Response to the *Pasha Bulker* Grounding

Report of the Incident Analysis Team

Australian Government
Australian Maritime Safety Authority

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April 2009

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 Grounding of the *Pasha Bulker* off Newcastle
on 8 June 2007.

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PREFACE

Following the *Pasha Bulker* grounding off Newcastle on 8 June 2007, three separate inquiries were undertaken to investigate the circumstances surrounding the cause of, and response to, the incident.

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, commissioned by NSW Maritime, investigated the events leading up to, and associated with, the grounding of the *Pasha Bulker* off Newcastle.

The third inquiry, the subject of this Report, was established by the Australian Maritime Safety Authority (AMSA) and NSW Maritime 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 July 2007. The IAT was charged with undertaking a comprehensive analysis of the management of the incident after the grounding, from the casualty response and oil pollution preparedness / response perspective; to assess any deficiencies in the National Maritime Emergency Response Arrangements and the National Plan arrangements or in the actual response to the *Pasha Bulker* incident, and identify any lessons that could be learnt by Australian responders. The terms of reference for the incident analysis, including details of the Team's membership, are at Appendix 1.

IAT members attended debriefing sessions of the main organisations involved with the response and conducted interviews and discussions with many of the people involved, ranging from State level management through to on-ground responders.

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 John Watkinson
Chair, Incident Analysis Team
8 April 2009

EXECUTIVE SUMMARY

Following the *Pasha Bulker* grounding off Newcastle on 8 June 2007 an analysis was undertaken to examine the effectiveness of the precautionary arrangements for the oil spill response to the incident. The Australian Maritime Safety Authority (AMSA) and NSW Maritime 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 the response was measured, effective and appropriate to the level of risk posed by the casualty.

The activation of the National Plan and NMERA arrangements were timely and well considered, once again demonstrating the collaborative relationship between participating agencies.

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

Firstly, dispersant effectiveness testing. The IAT is particularly concerned that the manner in which the dispersant testing effectiveness was undertaken, the conclusions drawn and as a consequence, the time taken to get appropriate dispersants on site at Newcastle had a potential to impact on the incident response. Such unacceptable circumstances clearly limit the response options available to the Incident Controller.

Given the inherent problems associated with dispersant testing in this and the previous major National Plan response, the *Global Peace*, AMSA needs to develop a simpler set of instructions for use with the field test kit and give consideration to appointing a dedicated dispersant advisor/tester.

Secondly, the IAT is concerned about the shrinking number of available responders, their demographics and capability to respond to a lengthy or large incident in Australia.

Thirdly, effective forward planning during the response. The IAT noted that there was a general under estimation of the number of staff resources required during an extended response, that staff rotation was less than desirable and that better use should have been made of local Newcastle Port Corporation staff to back-fill positions so as to allow some response personnel to be stood down.

The IAT also wishes to record its disappointment with the lack of openness at times and the limited documentation provided by the combat agency during this inquiry.

1
INCIDENT DESCRIPTION

At approximately 0951[1] EST on 8 June 2007, during a severe storm, the 40,042 GT bulk carrier *Pasha Bulker*, grounded on Nobby's Beach at Newcastle. The ship's momentum carried it onto rock ledges on the beach and its hull was breached but there was no pollution at the time of grounding. The vessel had 700 tonnes of heavy fuel oil (HFO), 34 tonnes of diesel and 16 tonnes of lube oil on board. The NSW State Waters Marine Oil and Chemical Spill Contingency Plan and arrangements under the National Plan to Combat Pollution of the Sea by Oil and Other Noxious Substances were activated in response to the incident and in preparation for a potential oil spill.

On the same day, there was concern for two other vessels, the *Sea Confidence* that came within 0.5 nautical miles of Stockton Beach and the *Betis*, which was 2.7 nautical miles off the coast and requesting assistance. Tugs were deployed to assist these vessels, however severe weather conditions limited the effectiveness of the assistance that could be provided. Both vessels were eventually able to clear the coast and reach the safety of deeper water offshore.

The safety of the 22-crew members on board the grounded *Pasha Bulker* was a concern to the ships' Master and all were safely airlifted off the vessel the same day.

Newcastle Port Corporation (NPC) and NSW Maritime were supported by other State agencies as part of the States' emergency management arrangements, including Sydney Ports Corporation, Port Kembla Port Corporation, Department of Environment and Climate Change, Department of Primary Industries and the State Emergency Management Committee.

Personnel and equipment were also mobilised from interstate under the National Plan arrangements. Participating agencies included AMSA, Maritime Safety Queensland, Marine Safety Victoria, Department for Planning and Infrastructure Western Australia, Department for Transport, Energy and Infrastructure South Australia, the Australian Marine Oil Spill Centre and Maritime New Zealand. At the height of the incident there were more than 70 people assigned to assist with the incident response and preparations for a potential oil spill.

