual).
- 5.5 The Director of Fisheries has stated that in fact the lead response for maritime incidents rests with Fisheries Operations, who did not consider at the time that the potential for a major incident existed such as required the initiation of Silver Command
- 5.6 It is arguable whether the potential for a major incident existed for a period of time and a precautionary approach could suggest that Silver Command arrangements should have been activated.
- 5.7 It also appears that communications and information base was inadequate (the difficulty shown in the Police log in contacting the military to request helicopters: in fact, the correct route is to contact the Joint Operations Centre). Although Fisheries Operations have said they are well aware of the procedure for requesting helicopters, it is clear from the Police log that the Police at least were not.

Recommendation 1

Further training should take place with the Police service, Fishops, other emergency services and those involved in Silver Command to ensure that all are fully aware of the correct procedure when facing a potential major incident and at what point such an incident should be declared.

Recommendation 2

The information base (emergency contact telephone numbers including of the military) needs to be continually updated and shared in a controlled manner to the emergency services and those involved in Silver Command.

- 5.8 Once the crew were confirmed as having abandoned ship, effort focused on combating the fire. In line with Government policy for ship fires where there is no danger to life, agreed in 1989, the Fire Service attempted to douse the fire from launches rather than fight the fire more actively by boarding the vessel.
- 5.9 During the period 5 19 May, it is clear that the situation of the vessel varied considerably from times when it appeared the fire (and listing) was under control and a controlled tow to FIPASS for repairs could be planned to times when fire raged and the vessel listed (as a result of water deployed to control the fire) with a potential risk of sinking and environmental damage. During this time, Government efforts were coordinated by the Director of Fisheries who liaised with relevant departments bilaterally.
- 5.10 The obvious issue arises as to why stronger efforts were not made to move the vessel to a less damaging location in case there was substantial fuel spillage or sinking.
- 5.11 There is evidence that attempts were made by the Director of Fisheries to obtain the owner's consent to move the vessel via the Falkland Islands Company who were the agents. A request was made by e-mail on 8 May to get permission to move the vessel to FIPASS which was agreed to by underwriters on 9 May. The Director of Fisheries has said that on 10 May an undocumented request was made to FIC to get agreement to get permission to undertake any action required to reduce the threat of pollution, to which no response was received.
- 5.12 It is clear from discussion with the Attorney General and examination of an e-mail from the Attorney General to the Director of Fisheries on 6 May that sufficient legal power existed to move the vessel without the owner's consent if there was sufficient justification, though some doubt existed as to whether the costs of such action could be recovered by FIG (see Appendix Two). These powers are exercised by; the Marine Officer (Harbours Ordinance; but only if, the Governor is of the opinion that the relevant threshold has been reached), the Governor (Prevention of Oil Pollution Act) or the Receiver of Wreck (Merchant Shipping Act). Where there is a reference to the Governor this must, in the usual way, be understood to mean the Governor acting on the advice of Executive Council (unless urgency dictates otherwise)."
- 5.13 However, it does not appear that any request was made to use these powers. The Director of Fisheries explanation is that it was a complex issue particularly as regards the definition of what constituted 'sufficient justification' to move the vessel.

Although consideration was given to these powers, only at one point prior to the actual sinking did it seem that the situation sufficiently warranted the moving of the vessel (without the confirmed consent of the owner) in view of the practical and legal difficulties of doing so and the arguable merits of alternative places to move the vessel to.

- 5.14 Taking the period up to 9 May (when the fire having appeared doused re-ignited) the view of both the Director of Fisheries and the Chief Fire Officer was that the situation appeared to be under control and they did not judge the risk of sinking to be serious enough to justify moving the vessel. The Attorney General has concurred that in view of the fact that the Government could be liable for the costs and consequences of any action unless it was clearly justified (or had the owner's consent) that it was important to avoid any action which could not be clearly justified.
- 5.15 On 9 May the fire re-ignited and appeared to take hold of the vessel. At this point the situation was reappraised and it was decided by the Director of Fisheries to move the vessel. The Geissenstroom was asked to do this on 10 May. However, attempts failed due to the difficulties in taking a burning vessel in tow and in fact attempts to tow her by her anchor proved to be dangerous: the anchor chain came close to being disconnected from the vessel which would have resulted in a burning vessel drifting in Berkley Sound. The Geissenstroom having abandoned the attempt to tow then had to return to East Cove for military duties.
- 5.16 The fire was then brought under control again and the point was reached where both the Director of Fisheries and the Chief Fire Officer were confidant a move to FIPASS could again be contemplated. Hence at the time it may again have been *possible* to tow the vessel it was felt almost for that reason to be *unnecessary*.
- 5.17 By 15 May the vessel was therefore awaiting a tow to FIPASS once the Geissenstroom became available and the weather settled.
- 5.18 The Marine Officer has said that poor weather meant there was no monitoring of the vessel on 17 and 18 May (weather forecasts for 17 May = Force 8/9: 18 May Force 6/7). On 19 May a visit was made by the Marine Officer and Fire Service to the vessel to fill the hold with foam as a precautionary measure. They found her listing heavily and shortly after she sank.
- 5.19 The picture which is presented of the period 5 19 May is a complex one whereby for most of the time a perceived lack of sufficient justification for moving the vessel coupled with uncertainty over the merits of alternative options meant no clear case existed in the minds of the decision maker (Director of Fisheries) for doing so. At the points where the justification existed (an obvious danger of fire, sinking and pollution) it was impossible to move her. The Director's analysis of the situation is provided at Appendix Three.
- 5.20 The Director raises the question that it may in fact have been better in hindsight to have moved the vessel as a precaution to shallow water where the effects of fuel spillage could be better contained. This would allow for the fire to be extinguished beyond any doubt and for fuel potentially to be removed before a tow was attempted to the dockside.

