



Australian Government
Australian Maritime Safety Authority

THE RESPONSE TO THE
Global Peace
OIL SPILL

REPORT OF THE
INCIDENT ANALYSIS TEAM



**RESPONSE TO THE *GLOBAL PEACE*
OIL SPILL**

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SEPTEMBER 2006**

Report by the Incident Analysis Team into the Response by the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances, to the Oil Spill from the *Global Peace* in Gladstone on 24 January 2006.

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PREFACE

Following the *Global Peace* oil spill in Gladstone on 24 January 2006, two separate inquiries were undertaken to investigate the circumstances surrounding the cause of, and response to the oil spill.

The first inquiry, undertaken by the Australian Transport Safety Bureau (ATSB), was established under the provisions of the *Transport Safety Investigation Act 2003*. The purpose of the ATSB inquiry was to identify the factors contributing to the incident so as to assist in preventing similar incidents in the future.

The second inquiry, the subject of this Report, was established by the Australian Maritime Safety Authority (AMSA) and Maritime Safety Queensland (MSQ) under the auspices of the National Plan Management Committee and the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (the National Plan).

An Incident Analysis Team (IAT) was established in February 2006 to undertake a comprehensive analysis of the management of the incident from an oil spill response perspective, to assess the adequacy of the response and identify any lessons that could be learnt by Australian spill responders. The terms of reference for the incident analysis, including details of the Team's membership are at Appendix 1.

IAT members attended key debriefing sessions of the main organisations involved with the response, conducted personal interviews and discussions with many of the people involved with the response ranging from State level management through to on ground responders as well as with community and environmental groups.

The IAT has identified a number of issues that were raised either during or after the response. Each issue has been examined in detail using a range of available information sources to ascertain its veracity. Based on this examination a series of conclusions and recommendations are presented.

The open response of the many individuals and organisations that provided written information and made time available for interviews and discussion is greatly appreciated by the IAT.

Any comments or criticisms in the Report must be read in a constructive sense. As with any analysis of an emergency incident it is important to ensure that the lessons learnt are used to improve arrangements and preparedness in readiness for any future incidents.



Captain Charles Black
Chair, Incident Analysis Team
29 September 2006

Executive Summary

Following the *Global Peace* oil spill in Gladstone on Tuesday 24 January 2006 an analysis was undertaken to examine the effectiveness of the response to the spill. The Australian Maritime Safety Authority (AMSA) and Maritime Safety Queensland (MSQ) established the investigation jointly under the auspices of the National Plan Management Committee (NPMC) and the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (the National Plan).

The IAT found that overall a good outcome was obtained in cleaning up the *Global Peace* spill. The response was effective with some 18 tonnes of 25 tonnes of oil recovered within five days and minimal environmental damage to Gladstone harbour and the surrounding environs. This is a testament to the success of the operation. The Gladstone harbour, foreshores, marina and accessible surrounding mangroves were cleaned as far as practicable. The oil that could not be removed has degraded over time and is expected to continue to do so.

The Port Curtis Integrated Monitoring Program, established under the auspices of the University of Central Queensland to monitor Gladstone industry's environmental effects on the marine environment, is well positioned to monitor any longer-term effect of the spill.

While in hindsight some response decisions could be questioned by the IAT, at the time of their making there was a clear process in place. However, the IAT has identified a number of systemic problems. While these problems did not materially affect the overall outcome, they did contribute to making the response more difficult.

Like all oil spill response scenarios, the IAT believes there are lessons that can be learnt from this incident and areas where improvements can be made in order to enhance any future responses.

Fourteen recommendations have been made,

mostly of an operational nature. It needs to be emphasised that the majority of the issues giving rise to the recommendations may have impacted on the effectiveness and efficiency of the activities, however they did not materially affect the overall outcome of the response. There is concern by the IAT that unless these issues are addressed they could have a serious impact in a more complex or larger spill.

While the recommendations address a range of issues, the IAT has identified 4 key strategic areas warranting further consideration by the National Plan Management Committee/National Plan Operations Group.

Firstly, the application of the Oil Spill Response Incident Control System (OSRICS). The IAT believes that the flexibility and the utility of the OSRICS structure was not fully appreciated and applied to its full advantage during the response and this tended to create a number of problems in itself.

Secondly, Occupational Health and Safety (OH&S). While a reasonable OH&S outcome was achieved, it appeared more attributable to the commitment and experience of individuals rather than a well constructed and promulgated strategy.

Thirdly, media and communications. The spill created a good deal of media interest both locally and internationally. However, the timing of the spill just prior to Australia Day and the vacuum created by the lack of timely, factual and accurate information provided to the media, caused them to develop their own headlines and stories greatly exacerbating the actual size, extent and impact of the spill.

Finally, the IAT is particularly concerned about the manner in which the dispersant testing effectiveness was undertaken, the conclusions drawn and as a consequence the reduction in response options available to the Incident Controller.

1 INCIDENT DESCRIPTION

On Tuesday 24 January 2006, at about 2354, the tug *Tom Tough* experienced engine problems and landed heavily against the port side of the Panamanian registered bulk carrier *Global Peace* (132,049 DWT – built 1982). The incident occurred during a berthing operation at the Clinton Wharf coal terminal facility in the port of Gladstone, Queensland.

The impact breached the ship's hull and ruptured a port side fuel tank. Heavy fuel oil flowed into Gladstone harbour from the hole in the ship's side for about 45 minutes. At the time of the incident, the vessel's port side fuel tank contained about 150 tonnes of heavy fuel oil. An amount of heavy fuel oil, later confirmed by an independent bunker survey to be 24.53 tonnes was lost into the harbour on the flood tide. No injuries to personnel on either the ship or the tug were reported.

The Port of Gladstone and surrounding areas contain a number of diverse environments, some of which are highly sensitive to the effects of marine pollution. These include large areas of mangroves, intertidal mudflats and seagrass beds close to the shipping channel and port area. The marine environment around Gladstone is also documented as a habitat for seabirds and waders as well as for turtles, dolphins and dugong. The area is also important for the prawn and fishing industries.

The Gladstone Marina, Auckland Creek and Barney Point beach, as well as the islands within the harbour, are important recreational areas for the local community.

At 2357, pollution response personnel in the port were notified and the Port of Gladstone's First Strike Oil Spill Response Plan was activated. MSQ assumed statutory and combat agency responsibility almost immediately. The Incident Control Centre (ICC) was setup in the MSQ offices in Gladstone during the early morning of Wednesday 25 January.

The Incident Controller made an initial field decision based on personal observations that due to OH&S considerations no equipment deployment would be undertaken during the hours of darkness.

To augment local resources, a range of spill response equipment was prepared through the night for deployment at first light about 0530 on Wednesday 25 January. These resources were drawn from the major stockpiles in Brisbane and Townsville and included four Marco oil recovery vessels from Townsville, Mackay, Gladstone and Brisbane. AMSA, as manager of the National Plan, assisted with mobilising equipment and personnel to support the clean-up effort.

An overflight was carried out at 0530 to determine the extent of the oil impacted area and support detailed planning to respond to the incident. An amount of heavy fuel oil was observed in the main channels and waterways system extending from east of Barney Point to Black Swan Island at the start of The Narrows. Heavy oiling was also observed along the banks and mangroves in the Calliope River (Map 1, refers).

A second overflight was carried out at 0900 and twice daily thereafter. The information gained from the overflights was critical in planning the response to the incident. By the end of Day 1, response equipment both local and intrastate had arrived and been deployed to facilitate containment and recovery. Given the inherent geographical challenges, this was a good result.