Svitzer Salvage conducted the *Pasha Bulker* salvage operation under Lloyd's Open Form arrangements. Three attempts were made to refloat the vessel.

The first refloat attempt was undertaken on the high tide of 1851 on 28 June 2007. While the vessel was not able to be refloated, the bow was moved approximately 8-9 degrees from its original position. The refloat was hampered due to a tow line parting from the tug *Keera* at approximately 1900. The refloat was called off at about 2130 as the tide dropped.

Early on 29 June, operations recommenced with the objective of bringing the bow around further during the day. Salvage efforts were hampered when the tow line from the *Pacific Responder* parted and then again shortly afterwards when the ground tackle attached to the bow parted.

The second refloat attempt was undertaken on 1 July 2007. While unsuccessful in freeing the vessel, the ships' position was changed so that it was sitting adjacent to Nobbys Beach on a heading of 177^{O}T (Diagram 1, refers).

The tugs *Keera, Woona* and *Pacific Responde*r remained fast to the casualty and in conjunction with the ground tackle held the casualty on its new heading (177^{O}T) overnight and until the salvors were ready to commence the second stage of the refloat – move the ship to sea.

[1]Throughout this report all times are expressed in Australian Eastern Standard Time

On 2 July 2007, at approximately 2138 hours, the third refloat attempt was successful with only a very small amount of lubricating oil leaking during this attempt. The impact of this leak was considered to be negligible. Spill response observers remained on the beach and the tug *Shirley Smith* was activated to monitor the area for pollution seaward.

The ship then proceeded to sea with the assistance of tugs where an inspection of the hull and assessment of seaworthiness was undertaken on 3 July.

Considerable preparation was undertaken by both the salvors and pollution responders prior to each refloat attempt to reduce the risk of pollution or mitigate any impact.

On each occasion when a refloat attempt was conducted, there was a pollution response team deployed as a precautionary measure against an oil spill, pollution or damage.

Three tugs (*Woona, Keera and Pacific Responder*) were used for the refloating of the *Pasha Bulker.* The *Pacific Responder* was used under a commercial agreement between Swire Pacific Offshore and Svitzer Salvage, as the vessel had been released off-hire by AMSA. Australian Maritime Systems Limited continued to provide for GBR/Torres Strait emergency towage services.

On 26 July 2007, following considerable in-port inspection and temporary strengthening of the hull prior to departure, the *Pasha Bulker* left Newcastle under tow for major repairs in Asia.