- 5.21 This point does show the lack of any clear policy framework for such decision making. However, such a policy framework would not be easy as it is likely that any future incidents will vary in significant respects.
- 5.22 Overall, the situation whilst superficially perhaps suggesting poor decision making is in fact a complex one whereby difficult judgements were made on the basis of the imperfect information available.
- 5.23 It is not easy to see any substantial point that should have been approached very differently. There do not appear to be major changes that need to made to policy, processes or resources in respect of the events leading up to the sinking. However there are a number of smaller improvements emerging from the review discussions that should be made bearing in mind that a similar incident is very possible in the future:
 - the suggestion that moving a vessel to shallow water and/or beaching would be a sensible precautionary move seems sensible and should now be investigated with respect to legal and practical issues including the identification of suitable sites
 - further clarification should be provided of the legal basis of action in relation to vessels in these circumstances including the options of scuttling in deep water and beaching. To avoid uncertainty in the future such clarification should be built in to the policy and procedures for dealing with incidents of this type
 - There can be an assumption that Emergency Planning arrangements focus on the threat of major loss of life. However this is not the case and they are in fact be designed to ensure services are coordinated and resourced appropriately and that top decision makers are involved in relation to any incident which goes beyond the normal way of working and scale of operation for Government services. Those likely to be involved in emergency responses need to be briefed accordingly
 - Although it is not felt that the invocation of Silver Command would have made a significant difference here (or been appropriate after the initial period), nonetheless more explicit co-ordination at a corporate level may have benefits in future situations and this should be built in to policy and procedures
 - There appears to be limited scope for senior officers to make decisions in an emergency without reference to the Governor. This can pose obvious problems in a situation of urgency and consideration should be given to formal delegation of specific powers to directors (or their deputies) in relation to their responsibilities. The powers of the Chief Executive also need to be reviewed given his role in managing the Government's response to any major incident as at present it does not appear how far significant decisions with resource or policy implications could be taken. This could seriously hinder the ability of Silver Command to manage an emergency;
 - The availability of a suitable tug is an important issue and in a situation where the only such vessel in the Islands is provide by the military and must meet military priorities poses a problem, but the costs of such vessels make it prohibitive to have a further, civilian, tug;
 - There is scope for reviewing the tactics and resources deployed by the Fire Service in such situations, including for example the use potentially of foams to extinguish ship fires more firmly.

Recommendation 3

A revision to Emergency Planning and incident management arrangements should be conducted to include:

- Ensuring all potentially involved are aware of what constitutes an emergency and justifies the implementation of emergency management arrangements (Silver Command) and:
- Clarification and potential review of appropriate delegations and powers to the Chief Executive and service directors to allow effective management of such incidents.

Recommendation 4

More explicit on-going corporate co-ordination of large incidents threatening property or the environment (although not necessarily major emergencies in themselves) should be provided for either through the Chief Executive or through delegation by him to Corporate Directors

Recommendation 5

In relation to contingencies involving shipping, the legal framework needs to be clarified further in relation to likely options, and plans should be made to move vessels to shallow water and/or beach them at pre-identified sites and clearly set down as firm continuing advice.

Recommendation 6

The Chief Fire Officer should review the tactics and equipment used in ship fires to provide for improved elimination

6. Post incident damage limitation

- 6.1 No preparations were made to containing oil spillage prior to the sinking, as this had not been seen at any time as imminent.
- 6.2 In relation to the perceived risk of environmental damage, this was not considered at the time the vessel sank to be that great. Although it was suspected after a discussion with the Master and Chief Engineer on 12 May that there was some Intermediate Fuel Oil (IFO) on board (this is an environmentally damaging type of fuel as it does not disperse easily) it had been assumed the quantity was relatively small and that most fuel was the less dangerous Marine Gas Oil which is the common fuel for these vessels. It was expected that this fuel would disperse quite easily through evaperation.
- 6.3 At a meeting on 23 May organised by the Director of Fisheries and including Falklands Conservation and the Environmental Planning Officer a video of the fuel leakage was reviewed. This showed limited, sporadic, leaking and some IFO. The appraisal of the environmental risk did not change but concern grew that there could be leakage of IFO from the vessel and that this could pose an environmental risk. It was decided to obtain further information about the oil stocks from the owners.

- 6.4 On 27 May attempts to spray dispersant on leaked oil were commenced. Equipment to do this was limited to ordinary back-packs and so the efforts were not that extensive. Consideration was later given to using a boom sprayer from the Agriculture Department but this was deemed to be impractical.
- At the meeting at Government House on 27 May attended by the Director of Fisheries, Attorney General and Chief Executive there was concern about the presence of IFO and it was agreed to write to the P&I Club to ask them to organise the plugging of the vessel in addition to providing a permanent solution. Such a letter was sent on 28 May.
- 6.6 On 28 May information was finally received about the make up of the fuel and this showed that there was far more IFO on board than had been assumed. After this pollution control efforts were reviewed and the possibility of using booms in addition to spray was considered (some booming equipment being held by Fisheries and further available from the military). However, it was felt that booming was impractical in the circumstances due to the depth, exposure and lack of any facility to collect and remove the trapped oil.
- 6.7 Spraying of the oil continued albeit there was doubt about its effectiveness and indeed appropriateness (spraying is not usually attempted at depths of less than 30 meters, the depth of the Ocean 8, as it can damage some sea life such as shell fish.
- 6.8 On 30 May the first systematic surveys of bird life on the shorelines of the Sound were commenced, which showed 29 from a total of 165 surveyed had been affected by oil.
- 6.9 On 1 June plugging of the vessel began and this was eventually completed on 13 June. During this period spraying of dispersant continued. Oil leakages were gradually decreasing.
- 6.10 Limited seepage of oil continued from 13 June until the oil removal operation was undertaken in October: but there is no clear evidence of continuing damage to wildlife caused by oil from Ocean 8.
- 6.11 An operation to remove the remaining oil organised and paid for by the P&I Club was commenced on 15 October and completed on 28 October. It is believed that some oil may remain in the vessel which will escape at some future date.
- 6.12 The obvious question arises as to why pollution containment was not undertaken far more actively and extensively than was the case. Efforts to contain or disperse oil took a number of days to get going: the first dispersant was not sprayed until 27 May and the first plugging did not take place until 1 June. Booms were never deployed. Spraying appears to have taken place only on a small scale.
- 6.13 It is accepted by those involved at the time that the initial assessment was that there was limited risk of environmental damage as it was believed that MGO would disperse easily on its own and that there were very limited quantities of IFO on board. This assessment did not finally change until 28 May when firm information was received about the quantity of IFO. However even after this point pollution control was limited.