Early in the morning of Wednesday 25 January a decision was made to boom off the mouth of Auckland Creek with boom that was stored at, and hence readily available in, Gladstone.



*Calliope River first Flyover
Wednesday 25 January at 05:30*

The rationale behind this booming was to prevent oil from entering both the Marina and the power station cooling intake by deflecting any slick away from the creek entrance.

Around this time a decision was also made to close the Marina to all vessel traffic. The closure limited access and egress by a range of vessels including commercial tourism and fishing vessels. However, later the boom was opened to allow the Heron Island ferry, two lines launches and the pilot launch to depart and it was at this time that oil first entered the Marina. This resulted in a new clean-up area being created in the Marina's finger berths and the associated oiling of moored vessel's hulls.

There was also a need to relocate the disembarkation point for the Heron Island ferry to one of the Port's main commercial wharves, which presented a range of issues for the Central Queensland Port Authority (CQPA) and passengers.

Commercial fishers were also subject to a range of disruptions including possible loss or tainting of product, closure of the local fisheries and subsequent loss of market access and hence an affect on income. As a result of a lack of factual information on the possible effect of oil on the marine environment and fish stocks, the local commercial fishers interacted with the media in an effort to highlight their concerns.

As part of the response, dispersant effectiveness testing was undertaken on the morning of Wednesday 25 January. Based on the outcome of this testing, the Incident Controller was advised that the various National Plan dispersants were not an effective response option to the spill. This limited the range of available response options for the Incident Controller. While there was a lack of helicopter dispersant capacity in Gladstone, boat mounted equipment for dispersant application was available as was access to the National Plan's fixed wing aerial dispersant capability.

Gladstone City Council was advised by MSQ on the first day of the incident. However, despite having a range of equipment that would have been appropriate to use in shoreline

clean-up operations they were reluctant to provide assistance, as they were unsure of their responsibility in this regard.

P&I Club representatives were on site during the spill response. A bond of A\$5 million was sought and obtained by MSQ from the P&I Club to cover a range of costs associated with the response. While the issue of the bond was handled fairly well between MSQ and the P&I Club, there were some problems with ambit claims, difficulties in contacting the P&I Club and / or their local representatives by public stakeholders, uncertainty about the claims process, and the operation of the P&I Clubs and third party claims generally.

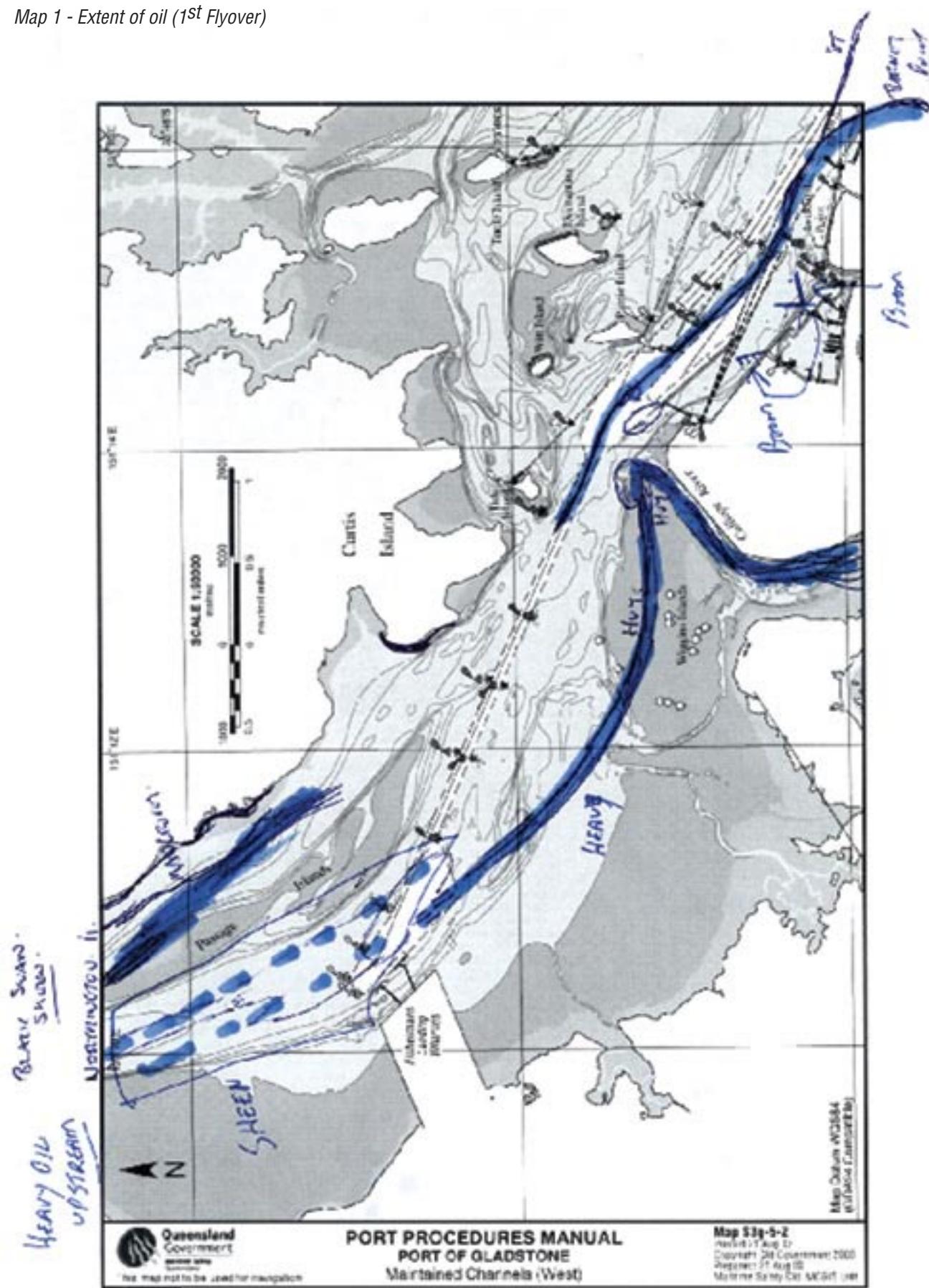
Over the next six days, personnel and equipment were deployed to undertake shoreline assessment, clean-up the spill and respond to oiled wildlife. The on-water recovery operations were completed by 28 January, with the relevant equipment being returned to the stores. The shoreline clean-up was completed to the standards required by the Queensland Environment Protection Agency (QEPA) by 30 January.

Fortunately, in 2001, the Port Curtis Integrated Monitoring Program (PCIMP) which is a consortium of 14 bodies representing industry, government (both local and State), research institutions and other stakeholders was established to develop a cooperative monitoring program for assessing the ecosystem health of Port Curtis (including Gladstone harbour).

PCIMP recognised that an assessment of the effect of the *Global Peace* spill was required as soon as possible in order to separate the effects of the spill on the marine environment from those general conditions causing changes in the harbour.

At this stage, PCIMP's initial assessment indicates that residual oil deposits have affected less than 1 per cent of the harbour. This assessment will be followed up by 6 and 12-month assessments with annual monitoring continuing thereafter. The University of Central Queensland has also estimated that the spill affected 1.5ha or 0.02 per cent of the total mangrove area in Port Curtis (F. Melville, pers. comm., 2006).

Map 1 - Extent of oil (1st Flyover)



2 THE RESPONSE

(a) Issue: Call Out Arrangements

Background

Concern was expressed during the debriefs that the call out arrangements had not functioned as effectively as expected. This was attributed to the increased use of mobile phones rather than landlines. For a callout arrangement based on mobile phones to be effective, procedures must ensure that on call personnel have their phone switched on and available i.e. not switched through to message bank.