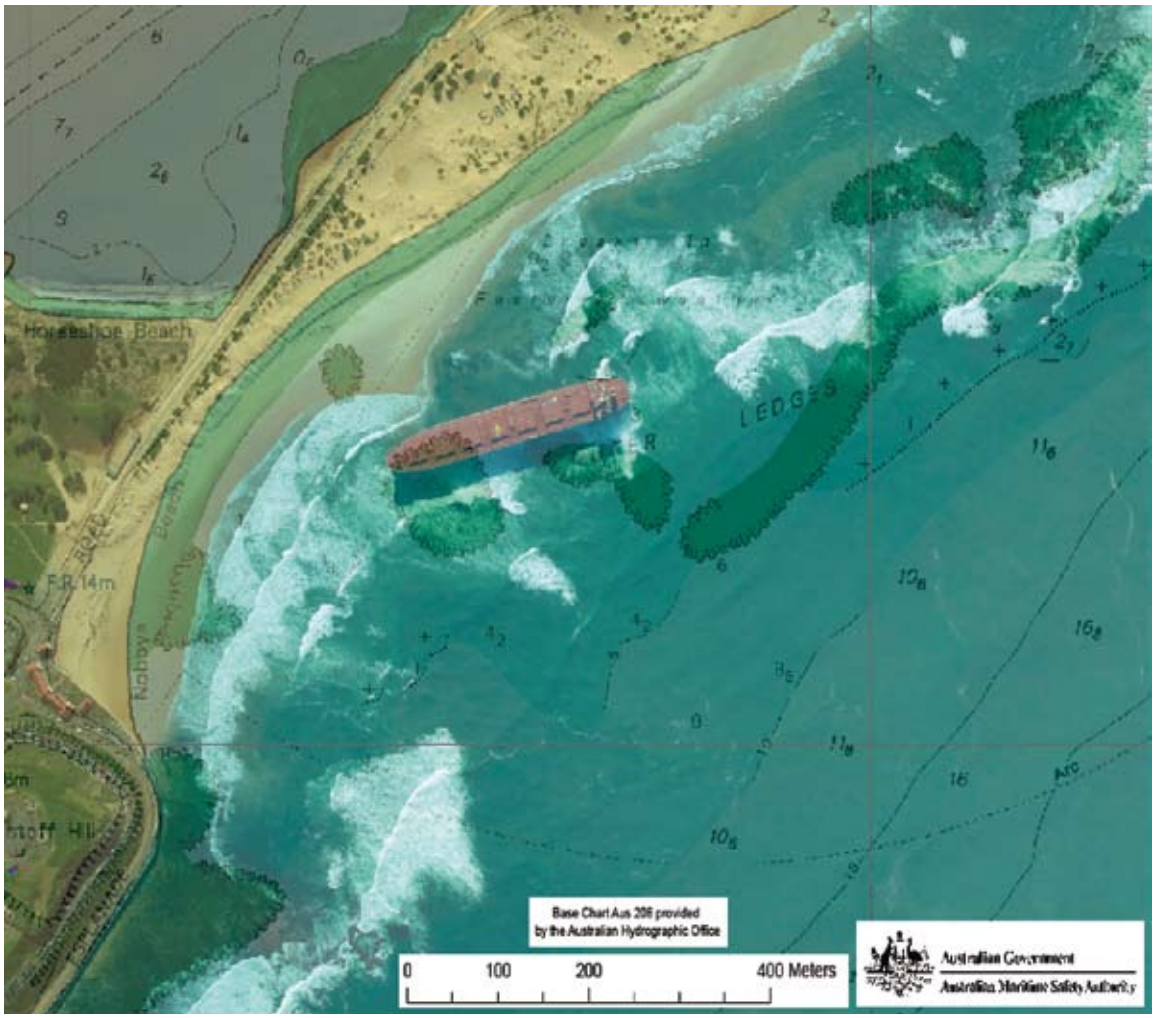

Diagram 1: Aerial photograph of the Pasha Bulker overlain on an Australian Hydrographic Office Chart (Prepared by Graham Whitehead, AMSA)

2
CASUALTY RESPONSE

(a) Issue: **NMERA / National Plan Link**

Background

The IAT is aware that the link between the National Maritime Emergency Response Arrangements (NMERA) and the National Plan is not clear. Further, the IAT is aware that there was an initial breakdown of communications and coordination responsibility between NMERA, the National Plan and the search and rescue functions. This is unusual given that the intent of the AMSA Maritime Emergency Response Commander (MERCOM) position was to embrace the first two functions and provide a key link to the third.

Indeed the National Plan Management Committee (NPMC) at its December 2007 meeting in Brisbane also considered this issue. In considering this matter NPMC decided that it would be beneficial from a transparency and operational perspective if the National Plan and the NMERA/Emergency Towing Vessel (ETV) program could be better integrated. AMSA was charged with following this through. The IAT supports this decision.

The IAT noted that in this incident the north Queensland based ETV (*Pacific Responder*) was used under AMSA's approval outside of its nominated operating area. Two replacement ETVs were used in this instance and this was done under agreement with the State.

Conclusion

The IAT believes that the decision by NPMC and its implementation by AMSA to better integrate the National Plan and the NMERA/ETV program will enhance not only the link between the two programs but will also be of benefit from an operational perspective. This will be assisted through the ongoing work by AMSA to workshop MERCOM's role in exercises and with incident controllers in all States/NT.

The IAT considers the use of the ETV outside of its nominated area of operation should only be undertaken on a case-by-case basis and following consultation with the State.

Recommendation

The IAT recommends that the MERCOM role and the integration of NMERA and the National Plan be included and tested in the national response exercises.

(b) Issue: **Any Directions Given or Interventions Made by the Responsible Authorities**

Background

There were no intervention orders made under the auspices of NMERA. NSW Maritime used their invention powers under the *NSW Marine Pollution Act 1987* during the response.

Conclusion

Any orders made by NSW Maritime were addressed by the NSW Maritime initiated inquiry. The IAT concluded that there had been no need to apply any interventions under the National Plan.

(c) Issue: **Role of the Incident Controller, NSW Maritime, AMSA's MERCOM and the Casualty Coordinator**

Background

The IAT believes that the Newcastle Port Corporation appointed Incident Controller did an excellent job over a three week period managing the response and none more so than during the initial 24 hour period when there was a very high potential that an additional two vessels could have grounded on the Newcastle coast.

Following the initial grounding of the *Pasha Bulker*, it has been suggested that NSW Maritime personnel seemed uncertain over the national implications of the incident believing initially that only a State level response was warranted and that contrary advice was given by officials regarding what equipment, personnel and resources were required. In noting this, the IAT believes that there may have been some confusion initially in the response that can be attributed to poor communications between the parties. This was exacerbated by the call out arrangements which saw NSW Maritime calling members of the National Response Team (NRT) directly rather than following the established call out regime of directing such calls to AMSA [see Section 3(a), below].

The IAT noted that the MERCOM played a supportive role during the response and agreed this was appropriate for this type of incident. As outlined above, the role of MERCOM should be enhanced and elaborated through better integration of the National Plan and the NMERA/ ETV program.