- 6.14 There was consensus amongst those taking part in the review that it was not practical to use more extensive or alternative measures. Equipment was not available in the Islands to spray more intensively or extensively and the efficacy of available spray against IFO was questioned by some. Booms could not be made to work effectively at such depths and in exposed, windy waters. In any event no receptacle was available to collect oil.
- 6.15 Although equipment and material could potentially have been obtained overseas, the time and/or expense of getting it to the Falklands would have been considerable in view of the relatively small scale nature of the oil slicks.
- 6.16 Ultimately, although there are some differences of opinion about the efficacy of various measures and some room for argument about whether spraying could have been done better with local resources, no-one involved at the time or in the review has suggested that substantial resources should have been obtained from overseas at considerable expense in the context of a small oil spill.
- 6.17 There was considerable consensus however in the review group that the key to pollution control is avoiding a vessel getting in to these circumstances in the first place, and that moving vessels at risk of sinking or oil leakage to shallow, sheltered and contained waters is the key step to take. In such waters the use of booms and the collection/removal of oil is very much more effective.
- 6.18 Of course this will not always be possible and there is a real risk of a vessel at some point leaking far larger quantities of oil and in a way which will be far more damaging. The difficulty is determining what level of contingency resources should be provided in such a small community and in the context of the likelihood of such events.
- 6.19 It does not appear that, taking in to account the context and the resource which realistically were available, that any major errors were committed and that any major adjustments need to be made to oil spill contingency plans, apart from the option of moving a vessel to sheltered waters. However a range of smaller points have arisen in discussion:
 - Although the approaches of the Oil Spill Contingency Plan were broadly followed (it is aimed at a much larger incident) it does appear to contain techniques for which the equipment is not available or which the review of this exercise has questioned the practicality of (for example, vessel towed booms to collect oil)
 - there is no regular exercising of the Plan and this is an obvious area for improvement to preparedness;
 - It also appears that only Fisheries staff have had up to date training in the Plan and there are a number of others who may be involved if the Plan is activated who should have training in the current version;
 - Better equipment can be acquired. Though there are some difficult judgements about where to draw the line on equipment and allied matters such as the extent of reserves of dispersant, there are some obvious practical improvements above all a boom sprayer capable of being deployed from vessels;

- The plugging of Ocean 8 was delayed whilst the agreement of the P&I club was sought. Agreement was difficult to obtain due to the distance/time differences from Korea and language barriers. The Government should review this and determine whether and in what circumstances action should be taken without the agreement of vessel owners. Further legal advice is needed on the potential implications and it may be that a financial threshold should be set for unilateral action;
- Accountabilities were diffuse; some actions were taken on the Director of Fisheries authority, some were taken after discussion with the Governor and Chief Executive it was not until 24 July that Executive Council was involved when it considered a report on Ocean 8 Status and Options (126/08);
- One option is for FIG to subscribe to Oil Spill Response Ltd which would give much readier access to expertise, equipment and material stocks
- Falklands Conservation reported that their resources were fully stretched dealing in fact with very few oiled birds and they are reviewing their own plans here (an Oiled Wildlife Contingency Plan has now been produced with the Department of Agriculture and recommendations are to be reported to Executive Council as part of the review of the Oil Spill Response Plan).

Recommendation 7

The Oil Spill Contingency Plan should be reviewed to ensure it does contain measures which are realistic in view of local circumstances and can be scaled up or down. This should include the option of moving a vessel to sheltered waters.

Recommendation 8

The Oil Spill Contingency Plan should be exercised annually and all staff who may be centrally involved must be trained in the up to date version

Recommendation 9

A formal, detailed review of equipment and stocks held locally should be conducted with clear recommendations to Executive Council on what additional measures may be appropriate. This should include the option of subscribing to Oil Spill Response Limited

Recommendation 10

A legal and financial appraisal of unilateral action to contain oil spillage should be completed and the outcome of this should be included in the Oil Spill Contingency Plan

Recommendation 11

Accountabilities for oil spill response management whilst being clear at departmental level in the Oil Spill Contingency Plan are not as clear at Governor/Executive Council/Chief Executive level and this should be clarified.

7. Legal and regulatory issues including the Governor's or the Government's powers

- 7.1 There are a number of legal or regulatory powers available to the Government to prevent or reduce the threat of pollution or to control an excellent summary provided by the Principal Crown Counsel is provided at Appendix Four.
- 7.2 The review meeting felt that there was scope to improve these powers principally by incorporating in to the 1971 Prevention of Oil Pollution Act the provisions of the UK's 1995 Merchant Shipping Act in relation to the serving of directions (section 108A and Schedule 3A; e.g. paragraph 11(2) of the Schedule would allow service of the directions on the vessel's agent) and liability for costs which flowed from that. This would allow the Government to serve directions on an agent in the Islands rather than to the owners who are likely to be overseas and hard to contact, and subsequently to claim costs if the directions were not complied with. Unilateral action would leave the Government exposed in relation to costs.
- 7.3 However, nonetheless it was felt that the power to act as required did already exist in Falkland Islands Law albeit with much greater uncertainty re cost recovery.
- 7.4 One issue is how the powers are exercised. Some FIG officers believe they are potentially hindered by the need to seek the Governor's explicit agreement to the exercise of various powers, which requires longer lines of communication and may not be possible in a situation of urgency. A scheme of delegation to relevant FIG officers would overcome this.
- 7.5 In relation to powers to require vessel owners to fund the clean up after pollution, this exists under the Merchant Shipping (Oil Pollution) (Falkland Islands) Order 1997 in relation to 'persistent hydrocarbon mineral oil'. However liability is governed by the Convention of Limitation of Liability for Maritime Claims 1976 which significantly limits the sums involved. However a 1996 Protocol allows greater claims but it is not clear that the Falkland Islands could sustain a claim under the Protocol as it has not been listed under the Matrix of Conventions applying to Overseas Territories and so possibly not notified to the International Maritime Organisation as applying. The position should be clarified and if needed rectified.
- 7.6 The issue of placing restrictions on fuel types and/or requiring information on fuel as vessels enter Falklands Waters (or harbours) was also considered. Legislation to do this could of course be passed, but there are practical implications in relation to competitive commercial operations and the policing of them that arise which must be set against the benefits of doing so. Full consideration of this would need further study.

Recommendation 12

The 1971 Oil Pollution Act should up updated to include provisions such as those in the UK's 1995 Merchant Shipping Act to facilitate the serving of directions and strengthen the Government's position in relation to cost recovery.

Recommendation 13

Consideration should be given to a scheme of delegation from the Governor to FIG officials to facilitate effective action in the case of urgency.