There was also a minor issue with the mobile phone provider's settings in which calls that were not responded to within 3 rings were automatically switched through to message bank.

Conclusion

This issue does not appear to have been a significant concern. At the local level, the Gladstone call out arrangements worked well though there is always the need to review and update telephone contact lists.

Whilst there may have been a few calls to the message banks of Brisbane based personnel there was no direct impact either on the response or the arrival of additional responders and equipment.

(b) Issue: Response Actions by the Vessel's Crew, Lines Boats' and Tug's Personnel

Background

During the course of the interviews a number of parties suggested that the vessel's crew, lines boats' and tug's personnel might have been well placed to provide an immediate response to the spill by either utilising available response equipment on board the respective vessels or by 'jury rigging' a device to temporarily stem the flow of oil.

Following an assessment, it is the IAT's view that the vessel's crew could not have mounted an immediate clean-up response as they were still engaged in the berthing of the ship. However, the crew did immediately commence transferring oil from the ruptured tank, which had the effect of reducing the volume of oil that potentially could

have escaped. The tug's three-man crew were fully engaged in managing on board problems, while the lines' boats personnel continued their assistance in berthing the vessel.

None of the three vessels involved carried any spill response equipment on board other than for their own immediate needs. It was felt that the suggestion, that 'jury rigging' a device to temporarily stem the flow of oil, warranted further consideration by the IAT. The IAT took the following view: that as oil is a hydrocarbon based chemical substance, it should only be handled directly by humans using protective apparel. While a plugging arrangement may have been successful, the lack of appropriate personal protective equipment (PPE), an oily deck (that is an inherently unsafe work environment), inadequate lighting and a lack of equipment on board to plug a hole, would mitigate any such approach.

Conclusion

In considering this issue, the IAT is satisfied there was nothing that the vessel's crew, the lines boats' or tug's personnel could have done to temporarily prevent or stem the flow of oil escaping from the vessel.

(c) Issue: Booming of Auckland Creek

Background

Although booms were deployed at the entrance to Auckland Creek/Marina, oil entered both areas.

There was a diversity of opinion at the debriefs and interviews as to whether the method of booming Auckland Creek was an effective response measure.

Early in the morning of 25 January a decision was made to boom off the mouth of Auckland Creek with boom that was stored at, and hence readily available in, Gladstone. The rationale behind this booming was to prevent oil from entering both the Marina and the power station cooling intake by deflecting any slick away from the Creek mouth. Although the boom was initially set up for deflection it in fact worked well for a short period

of time in containment mode. However, it proved to be ineffective due to the boom being placed:

- across the Creek's mouth which was effectively across the current;
- at a different location from that previously identified and used in MSQ training exercises undertaken by local MSQ and CQPA responder staff;
- without any apparent calculation of its' loading capacity. Ultimately the boom broke as a result of some uncertain factor – meteorological, tide / current, fishing vessel, etc; and,
- without any marking or monitoring overnight.

Conclusion

In summary, the booming of Auckland Creek and the method in which it was done was not a well-conceived idea and had it been handled in a manner identified in previous training exercises, a number of problems that occurred later in the response could possibly have been avoided.

A further compounding element to this issue was the opening of the boom. The boom was opened twice. Firstly, to allow a number of commercial vessels to depart from the Marina and this resulted in no ingress of oil. The second, 50 minutes later allowed oil to enter the Marina and caused recurrent clean-up problems for response staff in dealing with a range of recreational and commercial vessels moored in the Marina.

There is need to ensure that the National Plan's competency based training modules on the use of oil spill containment booms for responders emphasizes the limitations of booms in tidal areas and where currents of greater than 1 knot are experienced. In particular, the following points need to be noted:

- adequate securing arrangements and load calculations;
- an understanding of deflection and containment modes;
- appropriate marking and monitoring; and,
- recognition and utilisation of responder knowledge gained through on ground training exercises.

(d) Issue: Marina Closure

Background

While the effectiveness of the booming of Auckland Creek is discussed above the closure of the Marina proved to be a good preventative measure but was subsequently negated by a decision to open the boom.

The boom was opened twice. Firstly, to allow the Heron Island ferry, two lines launches and the pilot launch to depart. A second opening, 50 minutes later, allowed oil to enter Auckland Creek and the Marina. The outcome of this action was that a new clean-up area was created in the Marina's finger berths and the associated oiling of moored vessel's hulls.

It should be noted that closure of the Marina limited access and egress by a range of vessels including commercial, tourism and fishing vessels. There was a need to relocate the disembarkation point for the Heron Island ferry to one of the Port's main commercial wharves, which presented a range of issues for CQPA and passengers. Commercial fishers were also subject to a range of disruptions including possible loss or tainting of product, market uncertainty and hence an affect on income.

Conclusion

The IAT believes that the decision to close the Marina proved to be a worthwhile response measure and whilst it could have been done earlier the essential lesson to learn is that once the decision had been made it should have remained closed until the potential for the ingress of oil into the area had ceased.

(e) Issue: Uncertainty in Reporting Size of Spill

Background

Varying estimates of the spill size were reported during the initial stage of the response. Figures ranging from 3 to 150 tonnes were provided from a range of sources. Uncertainty over the quantity of the spill prevailed for some time and whilst this did not appear to affect the overall response it did have implications initially in terms of effective response planning.

Initially the Master believed that three tonnes of oil had escaped from the vessel. A surveyor's report requested by the Incident Controller from the ship's agent on Wednesday 25 January revealed a more accurate estimate of 24.53 tonnes.

Conclusion

Whilst there was an initial problem that could impact on response planning, personnel deployment and equipment mobilisation, there is probably little that can be done to improve the situation. Clearly though from a media perspective, an accurate estimate of the spill size is critical, before an official figure is reported.

(f) Issue: Security and Access

Background

There was a need to relocate the disembarkation point for the Heron Island ferry to one of the Port's main commercial wharves, which presented

some issues for the CQPA including the need to address security and passenger access.

Whilst maritime security and port access in terms of the Commonwealth's *Maritime Transport and Offshore Facilities Security Act 2003* was a minor issue in this incident, response personnel noted an inconsistent approach to security and access at a range of venues during the response. For example, during the interviews it was stated that normal security procedures were periodically relaxed at the ICC and this could have allowed uncontrolled access to the response's main planning area.

Conclusion

The IAT believes that this was only a minor issue during this incident and did not materially impact upon the response. However, all agencies should retain as a minimum their normal security standards and procedures during an incident response.

3 PLANNING

(a) Issue: Incident Response Planning

Background

Incident response planning consists of two integral components: pre-incident planning and response planning.

The IAT believes that there were deficiencies in both the pre-incident and incident planning that should be recognised and considered prior to any future spill response.

In terms of pre-incident planning, MSQ and CQPA staff had identified and trialled deployment of equipment at sites likely to be most effective in responding to a spill of this type. Whilst some response staff were aware of these operational issues they had not been formally documented in the contingency plan or elsewhere for future reference.

Response planning appeared to have been undertaken on an emergency basis only, without full consideration of future events and their implications. When for example the decision to close the Marina was made, little consideration appears to have been given to the flow on effects to commercial vessel operations including charter and fishing vessels and the lines and pilot launches.

The formation of the planning group did not seem to follow the OSRICS structure or principles and resulted in an incomplete group that could have played a more effective part in the overall response.

The expertise that NRT members could bring to the response (equipment, logistics, finance, administration, environmental, aerial surveillance) was not fully investigated nor appreciated by management and this resulted in the less than optimal utilisation of personnel and their skills. Ten NRT members arrived on scene and were not briefed at the time. Rather they were briefed the following day resulting in delays in their availability for response activities.