The IAT believes that the Casualty Coordinator (CC) played a crucial role in the success of the response to the grounding. However, the issue of reporting responsibility of the CC has been raised. Some believe that during a response there should only be a single point of communications between the Incident Control Centre and the CC and that this should be through MERCOM. Alternate communications models would see all such communications occurring only between the Incident Controller and the Casualty Coordinator or an arrangement whereby the Casualty Coordinator reported to both MERCOM and Incident Controller.

The IAT is also concerned that the CC and the NRT operated on different radio frequencies during the incident which hampered effective and efficient communications between these parties.

Conclusion

The IAT believe that all reporting models have their place and the most appropriate model will vary according to circumstances in the particular incident. However, it is important to note that the Incident Controller, who has overall responsibility for the response, retains the right of direct access to the Casualty Coordinator at all times during a response to a maritime casualty.

The IAT believes that irrespective of the applied model, communications between parties should not be hindered.

Recommendation

The IAT recommends that:

1. whatever communications model between the Incident Controller, MERCOM, and the Casualty Coordinator is utilised it should be agreed, clearly understood and applied consistently by all parties during a response; and,
2. AMSA move towards standardising radio communications equipment and frequencies between the NRT and the Casualty Coordinator during a response.

(d) Issue: **Effectiveness and Adequacy of Salvage Operations and Salvors Interaction with Responsible Authorities**

Background

The IAT believes that the effectiveness and adequacy of the salvage operations are ably demonstrated by the success of the refloat of the *Pasha Bulker.* However, while formal briefings were held daily between the Incident Controller and the salvor, in order to provide a complete and coordinated level of risk assessment between the salvor and the incident management team, the question has arisen as to whether there should have been a formal, detailed and cohesive salvage and refloat plan requested by the Incident Controller before any refloat attempt. Any such action should be supported by MERCOM. By way of example, while the salvor briefed the Incident Controller and NSW Maritime on potential issues that might arise when number 5 double bottom ballast tanks were blown prior to the refloat attempts, communications between the Incident Controller, the Casualty Coordinator and the Salvor could have been enhanced under a plan to allow all parties to better prepare and be in a position to respond.

Conclusion

In this instance as the grounding occurred within the confines of the defined Newcastle Port waters, the Incident Controller had the power to request salvage and refloat plans to a level of detail necessary to allow the making of an informed decision.

It is worth noting that during a response, access to independent salvage advice is available through the National Plan, however no such request was made during this incident.

Recommendation

The IAT recommends that:

1. an Incident Controller or a State Marine Pollution Controller should seek salvage and refloat plans from a salvor to a level of detail necessary to allow the making of an informed decision as it relates to allowing the preparation of response plans and the comprehensive management of the incident; and,
2. all opportunities should be taken during Incident Controller or State Marine Pollution Controller training sessions to reinforce information on salvage law and liability and the power of a State to intervene.

3
POLLUTION 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 NSW Maritime personnel calling members of the National Response Team (NRT) directly rather than following the established call out regime of directing such calls to AMSA. Subsequently it was established that the direct calls referred to were undertaken for the purpose of determining the availability of a specific skill set, and that actual call out was undertaken by AMSA.

The situation was clouded in that NSW Maritime contacted NSW-based response personnel who also happened to be members of the NRT.

There would appear to the IAT to have been some doubt by NSW Maritime in the initial stages as to the recognition of the level of response required to adequately deal with this incident and potential pollution.

Conclusion

At the state level, the call out arrangements worked well. However, an AMSA initiated contact and call out will ensure a well rounded and composite team selection. AMSA needs to ensure that it maintains a broad brush overview during the initial stages of an incident so as to ensure adequate and timely availability of response resources.

Recommendation

The IAT recommends that all NRT contact and call out requests are made by AMSA, recognising however that each State/NT has the right to call out personnel within its own jurisdiction.

(b) Issue: **NRT Personnel and Skills**

Background

The IAT considers that the AMSA-maintained list of NRT personnel and their key areas of expertise could have been used more effectively when seeking NRT personnel. NSW Maritime did not believe it was necessary to consult the list in the initial stages of the incident as it was well known who had the required skills within the state.

The IAT is concerned about the shrinking number of available responders, their demographics and capability to respond to a lengthy or large incident in Australia.

Conclusion

A detailed analysis of pre-requisite skills appropriate to the incident is essential for optimum team selection. An Incident Controller needs to identify which skills and experience is needed prior to requesting NRT resources.

Recommendations

The IAT recommends that:

1. both a relevant Incident Controller and AMSA need to improve their approach to seeking and providing requisite NRT personnel to fill identified skills/experience gaps in either an incident management team or as on-ground spill response coordinators;
2. AMSA should establish a quality assurance procedure in its internal management system that will ensure the NRT list is updated every six months and that the National Plan State Chairs are provided with the updated list and call out arrangements;
3. NPOG should consider whether the information, details, representation and available experience contained in the NRT list are relevant and appropriate. Targeted training courses may be needed to cover any identified shortfalls; and,
4. National Plan State Committees should consider and review all contingency plans with a particular focus on areas where specific skills and/or experience may be required [see 3(a), above].