Recommendation 14

The Government should clarify the position in relation to the 1996 Protocol of the Convention of Limitation of Liability for Maritime Claims 1976 in order to most effectively pursue a claim against vessel owners' for clear up costs.

8. **Conclusion**

8.1 This review has not found evidence of any major failings from either the Government or other organisations involved. A large number of FIG staff worked diligently in challenging circumstances and their efforts and professionalism are to be commended. A number of difficult judgements were made. There are however a number of important lessons to be learned which should ensure the Government and other bodies are better placed to deal with future similar events. These are captured in the formal recommendations and in the table below in relation to the specific terms of reference requested by the Governor:

Governor's terms of reference	Finding
whether we have sufficient powers to re- locate a vessel with or without the owners' consent in order to prevent it from becoming an obstacle to shipping and/or to minimise potential pollution (and whether we can make the vessel owners/insurers pay for its removal and/or scuttling);	Sufficient powers exist to relocate a vessel but the Government may remain liable for costs unless prior directions have been served. Amending the 1971 Oil Pollution Act to reflect the UK's 1995 Merchant Shipping Act will address this. The costs of actions can be recovered from the Owners but are limited by the Convention of Limitation of Liability for Maritime Claims 1976 and are hard to pursue overseas.
whether we have sufficient legislative powers to prevent such pollution in future (and to make the vessel owners pay for its clear-up);	Sufficient powers exist but their application is hindered as above.
what international practice is to deal with such events and whether we can draw on best practice;	The appropriate response is determined by the circumstances of any incident and the resources which can be realistically made available.
	It is not found that the response in this case was inadequate in the circumstances: however there is always scope for continuous improvement and updating to match best practice. The present review of the Oil Spill Contingency Plan is addressing this.
whether we should place restrictions on ships carrying such oil within our coastal waters (as we are considering for S Georgia) or charge them considerably more for the privilege;	This would not be easy to police and would raise issues in relation to practicality the competitiveness in relation to commercial activities in Falklands Waters.
whether our oil pollution control and clearance equipment (and training in its use) is adequate - why, for example, did we not deploy the containment boom?	There were valid practical reasons for not deploying booms, and there are resource limits on what equipment can sensibly be held in relation to the risks. Nonetheless there is scope for obtaining better equipment such as spraying machinery. These are being considered in the revision of the Oil Spill Contingency Plan.

whether our procedures for controlling fires on These would benefit from detailed review by the Chief board ship are satisfactory and whether Fire Officer who has indicated that improvements could be made (Recommendation 5) further training or equipment purchase is necessary; whether we should bring ships into shallow Each case must be considered on its merits, but for incidents similar to Ocean 8 (small scale) policy provision waters in order more easily to contain and dispose of oil spill or whether we should take and contingency arrangements for this are recommended (Recommendation 6) them out to deeper waters; and did we get our decision-making in this It is arguable whether there was a failing to decision instance right and if not, what could we have making in relation to the initial response, particularly done better? Should we, for example, have when there could have been a major threat to life. It is debatable whether Silver Command should have been set up periodic meetings of Silver Command activated and the Chief Executive contacted. This would to deal with the reception and repatriation of the crew and then the subsequent fire control have been a decision for the Police Service or for the - or at least established a steering group to Director of Fisheries (as a maritime incident). oversee decision-making? If so, whose call should it have been to propose or set up such Once this initial period was over, there is no evidence a group?". that management and co-ordination were ineffective in any significant respect or that decisions or actions would have been different had there been a more corporate approach. However, there are nonetheless obvious potential benefits to a more corporate approach to future such incidents.

9 Financial implications

9.1 There are no financial implications arising directly from this report.

10 Legal implications

10.1 As reviewed in the body of this report.

April 2009

'Ocean 8' - Review

Meeting 1 – Fisheries Department; Timeline, Response, etc:

A. Timeline – Pre-sinking:

The purpose of this timeline is not to set out a blow by blow account of action, but is to set out key moments, decisions and views as the incident unfolded over 2+ weeks.

4 May

- 1935 Fire on Ocean 8 reported to Duty Officer. Police and Fire service informed, launches on standby.
- 2022 Report indicates all crew evacuated from Ocean 8 (confirmed at 2030). From this point it is not a safety of life incident but a safety of property or avoidance of pollution/shipping hazard incident.

5 May

0800 Fire service continuing to douse fire, no flame but hot spots remain. Fisheries Department continues to facilitate launch provision as required by Fire service (the contract for services is between Fisheries Department and the shipping agencies, who invoice Fisheries Department).

Command Secretary contacted to ascertain whether the Giessenstroom is available to assist and on what terms.

- am First Sitrep sent HE/CE/Councillors
- am DoF faxed owners, commiserated on fire, emphasised pollution concern, and what proposals they had for dealing with the vessel.
- pm 2nd Sitrep sent HE/CE/Councillor AC/AG.
- 1515 Considered use of Tamar but agreed to consider further on following day.

Late

pm Believe Captain, Chief Engineer and Fire service return to Ocean 8 to top up diesel day tank – generators still running.

- 0800 Small fire reported port side forward.
- am Command Secretary confirms Giessenstroom can be available from late 7 May (Wednesday) to Sunday.

- Radio log reports no fire, bulkheads cold, anchor secured. Fire service proposing to stand down for night (not sure if this happened).
- 1445 Situation to be reviewed at 0900 on 7 May.

Hull underwriter contacts FIC asking for FIC to arrange a surveyor to inspect the Ocean 8 and report on condition. Roger Spink (RS) responds indicating Ian Wilkinson is "on his way".

pm DoF contacts AG's Chambers on legal powers. Ros responds with lengthy email on Harbours Ordinance, Merchant Shipping Act, Prevention of Oil Pollution Act.

7 May

- 00733 Smoke reported from Ocean 8.
- 0900 Reefer reports flames visible.
- O952 DoF requests Giessenstroom. Command Secretary responds indicating she has job to complete will then proceed Berkeley Sound arriving late afternoon.
- 1000 Ocean 8 reported listing 8° with fire below decks.
- am Sitrep sent to HE/CE/RC/Councillors/RK/TE proposing to move Ocean 8 to FIPASS once fire extinguished. Comment also made on legal powers. In the end this was overtaken by the fire re-igniting.
- pm Sitrep (as above), reporting that the situation is deteriorating.
- pm Further contact with AG's Chambers on legal issues. Ros confirmed no license required to tow the vessel elsewhere, but a license would be required if the intent was to scuttle the vessel. In referring to various aspects of legislation Ros makes it clear the vessel could be moved for the purposes of re-locating it but not for sinking, unless a license is obtained.