Conclusion

As planning is an essential element of any spill response an effective structure and system as outlined in OSRICS needs to be in place at an early stage to ensure immediate and ongoing issues are captured and addressed.

Pre-incident planning needs to be enhanced using experience gained from exercises, training and specific potential scenario evaluations and contingency plans updated accordingly.

Finally, NRT requirements should be identified early in a response by the Incident Controller and clearly conveyed to AMSA and that more effective and efficient use of the NRT's expertise be made during a response

Recommendations

The IAT recommends that an assessment regime is introduced for Incident Controller courses (i.e. the Oil Spill Management Course) and that Incident Controllers or their equivalents undergo retraining and revalidation at least every five years with AMSA to maintain the records and advise the Incident Controllers accordingly.

(b) Issue: Logistics

Background

During debrief and interviews the IAT received feedback that highlighted failures in the timely supply and quality of resources during the response by a range of agencies.

Whilst responsibility for logistics in the Incident Management Team was allocated to an individual this was never their primary task and this resulted in a lack of focus on the supply and distribution of resources required for an effective and efficient response. This was clearly demonstrated in the area of catering where quality and quantity of supplied provisions was often subject to criticism.

Anecdotal advice suggests that the use of a single level of authorisation for expenditure may

have led to some delays in provisioning and this function could have been delegated to a range of appropriate staff.

In term of pre-incident planning, the lack of identification of suitable suppliers and agencies to provide resources and provisions during an incident in suitable quantities created unnecessary difficulties.

Conclusion

Notwithstanding that the clean-up was successful, the response was compromised by a lack of understanding and resourcing for logistics and

expenditure authorisation levels which could potentially have affected the welfare and safety of responders.

During a response, logistics needs to be better recognised and resourced, as it is a separate specialist area in response planning under OSRICS. To this end, future desktop exercises should ensure that logistics are better resourced and that requests are clearly identified and actually followed through. The use of a single level of authorisation for expenditure during a spill response should be avoided and appropriate delegation arrangements put in place.

4 PERSONNEL AND EQUIPMENT

(a) Issue: Aviation Resources

Background

Paragraph 3.2 of the Queensland Coastal Contingency Action Plan (QCCAP) indicates that dispersant may be deployed in some circumstances in Gladstone harbour. There was also an understanding that MSQ had in place a contract for the provision of aerial dispersant application. However, the local helicopter company identified for aerial dispersant application did not have a pilot qualified to operate with an underslung load.

While the available Squirrel helicopter in Gladstone can only lift a $\frac{1}{2}$ bucket load of dispersant, proximity of the airport to the spill site meant that a rapid shuttle service could have been employed to apply dispersant.

Conclusion

Whilst this was a potential issue, a decision was made not to apply dispersants in this particular case. However, availability and utility of appropriate aviation resources could be a problem in any future response. Spill response operations that have the potential to use helicopters for aerial dispersant application through either existing contracts or on an *ad hoc* basis need to undertake regular audits of the providers' capabilities.

Recommendations

The IAT recommends that helicopter providers be regularly audited to determine whether the available platforms have the ability to lift a full dispersant bucket payload and that the pilots are qualified to carry such underslung loads.

(b) Issue: Use of Dispersants

Background

The purpose of the National Plan Dispersant Effectiveness Test Field Kit (Nat-DET Kit) is to provide State/NT agencies with the ability to field test unknown oils and/or weathered oil slicks and to determine the likely effectiveness of the various National Plan oil spill dispersants available for use.

The window of opportunity for dispersant use on slicks at sea is often very limited. As oil weathers

at sea under the action of wind and waves it tends to become less dispersible – it thickens and the viscosity and pour point increase. Delays in dispersant application because of uncertainty of the effectiveness of available dispersants can be reduced by in field-testing of the oil slick by response personnel.

The Nat-DET Kit has been designed to be fast and easy to use in the field, while still providing results that are meaningful to planners on the relative effectiveness of dispersants.

During the *Global Peace* response, dispersant effectiveness testing was undertaken but not with the required National Plan methodology. Instead testing was undertaken:

- on site without the use of the Nat-DET Kit which remained in Brisbane during the spill response;
- using a variety of non-standard equipment, unquantified volumes of oil, seawater and dispersant and without the preparation of standards for comparative purposes or the benefit of the Kit's operational guidelines, i.e. the 'Coke bottle' approach was employed; and,
- by personnel untrained in the use of the appropriate field dispersant/oil testing techniques.

Based on the outcome of this *ad hoc* approach the Incident Controller was advised that the various National Plan dispersants were not an effective response option to the spill. This limited the range of available response options. While there was a lack of helicopter dispersant capacity, boat mounted equipment to apply dispersants was available in Gladstone as was access to the National Plan's fixed wing aerial dispersant capability.

Paragraph 8 of the Port of Gladstone's First Strike Oil Spill Response Plan indicates that dispersants will not normally be used within the port because they are unlikely to be effective on the types of oil most likely to be spilt i.e. bunker fuel oils. This reinforces a common misbelief that dispersants are not particularly effective in responding to spills of heavy fuel oil. In general terms, provided that the oil is still relatively fluid it may be dispersible.

Temperature is an important parameter affecting the viscosity and Gladstone's seawater temperature in January/February can reach up to 27°C.

The widespread dispersion of the oil as attested to by its rapid tidal current induced distribution throughout Gladstone harbour and the surrounding marine environs would suggest that the selective use of dispersants may still have been an appropriate response tool.

However, this is only one consideration as there are other secondary benefits available with dispersant use. In particular, the Nat-DET Kit operator needs to also consider how the oil's properties are changed with the application of dispersants. For example, oil may become 'less sticky' following dispersant application and this will assist mangroves in self-cleaning and recovering from the effects of a spill through natural tidal flushing.

It is generally accepted that dispersant use over sensitive seagrass beds should be avoided. However, this does not, and should not, preclude its selective use in or near tropical mangrove areas.

Mangrove environments are particularly susceptible to the effects of oil as a result of their exposed root systems, the adherence of oil to trees, the entry of oil into the underlying mud matrix and its repeated release from this matrix and subsequent tidal inundation of mud flats.

Previous National Plan funded long-term research within the Gladstone port area has shown that using an oil/dispersant mix enhances the ability for mangroves to naturally self clean and minimises the environmental impact of oil spills.

An alternate view suggests that there maybe problems with dispersant use in that it can function as a defoliant when sprayed directly onto mangroves and may cause additional problems with increased chemical load on the environment.

Conclusion

The IAT is particularly concerned about the manner in which the dispersant testing effectiveness was undertaken, the conclusions drawn and as a consequence, the reduction in response options available to the Incident Controller.

Failure to use the Nat-DET Kit relying instead on the 'Coke bottle' approach by personnel untrained in the equipment and techniques serves only to severely undermine the reliability of any conclusions drawn. This could be overcome if training in the use of the Nat-DET Test Kit is brought within the ambit of the enhanced National Plan training program relying as it does on the application of competency based training principles.

Recommendations

The IAT recommends the Environment and Scientific Coordinator (ESC) or their equivalents, using the National Plan Dispersant Effectiveness Test Kit, undertake responsibility for dispersant testing effectiveness during a spill response and that this is clearly identified in contingency plans.

(c) Issue: Equipment Deployment at Night

Background

The Incident Controller made a field decision based on personal observations that due to OH&S considerations no equipment deployment would be undertaken during the hours of darkness.