4
PLANNING

(a) Issue: **Incident Response Planning**

Background

While NPC staff believed that the NPC response plan was flexible enough to be able to incorporate non-NPC staff into the incident management team this view was not necessarily demonstrated by their actions.

The expertise that NRT members could bring to the response (planning, equipment, logistics, finance, administration, environmental, aerial surveillance, etc) was not fully investigated nor appreciated by management and this resulted in less than optimal utilisation of personnel and their skills.

Indeed some of the crucial roles in the incident management team were filled by personnel with no spill response experience or training. While on-the-job training is always a useful adjunct during a response, it would seem to be inappropriate to place inexperienced personnel in key positions.

While the incident management team was formed in the immediate aftermath of the grounding of the *Pasha Bulker* on 8 June 2008, the view was expressed that there was some indication of a sense of complacency within the team due to the fact that no oil had been spilt. An example given was that by 6pm on the day of the grounding the incident management team went home and by early morning on day 3 there was still no documented response plan in place. It was felt that the Newcastle declared flooding disaster may have influenced a number of response decisions.

The view was expressed that the focus seemed to be on the vessel grounding and efforts to avoid any further grounding by two other vessels in distress, and that there should have been a greater focus on the potential risk posed to the environment by a grounded vessel with 700 tonnes of heavy fuel oil, 34 tonnes of diesel and 16 tonnes of lube oil on board.

However, it was subsequently determined that Incident Action Plans were in place during this time, and that the NPC continued planning despite the impacts of the storm events in Newcastle. It was pointed out that in the initial assessment of the incident the weather conditions and ability to deploy an on-water response and its likely effectiveness in the seas conditions at the time were taken into account.

Conclusion

Each port or maritime administration needs to carefully consider how it will initially staff its incident management team for the first 12 to 24 hours following an incident and prior to the arrival of NRT personnel.

The IAT believes that it is inappropriate to place untrained and untested people in key positions in an incident management team, although it is recognised that this may be the only option in the initial activation of the response.

Recommendation

The IAT recommends that untrained and untested people should not be placed in key positions in an incident management team during a response, though this does not preclude the use of on-the-job training as an essential component of training and experience development.

5
PERSONNEL AND EQUIPMENT

(a) Issue: **Use of Dispersants**

Background

In the immediate response to the grounding and the potential for a large scale spill, a decision was taken to transport what responders believed was the appropriate dispersant to use in such circumstances. Good response procedures would have seen this tested as soon as a sample from the ship was available to confirm its compatibility with the ships' HFO. Following initial field tests, it subsequently became apparent that an inappropriate dispersant had been brought to Newcastle for the response.

There would appear to have been a range of problems associated with bunker fuel sampling, testing of fuels' dispersability, whether a trained operator used the National Plan Dispersant Effectiveness Test Kit, the sending of samples to a laboratory, the lack of clear instructions to the laboratory and more importantly a failure by personnel to either see this task through or ensure an adequate handover following staff rotation.

It was suggested to the IAT that it took nearly three weeks (18 days) until the appropriate dispersant suitable for the ships' HFO was determined. This is clearly unacceptable. Should an oil spill have occurred, the Incident Controller would have three major response options available – containment and recovery, dispersal and shore line clean up. One of the key response options (dispersal) was not available and this had the potential to cause not only a major environmental effect, but also serious political and institutional damage to those organisations managing and responding to the incident.

Conclusion

The IAT is particularly concerned that the manner in which the dispersant testing effectiveness was undertaken, the conclusions drawn and as a consequence, the time taken to get appropriate dispersants on site at Newcastle had a potential to impact on the incident response. Such unacceptable circumstances clearly limit the response options available to the Incident Controller.

Given the inherent problems associated with dispersant testing in this and the previous recent major National Plan response, the *Global Peace*, AMSA needs to develop a simpler set of instructions for use with the National Plan Dispersant Effectiveness Test Kit and give consideration to appointing a dedicated dispersant advisor/tester.

Recommendations

The IAT recommends that:

1. AMSA develop a simpler set of instructions and appropriate training for use with the National Plan Dispersant Effectiveness Test Kit;
2. AMSA consider the need to appoint a dedicated dispersant advisor/tester during a National Plan incident response;

3. the next Environment and Scientific Coordinators workshop addresses the issue of dispersant testing to:
    a) ensure that a pool of qualified and trained advisors/testers are available for use during a response; and,
    b) provide information to all State Chairs on the effectiveness of all dispersants stockpiled in Australia on HFO in terms of age and location.
4. all opportunities should be taken during Incident Controller or State Marine Pollution Controller training sessions to reinforce the circumstances surrounding the general use, application and limitations of dispersants as a response tool.