- 0800 Radio log reports 10° list, fire out, hull cold, Fire service onboard conducting assessment.
- am DoF emailed RS reporting fire extinguished (again), indicating we were back in position of wanting to have the vessel surveyed. DoF asked FIC if surveyor undertaking survey for owners could assess whether the vessel was in a safe condition to come alongside FIPASS (this assessment to consider watertight integrity, stability, other non-fire aspects).
- am Sitrep (HE et al) reporting fire extinguished. Further correspondence between FIG and hull insurers.
- am Ocean 8's P&I club contacts FIC indicating they have been told the authorities are concerned about sinking and resulting pollution and seeking advice on how to avoid pollution.

- am Command Secretary advised fire extinguished but request Giessenstroom remain until Friday at least.
- pm Giessenstroom remains by Ocean 8. Fire crew returned to Stanley.

Ian Wilkinson and Fishery Officer Steve Waugh had a good look around the Ocean 8 with Fire service.

DoF emails RS indicating the vessel could be moved to FIPASS although will be assessed again on Friday, to confirm all ok. Requests RS to get owners approval to move the vessel. IW confirms the vessel seems ok from a 'nautical perspective' to be moved to FIPASS. Will need mooring ropes. DoF arranges these with FIPASS Management, and they are pre-positioned on the dock.

- pm A further outbreak of fire on the Ocean 8 is reported.
- pm Captain Wilkinson report sighted which states that the Ocean 8 is "able to be towed to FIPASS".
- pm Generator on Ocean 8 turned off.

9 May

- am Insurers confirm to FIC that they/owners will pay to move Ocean 8 to FIPASS.
- 0800 Fire service departed for Berkeley Sound. Ocean 8 initially seems ok, fire breaks out subsequently and all personnel withdraw.
- am DoF reported to RS that fire had spread, movement of Ocean 8 to FIPASS was off.
 - Command Secretary advises they need Giessenstroom back on Saturday (10).
- pm Sitrep (HE et al) outbreak of fire reported, and questions raised as to condition of Ocean 8.

Some confusion between Fire service record and Fisheries Department record as to tasking of Giessenstroom. Fire service log reports request was for Giessenstroom to come to Stanley to change crew, which would have been fine. The request as understood by me was for the tug to come to East Jetty for the night which was refused.

1500 Fire is intense and Giessenstroom has moved away. Nav warning issued for vessels and aircraft to keep clear.

- 0800 Fire service/Giessenstroom has been boundary cooling overnight.
- 1400 DoF discussed situation with Fire 1 (GF) and FO (SW) on Giessenstroom. The situation is worsening and agreed that the preferable option is to tow the

Ocean 8 to the entrance of Berkeley Sound where it can be re-anchored. It was considered this would reduce the environmental risks. DoF 'approved' this operation.

DoF sought to consult CE/HE/AG/EPO/assist EPO with no contact made. DoF contacted Ros Cheek who agreed the action was probably ok.

DoF also consulted Grant Munro (Falklands Conservation) who agreed it might be better in deeper water and would leave to 'our judgement'.

- 1445 Nav warning to keep clear reiterated.
- Around this time the Giessenstroom attempted to tow the Ocean 8, but had to release the tow as either the fire became too dangerous or there was a problem with lifting the Ocean 8's anchor. [As something of an aside, and to show some of the risks, the extra tension put on the Ocean 8's anchor chain by the tug caused any lock on the windlass to release and the remaining chain started to run out. Fortunately, there was a stopper on the end of the chain and it held when the end was reached. Had it not done so, the Ocean 8, then seriously ablaze, would have been drifting in a confined area with numerous other vessels].
- 1530 Smoke visible from Stanley.
- pm DoF writes to FIC advising that an attempt is being made to move the Ocean 8 to the entrance of Berkeley Sound. Whilst not documented, somewhere around here or earlier, FIC were asked to request insurers/owners to give a general waiver along the lines of "do whatever you think is best to reduce any potential pollution". No response to this was received whilst the vessel was afloat.
- The Giessenstroom departs for East Cove.FPV Pharos leaves FIPASS for Berkeley Sound to provide support.

late

pm Firefighting continued.

- 0800 Temperature in vessel at 230°C, 18° list and down by stern. Later no visible signs of fire but smoke still emanating from forward hatch and vent pipes.
- 1130 Meeting: DoF, CFO, MO. Decided to release Pharos unless it was required to support firefighting operations. Would investigate availability.
- 1650 Pharos reports no great change, no great smoke, leaves Berkeley Sound.
- 12 May
- 1030 Little change on Ocean 8: 130/140°C both sides.
- am Tug available until Wednesday, however as Ocean 8 not in condition to move to FIPASS, did not request tug attendance.

pm Discussions with Chief Engineer of Ocean 8.

13 May

0630 Ocean 8 starboard 60°C, Port 100/130°C.

am P&I club email asking:

- Distance from nearest land to Ocean 8
- Does wreck removal apply there or at FIPASS
- If no wreck removal at current location what action will authorities take against the owner

Jon Clark responds indicating:

- In current location Ocean 8 is a pollution and navigation hazard
- The vessel must be moved once the fire is extinguished
- The current location is not ok

14 May

O600 Firefighters to Ocean 8, water pumped out, vessel stabilised, list reduced. Fire was still visible and was doused.

am Further correspondence on legal powers with Ros Cheek.

15 May

am Ocean 8 checked; reported "all stable engine room secure". Some flashing beacons were deployed on Ocean 8 to mark her for other shipping. Rat bait deployed on Ocean 8 in preparation for eventual move to FIPASS.

16 May

am Ocean 8 checked: all stable.

17 &

18 May No visit due to weather.

19 May

0930 Firefighters and MO at scene. Vessel burning again, significant list.

1008 Ocean 8 sinks.

am &

pm Launches pick up flotsam from Ocean 8. Significant oil slick.

From: Rosalind Cheek Sent: 06 May 2008 16:47 To: Director of Fisheries

Cc: David Pickup; Robert King; Jon Clark

Subject: RE: Ocean 8 - Ship fire

Dear John

As discussed briefly earlier, there are a number of laws which may enable you, or another officer as appropriate, to take action in relation to the abandoned ship in Berkeley Sound (a designated harbour).