During the debrief and interviews some personnel and stakeholder groups questioned this decision based on their operational experience in related maritime industries. It was suggested that with adequate lighting and appropriate equipment an immediate response could be mounted during the hours of darkness.

Conclusion

The IAT noted that responding agencies gave careful consideration to deployment of equipment at night and decided that:

- normally response equipment deployment at night is not undertaken for a range of reasons largely centred on OH&S. In some circumstances it can be done. For instance, during the *Laura D'Amato* response at Gore Bay in Sydney Harbour, personnel successfully deployed boom during the hours of darkness. This was a well practiced activity attaching booms to defined anchorages, conducted in partial light by experienced crews;
- there were substantial OH&S issues with deploying equipment at night particularly with respect to wet, slippery and potentially oil covered rocks, the difficulty in distinguishing between oil and water under low light conditions and consideration of sea swell, tidal and current flows; and,
- no pre-existing anchor points were available in this location.

This approach is reinforced in paragraph 3.1 of the Queensland Coastal Contingency Action Plan where the preservation of human life and safety is identified as the number one priority during a spill response.

The IAT did not accept that a range of spill response equipment could be operated safely

and effectively at night. Further, the IAT did not accept comparisons with operational experiences in related maritime industries.

(d) Issue: Equipment Marking

Background

During the debriefs and the interviews it was suggested that response equipment needed to be better labelled and marked to assist in field identification using some form of colour coding to indicate point of origin and/or ownership. It would also assist in record keeping. It was also suggested that a laminated contents list should be included inside National Plan field kits.

Conclusion

The IAT agreed with these observations, and were aware that a standard numbering system is already used by AMSA and the Australian Marine Oil Spill Centre (AMOSC) to identify equipment. Information on the existing standard equipment identification system and a common equipment marking protocol should form part of Equipment Operators Courses and that a reference to the system needs to be made in other relevant National Plan training courses.

Recommendation

The IAT recommends that a common equipment marking protocol for National Plan participants be established.



5

ADEQUACY AND EFFECTIVENESS OF WILDLIFE RESCUE AND REHABILITATION

Issue: Adequacy and Effectiveness of Wildlife Rescue and Rehabilitation

Background

Given the limited wildlife rescue and rehabilitation associated with this incident there was no real effectiveness testing of this response component. Appropriate equipment and response personnel were deployed, but the small number of impacted wildlife, less than 10 birds, meant that the response was completed in a relatively short period of time with all personnel being stood down after six days.

Queensland Parks and Wildlife Service (QPWS) reported that there were some minor problems with the local oiled wildlife response plan not being regularly updated to reflect changes in personnel, contacts details and available equipment.

During the response, two pods of marine mammals were monitored. A pod of dolphins

near the Marina moved away during the incident and subsequently returned. While another pod, located in the Calliope River, seemed unaffected by the spill.

QPWS received reports of two dead dugongs some three to four weeks after the oil spill. While no oil was reported in the gut or intestines of these animals, no chemical analysis was undertaken due to their decayed state.

The area is not a bird breeding area so there were no migratory or intertidal birds in the area during the spill.

Conclusion

The IAT noted that the staged and structured approach adopted by QPWS in establishing a wildlife stabilisation centre as an initial step and then planning for additional actions as and when required, was entirely appropriate. There is also a need for all response agencies to regularly review and update their oiled wildlife response plans.

Calliope River



6 ENVIRONMENTAL ADVICE AND SUPPORT

(a) Issue: Use and Effectiveness of the Oil Spill Response Atlas (OSRA)

Background

The IAT believes that OSRA was not well appreciated as a resource in this incident. Instead, reliance was placed on local based knowledge, which while timely, cost effective and accurate was outside of the OSRA system.

The IAT noted that in this instance, environmental planning for the *Global Peace* response was primarily a paper-based exercise. This arose as a result of:

- a strong preference in the ICC for paper based presentation of information;
- no available trained OSRA operators in the first 24-36 hours after the spill;
- the use of only one OSRA operator to check, verify, interpret and present information when such a range of tasks normally requires two people; and,
- the belief that the Gladstone OSRA system would not interconnect with other computer based planning and response systems, that it would not produce up to date maps, that its information was out of date and that it was preferable to rely on locally based knowledge.

Conclusion

Notwithstanding a considerable data gathering exercise in the recent past, the combined benefit of OSRA and local data was not achieved. This resulted from a lack of appreciation of the benefits of a well operated OSRA during a response and a lack of preparatory work prior to an incident.

OSRA has been designed to provide, in an effective and efficient manner, rapid access to a range of environmental information for planning when responding to a spill. Like any tool it is only as effective as its operator, the information it contains and the interpretation of that information and ultimately the training and competence of the operator(s).

The IAT believes that there is a need for a better understanding of the OSRA system at all levels through a greater emphasis on training and the collection and input of data and that the skill

sets afforded by an OSRA operator should be recognised as a specific element for inclusion in the NRT.

Recommendation

The IAT recommends that AMSA and the States/NT identify and reconcile any differences in philosophy or strategy regarding both the maintenance and operation of the OSRA system.

(b) Issue: Shoreline Assessment

Background

Shoreline assessment and subsequent clean-up was largely effective. However, considerable time was lost due to inexperienced personnel being assigned to foreshore assessment and out of date MOUs with local councils.

Whilst CQPA staff believed that they have responsibility for shoreline areas to the high water mark on Port lands, this is neither stated in, nor supported by the Oil Pollution First-Strike Response Deed between themselves and MSQ.

While the shoreline clean-up was effective and adequately resourced, there were some concerns regarding the safe deployment of staff with particular reference to adequate supplies of water and management of personnel working in conditions of high tropical heat and humidity.

There were also some other problems in that QEPA staff, while well trained in oiled wildlife response, were not as familiar in shoreline assessment, in particular clean-up planning and operations. As a result this necessitated up to three visits to an area to undertake the requisite shoreline assessment, planning and clean-up.

Conclusion

The IAT believes that, overall the foreshore assessment and clean-up was largely effective but there is need to clarify areas of responsibility and jurisdiction between agencies.

Further, the IAT believes that shoreline assessment should not be the sole responsibility of the ESC but rather should utilise a multidisciplinary capability so that environmental, heritage, planning, cultural and operational issues are addressed at once.

Recommendations

The IAT recommends that training for shoreline assessors be enhanced to develop their multidisciplinary capability so as to permit simultaneous field assessment of environmental, heritage, cultural, planning and operational issues.

(c) Issue: Waste Management

Background

The disposal of waste, while expensive, was effectively handled through the use of an external contractor to remove both solid and liquid waste

as well as undertaking the clean-up of spill response equipment.

It is worth noting that the licensed waste disposal company used in this instance, brought all waste back to Brisbane for processing.

Conclusion

The IAT concluded that the issue of waste management during the response was well handled. In particular, the approach of out sourcing its management is one that should be considered along with any other applicable alternatives in future.

OCCUPATIONAL HEALTH AND SAFETY ISSUES

(a) Issue: OH&S

The IAT has identified a number of differences and discrepancies between the approach reported by management and that by field response personnel.

Operational planning for OH&S could not be validated. Although ICC personnel reported that detailed plans had been produced daily and authorised by the Incident Controller, the actual documents could not be produced for review. The request to sight the documents resulted from the substantial variance in views between the ICC and work sites.

While a reasonable outcome was achieved, it appeared more attributable to the commitment and experience of individuals rather than a well constructed and promulgated strategy.