(b) Issue: **Availability of Localised Personnel**

Background

The IAT noted that there was general comment that some Newcastle Port Corporation officers were not working well with response personnel. Port officers were still taking instructions from their normal line manager and not operating within the incident response structure.

The IAT believe that NPC senior management should have made it very clear how the changed incident response management was different from normal management arrangements.

Also it appears that some NPC staff were unaware of the Oil Spill Response Incident Control System (OSRICS) incident management structure involving both NPC and NRT personnel.

Conclusion

Command and control arrangements of the National Plan clearly show that personnel must be relieved of normal line responsibility when engaged in response actions of incident management.

Recommendation

The IAT recommends that senior management needs to advise all appropriate staff of changed reporting relationships in a response. This arrangement should be tested during desktop exercises.

6
ADEQUACY AND EFFECTIVENESS OF WILDLIFE RESCUE AND REHABILITATION

(a) Issue: **Adequacy and Effectiveness of Wildlife Rescue and Rehabilitation**

Background

No wildlife rescue or rehabilitation was associated with this incident. Therefore there was no real effectiveness testing of this response component.

Appropriate equipment and response personnel were available but deployed very late in the response.

While the focus of the response was naturally initially on the grounding and then the subsequent equipment mobilisation and deployment, the IAT believes that the planning for any wildlife rescue and rehabilitation process would have benefited if key personnel had been involved in the incident planning and response at a much earlier period than subsequently eventuated.

Conclusion

The IAT noted the delayed but staged and structured approach adopted by the wildlife responders.

There is also a need for all response agencies to regularly review and update their oiled wildlife response plans.

7
ENVIRONMENTAL ADVICE AND SUPPORT

(a) Issue: **Use and Effectiveness of the Oil Spill Response Atlas (OSRA) and the Oil Spill Trajectory Modelling (OSTM)**

Background

While the IAT believes that the Oil Spill Response Atlas (OSRA) was well appreciated as a resource, there is some doubt as to the effectiveness and utility of the oil spill trajectory modelling (OSTM) in this instance.

OSTM is used by AMSA/National Plan as a decision support tool to predict the behaviour of various oils in the water column based on wind, tidal and bathymetric data. It is important that an incident management team appreciates that this is a tool and that there are limitations in the utility and effectiveness of OSTM outputs. In this instance it would appear that some of the OSTM runs may have been unduly affected by the vessel's position and its influence on localised wind conditions and currents as well as the surf zone conditions associated with a grounded vessel on a beach.

Conclusion

While the OSTM outputs were no doubt useful as a planning tool, the unusual circumstances had an effect on the models' parameters and consequently the conclusions that could have been drawn. In this instance, it is thought that the grounded vessel and its localised effect on the wind and tide in association with the dynamic surf zone conditions had an undue effect on the model's utility as well as conclusions drawn.

Recommendation

The IAT recommends that AMSA provides greater information on spill model limitations as well as an interpretation of a spill models' results or outputs to assist response planners.

(b) Issue: **Shoreline Assessment**

Background

Shoreline assessment was not effectively tested during the incident as little to no oil was spilt and hence there was little to no visible presence of oil on the shoreline. However, the shoreline assessment teams while not finding any oil did consider the likely effect of the ship's antifouling system on near shore benthic invertebrates.

Conclusion

As the shoreline assessment was not effectively tested during the incident the IAT can draw no conclusions in this instance.

(c) Issue: **Waste Management**

Background

Given the limited spill of hydraulic oil during the third refloat attempt, this aspect of the response was not adequately tested.

Conclusion

The IAT concluded that the issue of waste management during the response could not be adequately tested.

8
OCCUPATIONAL HEALTH AND SAFETY ISSUES

(a) Issue: **OH&S**

Background

The IAT believes that the OH&S response during the incident was adequate but that it was compromised at times by differences in OH&S standards and requirements between work groups.

The provision and implementation of OH&S during an incident rests with many parties.

Setting of standards during an incident rests with the Incident Controller while individual responders should also be aware of meeting both any employer mandated OH&S standards, their own personal OH&S needs as well as any site specific needs.

The IAT noted that it has been difficult to assess performance in this area because of the lack of specifically provided information.

Conclusion

The IAT believes that it is preferable that all responders have OH&S training and that site specific expertise and induction for safety planning should be provided by local personnel familiar with an area.

Recommendations

The IAT recommends that:

1. NPOG considers the need for a common set of minimum OH&S safety standards for use during a response including *inter alia* personal protective equipment, hours of work, induction and risk assessment guidelines, etc, for the National Plan; and,
2. all field based responders should have a basic level of OH&S training and awareness.

(b) Issue: **Planning for On-going Reliefs**

Background

In general there were a number of problems identified with the on-going relief of staff during the incident including 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 believes that this was exacerbated during this incident by the prolonged nature of the response, lack of an actual oil spill, coupled with the extended standby period leading up to the refloat attempts.

Fatigue may also affect decision making and should always be monitored and managed particularly during a prolonged incident response.