Harbours Ordinance

Firstly, section 11 of the Harbours Ordinance provides for the removal, by the Harbour Master, of any vessel which is "sunk, stranded or abandoned in any harbour in tidal water", but only if the ship is so sunk, stranded or abandoned "in such a manner as, in the opinion of the Governor in Council, to be an obstruction or a danger to navigation".

Therefore, the exercise of this power by the Harbour Master may only occur if the Governor is of the opinion, after receiving the advice of Executive Council, that the ship is an obstruction or danger to navigation".

"Governor in Council" may, in accordance with section 61 of the Constitution, be interpreted as the Governor acting in his discretion if, in the Governor's judgment, the urgency of the matter requires him to act before he can consult Executive Council.

Section 11 allows the Harbour Master to demand payment of all expenses incurred in the removal from the vessel owner.

Therefore, on first glance this power seems quite helpful, but only if the Governor is persuaded that the abandoned ship is an obstruction or danger to navigation.

Merchant Shipping Act

The Merchant Shipping Act 1894, section 512, empowers the Receiver of Wreck to take action in relation to a vessel "wrecked, stranded, or in distress".

This follows on from a specific duty imposed on the Receiver under section 511 to take action in relation to such vessels for the preservation of the vessel, persons belonging to the ship and cargo as he thinks fit.

The power under section 512 allows the Receiver "with a view to such preservation" of persons, vessel or cargo to:

- (a) require such persons as he thinks necessary to assist him;
- (b) require the master, or other person having charge, of any vessel near at hand to give such aid with his men, or vessel, as may be in his power;
- (c) demand the use of any wagon, cart or horses that may be near at hand".

Incidentally, those sections have been updated and modified in English legislation (but not in Falkland Islands law) to now appear as sections 232 and 233 of the Merchant Shipping Act 1985.

Clearly the vessel in this case is not wrecked. However, given that the law does not attempt to define when a vessel is "stranded, or in distress", I would suggest that it is at least arguable that either or both terms might apply to the vessel in this case. Ordinary dictionary meanings of the words are "to leave or drive aground (a ship)" and "in dire need of help", respectively.

Whilst I understand that the ship is currently abandoned (ie left and/or in dire need of help), at anchor, there is a real risk that if left in that situation, the ship could easily begin dragging her anchor, especially in high winds, and end up [wrecked] on the shore.

You may therefore consider that the circumstances are such to permit the Receiver of Wreck to exercise powers of preservation in this case; I therefore copy my advice to Robert King for his consideration.

Prevention of Oil Pollution Act

Finally, I have also given consideration to the provisions of the Prevention of Oil Pollution Act 1971 as it applies to the law of the Falkland Islands. Clearly the prospect of pollution in this case is a significant concern, especially given the proximity of the ship to a number of sensitive wildlife sites, such as Volunteer Point.

For speed and ease of reference, I copy below the advice given in the Holberg case in relation to that Act (and related oil pollution liability legislation):

"......the Merchant Shipping (Oil Pollution) (Falkland Islands) Order 1997 deals only with civil liability for oil pollution, it does not give any power to take steps in relation to pollution which has occurred or which may occur.

The Prevention of Oil Pollution Act 1971 contains the provision that may provide FIG with the ability to take the necessary steps, so I shall deal with that first.

Under the Act "oil" is defined as oil of any description, and includes spirit produced from oil.

The powers under the Act may be exercised if an accident has occurred to a ship, and in the opinion of the Governor the oil from the ship will or may cause pollution on a large scale in Falkland Islands waters, and the Governor is of the opinion that the use of the powers conferred is urgently needed.

The Governor would need to be advised in some detail on the scale of pollution or potential pollution involved in this case and the urgency of the situation before he may reach the opinions necessary to exercise any powers.

The Act provides that the Governor may give directions to the owner, master or other person in possession of the ship for the purpose of preventing or reducing oil pollution, or the risk of oil pollution. The directions would need to be formal, written directions containing specifics of the action required, and would need to be served on the master, owners or person in possession of the ship.

A failure to comply with directions is a criminal offence, with a defence available if the person can show that they used all due diligence to ensure compliance with the directions. The maximum fine for the offence is £50,000.

Such directions to the owner or master etc will usually be the first step, but if those directions have proved to be inadequate (ie directions have been given and have not had the required effect), or if the Governor is of the opinion that such directions are inadequate for the purpose of preventing or reducing the oil pollution or the risk of oil pollution, the Governor may take any action of any kind whatsoever, for example he may undertake operations which involve the taking over of control of the ship. The Governor may direct that those powers may be exercised by persons authorised by him.

The Act contains a provision for the owner of the vessel to take action for costs incurred or damage caused by action taken under the Act which was not reasonably necessary to prevent or reduce oil pollution or the risk of oil pollution, or which was disproportionate. That provision should act as a deterrent to excessive or ill considered action being taken.

The 1971 Act does not contain any provision for FIG to recover the costs of any action taken under it. That is where the Merchant Shipping (Oil Pollution) (Falkland Islands) Order 1997 may assist. However, the main difficulty that has been identified in trying to establish whether costs might be recovered under the 1997 Order in this case is the fact that "oil" is defined for the purposes of the Order as "persistent hydrocarbon mineral oil".

Jon Clark has been in touch with the MCA Pollution Control Unit, who have indicated that Marine Gas Oil, which is the fuel oil on board Holberg, is not regarded as persistent. The research I have now undertaken would seem to confirm what Jon has been told. In the light of this information, I cannot advise that FIG could recover the costs of any action taken in relation to the pollution.

The key issues for exercise of powers under this legislation are therefore whether the Governor may reach the opinion that (1) oil on board the vessel may cause pollution on a large scale in Falkland Islands waters; and (2) use of the powers under the Act is urgently needed.

Please let me know if you have any queries, or if I can assist further.