The IAT has identified a number of specific concerns including:

- OH&S roles and responsibilities were not well defined and therefore there was often no specific responsible person nominated during practical activities;
- the overall plan was not well distributed so there was no consistent standard or obvious safety leadership;
- although MSQ has a published Hours of Work Policy, it was not applied consistently during the incident;
- cost management restraints impacting on a number of facets of the incident. For example, the provision of water and supplies is essential to ensure responder safety and morale and care needs to be taken to ensure that this is done in a timely manner and without the need to get too high a level of authorisation for expenditure purposes;
- a reliance on responders to self monitor with no formal program to ensure compliance;
- no formal check-in or registration of staff; no meeting of personnel upon arrival in Gladstone and no staff induction. One on one interviews with responders indicated that there was a lack of process for ensuring that there was

individual awareness and commitment to safety;

- some reported problems with people not using PPE, though these issues were never formally reported to the ICC;
- a number of small OH&S incident reports were not logged with the ICC and there was no overall incident reporting structure; and,
- staff rotation through an incident would reduce burn out/potential OH&S problems and would also expose more Australian response personnel to actual spill incidents.

Conclusion

The IAT believes that a reasonable OH&S outcome was achieved by personnel knowledge and training rather than by design. Whilst groups seemed to work to their own individual OH&S requirements there was no overall safety plan promulgated or control and coordination of response staff.

While response plans can always be reviewed to strengthen their OH&S component, there are a number of commonsense measures that agencies can adopt to enhance OH&S during a spill including implementing an hours of work arrangement by identifying a staff rotation policy and adhering to that policy; and, for safety reasons, providing to each person operating in the field, a map of the area and a telephone contact list.

Recommendations

The IAT recommends the National Plan introduce a formal safety training program for spill managers. The program should comprise desktop exercises and require managers to detail the safety philosophy and objectives for a spill response and to design the implementation strategy, showing how the philosophy would be communicated through the line of command and result in awareness by all personnel of the commitment to safety. Further, the OH&S component of response training should be reviewed and amended to ensure that safety management is a primary element in management training.

(b) Issue: Registration of Staff

Background

The IAT has identified that registration of staff was a problem during the response. There was no central congregating or staging point. Some NRT personnel reported to the ICC. Some responders reported to the MSQ field operations base and not to the ICC. In that circumstance the Incident Controller was bypassed on information about available personnel and their skills.

The use of a central congregating or staging point for personnel and also for equipment registration would be a useful and prudent approach. This would allow for the issuing of identification and security tags for access to port and incident operational areas.

It was noted that some staff were initially not provided with a registration sheet, time sheet or daily log sheet to record their activities. Such a system was not operated by the QEPA at all.

Conclusion

This is a safety and management issue with strong implications for OH&S, planning and staff resourcing and should be addressed by the recommendations outlined in the OH&S component, above.

(c) Issue: Planning for On-going Reliefs

Background

The IAT noted that there were a number of minor problems identified with the on-going relief of staff during the incident including poor time management of people and reluctance to turn personnel over quickly enough during the response. This is always a potential problem, particularly where there is a strong team commitment to get the job done. The IAT also noted that there was no plan or policy for relieving people during the response. Some agencies initiated their own actions such as CQPA who sent staff home on Day one after a 12 hour shift and MSQ who gave time off to their administration staff or allowed them to job share during the response.

One on one interviews with responders indicated that they should have been grouped into two shifts: one working in the field and one preparing for the next day. This is consistent with the aims of the OSRICS structure.

Conclusion

Whilst the inadequate planning for on-going reliefs during the incident did not materialise as a problem, it is worth noting for future reference and should be addressed by the recommendations outlined in the OH&S component, above.

8 ADMINISTRATION SUPPORT SERVICES

(a) Issue: Administration Staff Training

Background

The IAT has identified that the major response agencies had a problem with administrative support in this incident. Staff knew what was required but were under resourced to effectively conduct the requisite tasks.

While there were no problems in the supporting claim to the P&I Club, the IAT is concerned that if the administration function is not undertaken properly during an incident, there may be subsequent problems in dealing with, and supporting claims for, recompense. Problems may also arise as a result of an inability to check and verify any expenses or claims submitted by contractors, suppliers, staff, etc.

The National Plan places a high priority on training for field operators and responders with little focus or available training units developed for administration and finance.

The IAT was particularly impressed, that following the identification of a deficiency in training for administration and finance staff, an individual involved with the response had subsequently commenced the process of developing a suitable program for the State.

Conclusion

The IAT believes that while there was available expertise to undertake the administrative support function, it was not well used nor well supported.

Recommendation

The IAT recommends that the States/NT implement their responsibilities for running the Oil Spill Administration Workshops [see Intergovernmental Agreement (IGA) on the National Plan, Schedule 2, paragraph 19].

(b) Issue: Bond

Background

Following an incident, there needs to be a reasonable basis for determining the quantum of any bond that may be sought. The use of ambit claims, particularly in the media or as a measure to promote the appearance of government action,

should not be pursued, as it is unlikely to be supported by the P&I Club.

Rather, when seeking a bond, a party's intentions and the basis for the amount sought needs to be clear. The expected claims components for, *inter alia*, gear, personnel, clean-up, wildlife rehabilitation, court imposed fines, etc, should be estimated along with a component for unexpected claims amounts such as oil entering a power station's cooling water intake, etc. It is better to factor in a worst-case scenario and costs when setting a realistic bond amount.

Such an approach, which is open and transparent, is more likely to meet with a favourable response from the P&I Club than an ambit claim.

This incident was most likely the first time that many public stakeholders had encountered a P&I Club and it was apparent that the claims process for many in the local community was either not well understood or well explained.

The IAT was made aware that a number of claimants and potential claimants had encountered some difficulties in contacting the P&I Club and / or their local representatives. Concern had also been expressed by a number of claimants and potential claimants that the P&I Club would not pay for hull cleaning and re-application of anti-foulant. However, the P&I Club indicated that claims by commercial and recreational boat owners were being paid. Claims for consequential loss by commercial fishermen were not being paid as they were outside the scope of the cover provided by the P&I Club and the Queensland Seafood Industry Association's (QSIA) call to stop fishing had made such third party claims more difficult.

The IAT also noted that the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (the Bunkers Convention) would cover costs for such incidents and in particular third party claims when it enters into force both internationally and for Australia.

Conclusion

The IAT believes that the issue of the bond was handled fairly well between MSQ and the P&I Club though there were some problems with

ambit claims, some difficulties in contacting the P&I Club and / or their local representatives by public stakeholders and uncertainty about the operation of the P&I Clubs, the claims process, and third party claims generally.

As a result of the incident there is some basis to develop a plain English standard national bond and undertaking agreement and a standard release form or *pro forma* for vessels. The IAT believes that guidance on arranging and coordinating bonds and guarantees should be included in contingency plans.

Recommendations

The IAT recommends that a standard plain english form of words for bonds and agreements be developed. This should be accompanied by an explanatory note outlining the legislative basis for applying bonds, the basis for their calculation, a list of standard claims components that a bond should cover as well as examples of non-standard claims components that may be encountered. As well as a standard release form or *pro forma* for vessels should be developed.

(c) Issue: Message from Air-Sea Rescue

Background

The Gladstone Volunteer Marine Rescue (GVMR) was contacted by Gladstone Harbour Control (GHC) on behalf of the ICC and advised that there had been an oil spill. They were verbally

requested to broadcast a message to mariners advising that Auckland Creek and the Marina were closed to all vessel traffic.

The GVMR requested that GHC provide a written notice for their use. However, as no written notice was provided GVMR drafted and broadcast the message that was requested of them. This apparently caused some confusion with mariners as to whether Auckland Creek and the Marina were open or closed.