Conclusion

The IAT noted that there was a general under estimation of the number of staff resources required during an extended response, that staff rotation was not well organized and that better use should have been made of local Newcastle Port Corporation staff to back-fill positions so as to allow some response personnel to be stood down.

Recommendation

The IAT recommends that the incident management team needs to recognise and plan for the on-going relief of response personnel early during an incident.

9
ADMINISTRATION SUPPORT SERVICES

(a) Issue: **Outsourcing of Functions**

Background

The IAT noted that the outsourcing of some functions was undertaken by Newcastle Port Corporation during this response. In particular the IAT is aware that legal, security and some media functions were outsourced to local providers. The IAT believes that such an approach is an effective and efficient means of dealing with some specific tasks during a spill response where in-house resources are limited.

Conclusion

The IAT believes that the outsourcing of some functions during an incident can free up internal agency resources and make better use of available staff skills and expertise.

Recommendation

The IAT recommends that spill response agencies consider and plan for the outsourcing of relevant functions during a response where appropriate external expertise is available.

10
RELATIONSHIPS AMONGST PARTIES INVOLVED IN THE RESPONSE

(a) Issue: **Media and General Communications to Stakeholders**

Background

As was demonstrated by this incident, the media component of a shipping incident can be intensive, may involve direct Ministerial participation and require good coordination across a number of agencies.

The IAT was particularly impressed with the quality, quantity and timeliness of information provided to the media. The early release of factual information to the media is a crucial component of any response. The provision of such information was clearly explained to the media who from all accounts accurately reported the response events.

However, a number of communications/information dissemination issues arose that could have been readily resolved through the use of a dedicated public inquiry line, a dedicated media line, email contact addresses for both of these groups as well as the use of a web site. This could have been done from the outset and been widely disseminated.

The IAT has also identified a number of instances in which improved briefing for reception staff would have assisted them in being better placed to answer public inquires during the incident response.

Conclusion

The IAT noted that there were no major problems with media and communications in this incident. On the contrary, the provision of timely, factual and accurate information to the media and local stakeholders was an extremely effective tool during the response.

Recommendation

The IAT recommends spill response agencies utilise a dedicated public inquiry line or email address, a dedicated media line or email address as well as the use of a web site to enhance communication and information dissemination.

(b) Issue: **Relationship Between State Government Agencies**

Background

During the initial response, shortly after the grounding, it became apparent that the roles and responsibilities between the NSW State Emergency Service (SES), NSW Fire Service and NPC were not clear. The IAT is aware that these three groups met initially as part of the local emergency management committee to resolve this matter and that while NPC staff attended the meeting little advice was offered to clarify jurisdictional roles, responsibilities and the relationships between these agencies.

Conclusion

NPC needs to work with the local emergency management group to identify areas of responsibilities as well as working through NSW Maritime to remind State Emergency Management Committee (EMC) members (particularly NSW Fire Brigade and Police) of their jurisdiction and responsibilities.

Recommendation

The IAT recommends that port organisations work with both the local emergency management group as well as their maritime administration to remind State Emergency Management Committee members of their jurisdictional roles and responsibilities.

11
CONTINGENCY PLANS – NATIONAL, STATE AND LOCAL

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

Background

The nature of the incident meant that the first strike capability within Newcastle Port Corporation was not tested through a field based response, however, NPC did demonstrate that its first strike capability was capable of successful integration into a larger NSW based response.

The IAT noted that there was an OSRICS structure created but that some personnel failed to abide by it and that NPC initially chose not to place outside personnel (i.e. NRT) into key positions within the management team.

The IAT also noted that the allocation of administrative personnel with local knowledge could have assisted the ability of field based teams to access local suppliers.

The IAT noted from their participation at the NPC debrief under the auspices of an external consultant that logistics seemed to be outside or disconnected from the incident control team and the OSRICS structure.

Conclusion

The IAT noted a number of identified limitations with the implemented OSRICS structure.

The IAT was concerned that NSW Maritime was slow to recognise the seriousness and potential size of the incident and therefore the scope of the response that was required. Though this could be reasonably attributed to inadequate communications to response personnel.

Recommendation

The IAT recommends that spill response agencies should ensure that all contingency plans include current information on the OSRICS structure and information on how OSRICS can readily be adapted to suit any potential spill scenario.