Kind regards

Ros

'Ocean 8' - Review

B. Discussion and Conclusions:

- i) There have been a number of ship fires in FI harbours involving fishing vessels, reefer, and a tanker. The vessels have generally survived the fire and have been towed away. A couple sank during the tow.
- ii) Apart from the final moment, there were a couple of points where the prognosis for the Ocean 8 did not look good. Had the Ocean 8 been towed out to deep water at those times, with a view to having it in deep water rather than deliberately sinking it, it would most likely have been towed back into harbour at some point. One of these moments occurred on 10 May, however the vessel did not sink for a further 9 days.
- iii) There were lengthy periods, particularly in the second week when the vessel seemed quite stable. Lights and rat bait had been placed on the Ocean 8 and it seemed quite feasible that the vessel could be moved to FIPASS.
- iv) With the benefit of hindsight it now seems likely that the fire was more significant than seemed the case at times. It appears to have continued to burn somewhere in the ship and was clearly causing some significant damage.
- v) Again with hindsight, the preferable option would have been to move the Ocean 8 to very shallow water. Realistically, the earliest this might have been possible was 7 May, when the tug was on scene. Whether that would be the preferred option in any future cases needs consideration. Factors to consider would include size of vessel, nature and volume of cargo and bunkers, any legal issues which arise if damage to the vessel is caused as a result of the move, arrangements with landowner. If a vessel is to be moved to shallow water it should be moved at the earliest opportunity.
- vi) The attempt to move the Ocean 8 to the entrance of Berkeley Sound had to be abandoned on 10 May. The vessel would have been moved to an area where 2 existing wrecks appear on the chart. The vessel was to have been re-anchored in c. 50m. The tug could have attempted this again around 13 May. At the time the Ocean 8 seemed to be stabilising again. At the entrance to Berkeley Sound, the Ocean 8 would have been in a more exposed location. The risks of dragging northward to Volunteer Point, or southward to Kidney Island might have been greater. It would have been more difficult and uncomfortable to sustain any firefighting operation in that area. westerly winds the environmental impact would have been much reduced. In the aftermath of the sinking the winds were northerly and southerly for several days. Had the Ocean 8 been at the entrance it is

- possible that there may have been more impact on Volunteer Point or Kidney Island, in view of the unusual wind direction.
- vii) There may be a question as to how apt the Major Incident Plan is to the Ocean 8 scenario. To a large degree the operation conformed to the plan set out in the MIP-Ship fire in Berkeley Sound. Whilst the fire lasted for two weeks, any 'safety of life' aspect was resolved within the first hour. It then became a protection of property/protection of environment scenario. Whilst information was distributed largely by email, the question arises as to whether more effective action would have been identified if a meeting of key participants and decision makers had been convened in the first week. The MIP could possibly undergo some revision. If life is not at stake then environmental protection/pollution control should receive higher consideration, not necessarily higher than firefighting, but at least on a par.
- viii) The discussions with the Chief Engineer and Master of the Ocean 8, did not establish the volumes of IFO-180 on the vessel. They were unclear on that point or the translation may have contributed to the lack of clarity.

OCEAN 8 – POST ACCIDENT REVIEW

Meeting 3 – Legal and regulatory issues including the Governor's and the Government's powers

Summary of key relevant powers

1. Harbours Ordinance 1902

(a) The Harbour Master [Marine Officer] is given a power of removal of a vessel "sunk, stranded or abandoned" in a harbour. The Harbour Master may recover the expense of removal from the vessel owner.

Limitation on power: Before the Harbour Master may exercise the power, the Governor must be of the opinion that the ship is "an obstruction or danger to navigation" and, unless urgency requires otherwise, the Governor must consult Executive Council on the question of an obstruction/danger to navigation.

(b) The Harbour Master may direct the vessel's master to move a ship within a harbour.

Limitation on power: The presence/ability of the master to move the ship is required.

2. Merchant Shipping Act 1894

(a) The Receiver of Wreck [Collector of Customs] is given power to take action in relation to a vessel "wrecked, stranded, or in distress". This flows on from the duty imposed on the Receiver to take action in relation to such a vessel for the preservation of the vessel, passengers or cargo.

Limitation on power: Largely ineffective; eg the Receiver may "demand the use of any wagon, cart or horses that may be near at hand"

(b) The Receiver of Wreck also has the power to remove a ship once it has become a wreck, but only if the vessel is an obstruction or danger to navigation.

3. Prevention of Oil Pollution Act 1971

Where an accident has occurred to a ship, the Governor may-

- (a) give directions to the owner, master or other person in possession of the ship for the purpose of preventing or reducing oil pollution or the risk of oil pollution;
- (b) take any action whatsoever for the purpose of preventing or reducing oil pollution or the risk of oil pollution, if directions under (a) have proved inadequate, or if the Governor is of the opinion that any directions are likely to be inadequate.

Limitation on power:

The Governor must be of the opinion that –

- (a) oil from the ship will or may cause pollution on a large scale; and
- (b) use of the powers is urgently needed [the requirement for urgency would tend to indicate that consultation with ExCo is not required before action].

Further, any action taken must only be such as is reasonably necessary to prevent or reduce oil pollution, or the risk of oil pollution, and the good done by it must not be disproportionately less than the cost incurred by or damage suffered as a result of the action.

There may be practical difficulties in serving notice of the Governor's directions on the owners of the vessel where they are not resident in the jurisdiction and where the master is no longer available in the jurisdiction as a representative of the owners (the law does not provide for service on the vessel's agents on behalf of the owners, although the owners may voluntarily agree to accept such service).

There is no power to recover the costs of any action taken under the Act (a civil liability for the cost of pollution damage and clear up is created by the Merchant Shipping (Oil Pollution) (Falkland Islands) Order 1997, but this only relates to pollution caused by "persistent hydrocarbon mineral oil").

Summary of other relevant laws

4. Food and Environment Protection Act 1985

A licence would not be required under the Act simply to tow the vessel out into deeper water to prevent her sinking in Berkeley Sound. However, any positive action to scuttle the vessel would require a licence under the Act [issued by the Governor, on the advice of Executive Council unless urgency required otherwise].

5. Oil in Territorial Waters Ordinance 1960

This Ordinance makes it an offence for the owner or master of a vessel to allow oil to escape into territorial waters. A number of defences are provided. Essentially, provided that all reasonable steps are taken, to stop or minimise pollution, after damage has occurred to ship which may result in oil leakage, there can be no real question of prosecution.

6. Merchant Shipping (Oil Pollution) (Falkland Islands) Order 1997

The law creates a civil liability for –

- (a) damage caused by oil which has escaped from a ship;
- (b) the cost of measures reasonably taken to prevent or minimise damage caused by oil which has escaped from a ship;
- (c) damage caused by those preventative/minimising measures themselves; and
- (d) where there is a grave and imminent threat of damage being caused by oil which might escape from a ship;
 - (i) the cost of measures reasonably taken to prevent/minimise damage; and
 - (ii) damage caused by those preventative/minimising measures themselves.