GVMR also placed personnel at the launching ramps advising mariners of the spill and consequent restrictions.

The IAT noted that there is a local agreement that GHC usually broadcasts to commercial vessels while GVMR broadcasts to the general public. However, GHC does have the capacity to, and does broadcast notices to, mariners from 1700 to 0500 when GVMR is closed.

Conclusion

The IAT noted that although this did cause some confusion it did not materially impact on the response. The IAT is concerned that the release of information needs to be well handled during an incident response. Accordingly, contingency plans need to provide for the use of specific written instructions of required actions when utilising the services of any volunteer organisation so as to ensure certainty and to reduce the likelihood of error or confusion.

RELATIONSHIPS AMONGST PARTIES INVOLVED IN THE RESPONSE

(a) Issue: Media and General Communications to Stakeholders

Background

A number of issues arose regarding media and communication as a result of the requirement by the Minister's office to approve all material prior to its release to the media. This caused some frustration at a local level due to the lack of information on spill response clean-up measures and what affect the spill may have on local fisheries, commercial fishing operators and the recreational boating community.

It is a generally accepted practice that the early release of factual information to the media and stakeholders is a crucial component of any response. However, MSQ are required to follow departmental policy and guidelines on any media releases.

In this instance, the vacuum created by the lack of timely, factual and accurate information provided to the media caused them to develop their own headlines and stories greatly exacerbating the actual size, extent and impact of the spill. All parties recognised that this was a major problem particularly in Gladstone. In this instance, local media and stakeholders were aware there was a problem but were not being provided factual information by either MSQ or the Minister's office.

Whilst the Incident Controller was in regular contact with a Gladstone City Council representative, the Council commented on the lack of available information and the frustrating effect it had on both the local community and their desire to assist.

AMSA also received many media inquiries and it took several days before a specific media hotline number was provided for inquiries. This should have been done from the outset and been widely disseminated. As well, agencies should have been provided with relevant factual and accurate information about the incident on a regular basis to ensure there was a consistent response to the media.

During the response MSQ were required to direct all media communications through the Queensland Department of Transport's (QDOT) media communications unit. There also appeared to be no overall coordination of media across

Queensland government agencies even though there was an agreed arrangement in place between agencies on dealing with the media during an incident. This was particularly so in relation to the issue of fisheries in which the Queensland Department of Primary Industries (QDPI), a member of the Queensland State Committee, acted independently, handling media matters through Queensland Health rather than through the agreed arrangement.

The IAT also noted that on ground responders were put in the awkward position of dealing with questions from the general public without any public relations support, appropriate briefing on what to do or what factual information to pass on.

The IAT also noted that during the response, media staff were also required to participate in a public forum without the requisite technical knowledge and practical understanding of a spill response.

Conclusion

The IAT noted that there were a number of major problems with media and communications in this incident. In particular, issues arose through:

- the lack of timely, factual and accurate information provided to local stakeholders and the media;
- coordination problems between different government agencies; and,
- lack of prior approval from the Minister's office for the release of timely, factual and accurate information.

The IAT noted that while the media and communications problems did not materially affect the response, they did contribute to making the response more difficult.

The IAT believes that response agencies should institute *a priori* arrangements with their Minister's office to ensure the release of timely, factual and accurate information to both the media and local stakeholders during a spill response.

Recommendations

The IAT recommends response agencies utilise their own media liaison unit or other suitable arrangements to ensure a coordinated preparation and distribution of media information across all responding agencies during a spill response.

(b) Issue: Relationship Between State Government Agencies

Background

The IAT believes that there were some communications problems between the Gladstone and Brisbane offices of a number of government agencies that operated independently of the OSRICS response structure.

Similarly, the IAT is also concerned about the lack of coordination and the roles and responsibilities of a number of State agencies during the response. For example, in responding to fisheries issues during the incident, QDPI believed that the matter was primarily a contaminated seafood issue rather than one relating to the understanding by, and operations of the local fishing industry. This disconnection caused significant unrest amongst the local fishing community that led to a perception, in some cases that the response was not well managed. Early involvement of an agency could be assisted by the use of a spill or issues hotline number similar to that used by QEPA.

Coordination and exchange of information across Government agencies is a key action during a spill response. The IAT noted that there was no Queensland State Committee meeting during the incident response and this may have contributed to some of the cross-agency problems encountered during the response. Instead, all State Committee members were notified of the incident and advised to be on standby for immediate input. Regular input was sought from State Committee members.

The IAT believes that it is important the Queensland State Committee members represent their respective organisations and interests in a proactive manner. This will assist in improving cooperation and coordination during a response.

A number of comments were received by the IAT that highlighted the need for better awareness of, and coordination of, responding agencies at the local level during a response. In particular a number of concerns were raised about agencies acting independently of the Incident Controller and without any proper technical assessment of the situation and its potential risks.

Conclusion

As a result of the apparent disconnect between some government agencies and the need for a better coordinated response the IAT believes there is a need to review participation in the Queensland State Committee with respect to membership, roles and responsibilities of members and the seniority level at which an agency is represented.

Recommendations

The IAT recommends MSQ reviews the membership of the Queensland State Committee, members' roles and responsibilities and the seniority level at which an agency is represented so as to ensure an enhanced operational capability and that the Queensland State Committee examines ways to strengthen its management and the relationship between members so as to improve coordination and information exchange.

(c) Issue: Relationship with the Fishing Industry

Background

As a result of a lack of factual information on the possible effect of oil on the marine environment and local fish stocks, local fishermen interacted with the media in an effort to highlight their concerns.

In particular, commercial fishers raised the issue of damage to their industry and the effect of the incident on local seafood in terms of contamination, closure of the local fisheries and subsequent loss of market access. Without evidence to the contrary this became a significant issue and was not resolved until an experienced member of the International Tanker Owners Pollution Federation (ITOPF) was brought in to defuse many 'urban myths' about oil and its effect on the marine environment.

The IAT identified that whilst information was passed onto peak body representatives this did not necessarily mean that it was being passed onto local members and a broader range of communications channels may have been more beneficial.

Conclusion

The IAT believes that communication with, and by the fishing industry was a major source of discontent, which could have been avoided, had suitably qualified people been available to pass on appropriate information at an early stage. This could be assisted through the use of an appropriately qualified person from the fisheries management agency being represented in the Planning Section to undertake consultation/liaison on fishing issues with local fishers and their representative organisation(s).

Recommendations

The IAT recommends fisheries management agencies develop guidelines to assist in reaching a decision about whether to close fishing areas during a spill using as a basis the IMO/FAO Publication on Guidance on Managing Seafood Safety During and After Oil Spills.

(d) Issue: Relationship with Local Councils

Background

Gladstone City Council (GCC) was advised of the spill by MSQ on the first day of the incident. However, despite having a range of equipment that would have been appropriate to use in shoreline clean-up operations they were reluctant to provide assistance, as they were unsure of their responsibility in this regard.

It should be noted that under paragraph 4 of the Port of Gladstone's First Strike Oil Spill Response Plan, the GCC is responsible for shoreline clean-up operations under MSQ's direction. Further work is required in consolidating these arrangements.

MSQ has previously undertaken consultations with Queensland councils regarding preparedness, planning, waste disposal, etc, during a spill response. However over time this experience and recognition of a council's roles and responsibilities during a spill has been lost. It should be noted however that this does vary from council to council.

Conclusion

The IAT noted that there was a disconnection between GCC's management and operational personnel regarding its roles and responsibilities during a spill response. It should be recognised that councils constitute a good organised resource of local people and equipment for use during a spill response.