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RECOMMENDATIONS

The IAT recommends that:

1. the MERCOM role and the integration of NMERA and the National Plan be included and tested in the national response exercise (page 5);
2. whatever communications model between the Incident Controller, MERCOM, and the Casualty Coordinator is utilised it should be agreed, clearly understood and applied consistently by all parties during a response; (page 7);
3. AMSA:
    a. move towards standardising radio communications equipment and frequencies between the NRT and the Casualty Coordinator during a response (page 7);
    b. should establish a quality assurance procedure in its internal management system that will ensure the NRT list is updated every 6 months and that the National Plan State Chairs are provided with the updated list and call out arrangements (page 9);
    c. develop a simpler set of instructions and appropriate training for use with the National Plan Dispersant Effectiveness Test Kit (page 11);
    d. appoint a dedicated dispersant advisor/tester during a National Plan incident response (page 11); and,
    e. provides greater information on spill model limitations as well as an interpretation of a spill models' results or outputs to assist response planners (page 14);
4. an Incident Controller or a State Marine Pollution Controller should seek salvage and refloat plans from a salvor to a level of detail necessary to allow the making of an informed decision as it relates to allowing the preparation of response plans and the comprehensive management of the incident (page 7);
5. all opportunities should be taken during Incident Controller or State Marine Pollution Controller training sessions to reinforce:
    a. information on salvage law and liability and the power of a State to intervene (page 7); and,
    b. the circumstances surrounding the general use, application and limitations of dispersants as a response tool (page 12);
6. all NRT contact and call out requests are made by AMSA, recognising however that each State/NT has the right to call out personnel within its own jurisdiction. (page 8);
7. both a relevant Incident Controller and AMSA need to improve their approach to seeking and providing requisite NRT personnel to fill identified skills/experience gaps in either an incident management team or as on-ground spill response coordinators (page 9);
8. National Plan State Committees should consider and review all contingency plans with a particular focus on areas where specific skills and/or experience may be required (page 9);

9. NPOG should consider:
    a. whether the information, details, representation and available experience contained in the NRT list are relevant and appropriate. Targeted training courses may be needed to cover any identified shortfalls; (page 9); and,
    b. the need for a common set of minimum OH&S safety standards for use during a response including *inter alia* personal protective equipment, hours of work, induction and risk assessment guidelines, etc for the National Plan (page 15);
10. untrained and untested people should not be placed in key positions in an incident management team during a response, though this does not preclude the use of on-the-job training as an essential component of training and experience development (page 10);
11. the next Environment and Scientific Coordinators workshop addresses the issue of dispersant testing to:
    a. ensure that a pool of qualified and trained advisors/testers are available for use during a response (page 12); and,
    b. provide information to all State Chairs on the effectiveness of all dispersants stockpiled in Australia on HFO in terms of age and location (page 12);
12. senior management needs to advise all appropriate staff of changed reporting relationships in a response. This arrangement should be tested during desktop exercises (page 12);
13. all field based responders should have a basic level of OH&S training and awareness (page 15);
14. the incident management team needs to recognise and plan for the on-going relief of response personnel early during an incident (page 15);
15. spill response agencies:
    a. consider and plan for the outsourcing of relevant functions during a response where appropriate external expertise is available (page 16);
    b. utilise a dedicated public inquiry line or email address, a dedicated media line or email address as well as the use of a web site to enhance communication and information dissemination (page 17); and,
    c. should ensure that all contingency plans include current information on the OSRICS structure and information on how OSRICS can readily be adapted to suit any potential spill scenario (page 18);
16. port organisations work with both the local emergency management group as well as their maritime administration to remind State Emergency Management Committee members of their jurisdictional roles and responsibilities (page 17).

Finally, the IAT suggests that implementation feedback be provide 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.

APPENDIX 1
TERMS OF REFERENCE

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

Response to the *Pasha Bulker* Grounding

Aim: To undertake a comprehensive analysis of the response following the grounding of the *Pasha Bulker* off Newcastle on 8 June 2007, 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 marine casualty and ship-sourced marine pollution incidents and related matters, but who had no role in the response to the *Pasha Bulker* incident. Members of the assessment team are:

- Captain John Watkinson (Chair) – Maritime Safety Queensland;
- Mr Shane Hobday – Sydney Ports Corporation (NSW State Nominee);
- Mr Ivan Skibinski – Australian Marine Oil Spill Centre (Industry Representative);
- Mr David Penny – Australian Maritime Safety Authority (AMSA nominee); and,
- Mr John Gillies (Executive Officer) – Australian Maritime Safety Authority.

Terms of Reference: Analyse the management of the incident, after the grounding, from the casualty response and oil pollution preparedness/response perspective and assess any deficiencies in the National Maritime Emergency Response Arrangements and the National Plan arrangements or in the actual response to the *Pasha Bulker* incident. In this context:

1. Assess the casualty response aspects with particular reference to:
   (i) the effectiveness and the adequacy of the National Maritime Emergency Response Arrangements;
   (ii) any directions given, or interventions made by, the responsible Authorities;
   (iii) the role of the Incident Controller (NPC), NSW Maritime, AMSA's MERCOM and Casualty Coordinator; and,
   (iv) the effectiveness and the adequacy of the salvage operation and the salvor's interaction with the responsible Authorities.
2. Assess the oil pollution response aspects 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; and,

(x) the adequacy and effectiveness of communications with affected and interested stakeholders.

3. 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.

4. 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).

5. 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 November 2007.