The liability relates only to pollution caused by a persistent hydrocarbon mineral oil, ie not MGO, and the cost of preventative steps can only be recovered if those steps were reasonable.

The Convention of Limitation of Liability for Maritime Claims 1976 has effect to limit the sum for which the vessel owners may be liable. In this case advice from the MCA suggests that, based on the vessel type and tonnage, the maximum sum which could be recovered from the vessel owners is approximately £800,000.

The prospects of a recovery may be limited in practical terms where the owners are not resident or do not have assets within the jurisdiction.

Harbours Ordinance 1902

5. Orders of Harbour Master

The Harbour Master may order the master of any vessel, boat or hulk-

- (a) to shift the berth of such vessel, boat or hulk to any place other than where such vessel, boat or hulk may be lying at the time of making such order;
- (b) to make in writing or otherwise any declaration upon any subject in connection with his vessel or the cargo and crew thereof

Any person receiving such order who refuses or neglects to comply with such order with all convenient speed commits an offence and is liable on conviction to a fine not exceeding £20.

11. Removal of wrecks

Where any vessel or boat is sunk, stranded or abandoned in any harbour or tidal water, or in or near any approach thereto, in such a manner as, in the opinion of the Governor in Council, be an obstruction or danger to navigation, the Harbour Master may-

- (a) take possession or and raise, remove or destroy the whole or any part of the vessel or boat; and
- (b) light or buoy any such vessel or boat or part until the raising, removal or destruction thereof; and
- (c) deliver to the owner on demand and on payment of all expenses incurred, or in the absence of such demand and payment sell, in such manner as he shall think fit, any vessel or boat or part so raised or removed, and also any other property recovered in the exercise of his powers under this section, and out of the proceeds of the sale reimburse himself for the expenses incurred by him in relation thereto and deposit in the Treasury the surplus (if any) of the proceeds in trust for the person entitled thereto:

Provided that the Harbour Master shall be entitled to recover from the owner of anything raised, removed or destroyed or sold under this section all expenses incurred by him in relation thereto in excess of the proceeds of such sale.

Merchant Shipping Act 1894

- 511. Duty of receiver where vessel in distress
- (1) Where a British or foreign vessel is wrecked, stranded or in distress, at a place on or near the coast of the United Kingdom, the receiver of wreck for the district in which that place is situate shall, upon being made acquainted with the circumstance, forthwith proceed there, and up his arrival shall take the command of all persons present, and shall assign such duties and give such directions to each person as he thinks fit for the preservation of the vessel and of the lives of the persons belonging to the vessel (in this Part of the Act referred to as the shipwrecked persons) and of the cargo and apparel of the vessel.
- (2) ...[offence]

- 512. Power of the receiver in case of vessels in distress
- (1) The receiver may, with a view to such preservation as aforesaid of the shipwrecked persons, or of the vessel, cargo, or apparel-
- (a) require such persons as he thinks fit to assist him;
- (b) require the master, or other person having the charge, of any vessel near at hand to give such aid with his men or vessel as may be in his power;
- (c) demand the use of any wagon, cart, or horses that may be near at hand.
- (2)...[offence].

Prevention of Oil Pollution Act 1971

- 12. Shipping casualties
- (1) The powers conferred by this section shall be exercisable where-
- (a) an accident has occurred to or in a ship; and
- (b) in the opinion of the Governor oil from the ship will or may cause pollution on a large scale in the Falkland Islands or in the waters adjacent to the Falkland Islands up to the seaward limits of the territorial waters; and
- (c) in the opinion of the Governor the use of the powers conferred by this section is urgently needed.
- (2) For the purpose of preventing or reducing oil pollution, or the risk of oil pollution, the Governor may be give directions as respects the ship or its cargo-
- (a) to the owner of the ship, or to any person in possession of the ship; or
- (b) to the master of the ship; or
- (c) to any salvor in possession of the ship, or to any person who is the servant or agent of any salvor in possession of the ship, and who is in the charge of the salvage operation.
- (3) Directions under subsection (2) of this subsection may require the person to whom they are given to take, or refrain from taking, any action of any kind whatsoever, and without prejudice to the generality of the preceding provisions of this subsection the directions may require-
- (a) that the ship is to be, or is not to be, moved, or is to be moved to a specified place, or is to be removed from a specified area or locality; or
- (b) that the ship is not to be moved to a specified place or area, or over a specified route; or
- (c) that any oil or other cargo is to be, or is not to be, unloaded or discharged; or
- (d) that specified salvage measures are to be, or are not to be taken.
- (4) If in the opinion of the Governor the powers conferred by subsection (2) of this section are, or have proved to be, inadequate for the purpose, the Governor may, for the purpose of preventing or reducing oil pollution, or the risk of oil pollution, take, as respects the ship or its cargo, any action of any kind whatsoever, and without prejudice to the generality of the preceding provisions of this subsection, the Governor may-
- (a) take any such actions as he has power to require to be taken by a direction under this section;
- (b) undertake operations for the sinking or destruction of the ship, or any part of it, of a kind which is not within the means of any person to whom he can give directions;
- (c) undertake operations which involve the taking over of control of the ship.
- (5) The powers of the Governor under subsection (4) of this section shall be exercisable by such persons as may be authorised in that behalf by the Secretary of State.
- (6) Every person concerned with compliance with direction given, or with action taken, under this section shall use his best endeavours to avoid any risk to human life.
- (7) The provisions of this section and of section 16 of this Act are without prejudice to any rights or powers of her Majesty's Government in the Falkland Islands exercisable apart from those sections whether under international law or otherwise.

- (8) It is hereby declared that any action taken as respects a ship which is under arrest or as respects of the cargo of such a ship, being action duly taken in pursuance of a direction given under this section, or being any action taken under subsection (4) or (5) of this section-
- (a) does not constitute contempt of court; and
- (b) does not in any circumstances make the Admiralty Marshal liable in any civil proceedings.
- (9) In this section, unless the context otherwise requires-

"accident" includes the loss, stranding, abandonment of or damage to a ship; and "specified" in relation to a direction under this section, means specified by the direction; and the reference in subsection (8) of this section to the Admiralty Marshal includes a reference to the Admiralty Marshal of the Supreme Court of Northern Ireland.