Recommendations

The IAT recommends MSQ reviews the existing arrangements between councils statewide and re-establishes closer working relationships in terms of identifying each party's roles and responsibilities during a spill response and that contingency plans be revised and updated as necessary.

CONTINGENCY PLANS – NATIONAL, STATE AND LOCAL

Issue: First Strike Capability and the Oil Spill Response Incident Control System (OSRICS)

Background

The Queensland Coastal Contingency Action Plan outlines a scalable OSRICS structure that would be suitable for use during an incident.

The IAT believes that the principles and processes underlying the OSRICS system are fundamental to an appropriate and effective spill response.

The IAT is particularly concerned about both the application of the Plan and the lack of implementation of the OSRICS structure in this incident.

Conclusion

The Contingency Plans were satisfactory for their intended purpose and there were no issues arising from either the First Strike Capability Plan

or the Queensland Coastal Contingency Action Plan. There is however an ongoing need for MSQ and CQPA to review the Gladstone First Strike Response Plan to ensure its currency.

The IAT believes that the flexibility and the utility of the OSRICS structure was not fully appreciated and applied to its full advantage during this incident and this tended to create a number of problems that have been previously identified elsewhere in the Report.

Recommendations

The IAT recommends AMSA reviews the OSRICS training process, including training in the functions, roles and responsibilities for each of the components in the OSRICS structure with particular reference to planning, logistics and safety.

11 RECOMMENDATIONS

The IAT recommends that:

1. an assessment regime is introduced for Incident Controller courses (i.e. the Oil Spill Management Course) and that Incident Controllers or their equivalents undergo retraining and revalidation at least every five years with AMSA to maintain the records and advise the Incident Controllers accordingly (page 7).
2. helicopter providers be regularly audited to determine whether the available platforms have the ability to lift a full dispersant bucket payload and that the pilots are qualified to carry such underslung loads (page 9).
3. the Environment and Scientific Coordinator (ESC) or their equivalents, using the National Plan Dispersant Effectiveness Test Kit, undertake responsibility for dispersant testing effectiveness during a spill response and that this is clearly identified in contingency plans (page 10).
4. a common equipment marking protocol for National Plan participants be established (page 11).
5. AMSA and the States/NT identify and reconcile any differences in philosophy or strategy regarding both the maintenance and operation of the OSRA system (page 13).
6. training for shoreline assessors be enhanced to develop their multidisciplinary capability so as to permit simultaneous field assessment of environmental, heritage, cultural, planning and operational issues (page 14).
7. the National Plan introduce a formal safety training program for spill managers. The program should comprise desktop exercises and require managers to detail the safety philosophy and objectives for a spill response and to design the implementation strategy, showing how the philosophy would be communicated through the line of command and result in awareness by all personnel of the commitment to safety. Further, the OH&S component of response training should be reviewed and amended to ensure that safety management is a primary element in management training (page 15).
8. the States/NT implement their responsibilities for running the Oil Spill Administration Workshops [see Intergovernmental Agreement (IGA) on the National Plan, Schedule 2, paragraph 19] (page 17).
9. a standard plain english form of words for bonds and agreements be developed. This should be accompanied by an explanatory note outlining the legislative basis for applying bonds, the basis for their calculation, a list of standard claims components that a bond should cover as well as examples of non-standard claims components that may be encountered. As well as a standard release form or *pro forma* for vessels should be developed (page 18).

10. response agencies utilise their own media liaison unit or other suitable arrangements to ensure a coordinated preparation and distribution of media information across all responding agencies during a spill response (page 19).
11. MSQ reviews the membership of the Queensland State Committee, members' roles and responsibilities and the seniority level at which an agency is represented so as to ensure an enhanced operational capability and that the Queensland State Committee examines ways to strengthen its management and the relationship between members so as to improve coordination and information exchange (page 20).
12. fisheries management agencies develop guidelines to assist in reaching a decision about whether to close fishing areas during a spill using as a basis the IMO/FAO Publication on Guidance on Managing Seafood Safety During and After Oil Spills (page 21).
13. MSQ reviews the existing arrangements between councils statewide and re-establishes closer working relationships in terms of identifying each party's roles and responsibilities during a spill response and that contingency plans be revised and updated as necessary (page 21).
14. AMSA reviews the OSRICS training process, including training in the functions, roles and responsibilities for each of the components in the OSRICS structure with particular reference to planning, logistics and safety (page 22).

Finally, the IAT suggests that implementation feedback be provided to the National Plan Management Committee and the National Plan Operations Group from AMSA/States/NT as to how their spill response arrangements, planning and training, etc, have changed as a result of this Report's recommendations.

12 REFERENCES

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IMO/FAO Guidance on Managing Seafood Safety During and After Oil Spills. IMO Publication No: 1590E. London 2002, p21.

Inter-Governmental Agreement on the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances. Australian Transport Council, 24 May 2002.

National Plan Oil Spill Dispersant Effectiveness Test – Field Kit (Nat-DET) Operational Guidelines. Australian Maritime Safety Authority, p8.

APPENDIX 1 TERMS OF REFERENCE

National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances

National Plan Response to the *Global Peace* Pollution Incident

Aim: To undertake a comprehensive analysis of the pollution response to the loss of oil from the *Global Peace* in Gladstone on 24 January 2006, in accordance with the Terms of Reference for the National Plan Management Committee.

Assessment Team Membership: The assessment team is to comprise persons with expertise in response to ship-sourced marine pollution incidents and related matters, but who had no role in the *Global Peace* incident. Members of the assessment team are:

- Captain Charles Black (Chair) – Tasmanian Ports Corporation;
- Captain Alan Boath – Harbour Master Cairns, Queensland State Nominee;
- Mr Ivan Skibinski – General Manager, Australian Marine Oil Spill Centre, Industry Representative;
- Captain Kerry Dwyer – Marine Consultant; and,
- Mr John Gillies (Executive Officer) – Australian Maritime Safety Authority.

Terms of Reference: Analyse the management of the incident from the oil pollution response perspective and assess any deficiencies in the National Plan arrangements or in the actual response to the *Global Peace* incident. In this context:

1. Assess the response with particular reference to:
 - (i) the call out procedures used, the effectiveness and timeliness of the initial and subsequent response;
 - (ii) the suitability and accessibility of National Plan equipment including State and industry equipment;
 - (iii) availability and timeliness of response personnel;
 - (iv) the decisions made in respect of calls for equipment and personnel in regard effectiveness, sufficiency and timeliness;
 - (v) the adequacy and effectiveness of the wildlife rescue and rehabilitation response;
 - (vi) the adequacy and effectiveness of incident response plans and their implementation;
 - (vii) the adequacy of the management of Occupational Health and Safety issues;
 - (viii) the adequacy of the administrative support, environmental advice and support, and other related activities;
 - (ix) the interaction with the media and other interested parties;
 - (x) the adequacy and effectiveness of communications with affected and interested stakeholders.

- 2 Assess the involvement of the various parties to the response from the viewpoint of appropriateness, timeliness and adequacy. In this regard, particular attention should be given to the inter-relationship between the parties involved in the incident response.
- 3 Within the context of this incident, assess the National, State and local contingency plans and report on the adequacy of each, including the Oil Spill Response Incident Control System (OSRICS).
- 4 Provide recommendations for improvements and initiatives based on the lessons learned from the incident.

As far as is practicable, the assessment team or member(s) thereof should attend the various debriefing sessions to be carried out by relevant agencies and bodies involved in the incident and consider the written reports of the various entities in the response.

Administrative support for the analysis team will be provided by AMSA.

A written report on the findings and recommendations of the incident analysis is to be submitted to the National Plan Management Committee by the end of September 2006.

