

Summary Oiled Wildlife Response Plan

Montara Well Head Platform Spill

August/September 2009

The following is a synopsis of the considerations necessary to further support the actions to respond effectively to oiled wildlife associated with the Montara Well Head Platform spill as of the situation to the 14th September.

This summary plan is based on the fact that DEWHA has already committed to on site surveys in the Ashmore and Cartier Reserves to identify, capture and provide basic care to oiled wildlife seen. This has been supported with systems put in place by DEWHA including: vessel arrangements with Australian Customs; basic oiled wildlife response equipment mobilised on site; and contractual arrangements to have experienced wildlife officers manage this part of the operation.

It should be clearly acknowledged that this operation managed by DEWHA is the first offshore oiled wildlife response of this type ever undertaken nationally.

It should also be noted that there are a number of logistical challenges to any planned actions at the Ashmore and Cartier Reserves. The values of these very important wildlife Reserves including the presence of some 35,000 adult seabirds seen and the ongoing oil threat do warrant the necessary response actions.

Oiled wildlife responses consist of a standard set of operational phases. These include:

1. Hazing
2. Pre-emptive Capture
3. Collection of oiled wildlife and primary treatment
4. Remote site stabilisation
5. Transportation
6. Development of a specific oiled wildlife rehabilitation centre
7. Wildlife assessment and triage
8. Intensive care support
9. Pre-wash care and stabilisation
10. Cleaning and drying
11. Post wash care stabilisation
12. Release
13. Post release monitoring
14. Compliance

Each of these standard operational phases for oiled wildlife response have been reviewed in the following as a means to provide guidance on the actions that DEWHA need to further consider.

Hazing

Objectives

1. Determine wildlife species and numbers impacted by the spill event

- Aerial surveillance was undertaken on the 31st August to the spill area and the Cartier and Ashmore Reserves
- The flight confirmed the presence of wildlife feeding near the spill area and roosting to the islands associated with the two Reserves
- Ground truth surveys were then undertaken within the Ashmore and Cartier Reserves to identify the presence of oiled or chemically contaminated wildlife
- Dead Birds
 - At Cartier Reserve ground surveys identified one possible oiled bird (Brown Booby) mortality seen on Cartier Island. It is unclear however if the mortality is a direct result of oil pollution or if this bird is associated with the Montara platform incident
 - Another oiled Common Noddy was also seen on Middle Island in the Ashmore reserve on the 11th September. The bird was initially alive but died shortly thereafter. The animal was wet as a result of chemical contamination
 - Reports of 4 (? numbers check) oiled dead birds and 3 (numbers check) dead sea snakes were reported to DEWHA from the Jabiru platform near the spill area
 - One of the contaminated Common Noddy's (bird 2) collected on the 12th September and taken into captive care died on the 13th.
- Live Birds
 - At Ashmore one Common Noddy was photographed aboard a Customs vessel that may likely have been contaminated with material from the spill event. The fate of this bird is unknown but without treatment it is not likely too have survived.
 - On the 12th September 2 oiled Common Noddys and 1 oiled Brown Booby were collected from East Island and transferred to the "Hervey Bay" for primary treatment and care (noting that one of the noddy's died on the 13th as reported earlier)
- The numbers of confirmed oiled wildlife is relatively low to date
- Response actions however are still required given that oiled or contaminated birds have been identified; live oiled birds have been taken into captive care; and the threat from the oil spill will continue for some time and reports suggest that the slick is moving closer to the Reserves
- The ongoing assessments of wildlife at the Ashmore and Cartier reserves is essential for the review and updating of response plans and associated actions
- Continued site surveys have been planned to meet this need whilst there is still a risk of contamination
- The proposed monitoring by Customs Crews and DEWHA contractors for oiled wildlife should therefore be continued as a minimum to allow re-

assessment of the situation (a training package and systems to support this has been put in place)

2. Where possible haze wildlife away from the areas of potential oil pollution

- Given the low numbers of oiled wildlife known it is not recommended to initiate hazing practices at this stage
- Recent updates from AMSA suggest that the spill is however moving closer to Cartier Reserve and this may expose greater numbers of wildlife to the risk of contamination
- Ongoing regular monitoring of wildlife at the Ashmore and Cartier Reserves to further validate impacted wildlife is therefore necessary. This information will then potentially act as a trigger to review, reconsider and possibly implement hazing approaches

Pre-Emptive Capture

Objective

1. Initiate pre-emptive capture operations for wildlife that may potentially be at high risk of being contaminated from the Montara Platform spill

- From an evaluation of the wildlife impacted to date it is not recommended to implement a pre-emptive capture program
- Ongoing assessments of wildlife near the oil impacted area is however essential to further review and validate this decision

Collection of oiled wildlife and primary treatment

Objective

1. Collect all live oil impacted wildlife and provide primary treatment

- Live contaminated animals have been identified and taken into captive care for this spill event
- It is essential to maintain the oiled wildlife response capability to Ashmore Reserve whilst there is still contaminants being released by the Montara Well Head Platform and whilst these contaminants are still on the waters surface. Only once the risk of oils or chemicals is removed should the oiled wildlife response be demobilised
- Customs crews and / or DEWHA contractors are to monitor wildlife in and adjacent to the Ashmore Reserve on a regular basis (every two days or thereabouts)
- Customs crews are to monitor wildlife in and adjacent to the Cartier Reserve as regularly as possible when opportunities arise

- The Customs crew support on site at the Ashmore and Cartier Reserves is very important to the oiled wildlife response process and this relationship needs to be continued whilst there is an ongoing risk from the spill
- The power point training package developed by MShort for oiled bird identification should be undertaken by all Customs officers on site at the Reserves to maximise this support
- On identification of oiled wildlife or wildlife of interest, photographs and information are to be collected and DEWHA are to be notified
- DEWHA are then to confirm if the wildlife seen are likely to be contaminated and any necessary actions to be taken
- Other oiled wildlife (Dugong, Dolphins and Whales) will need also to be assessed on a case by case situation to determine the most appropriate response actions
- Experienced wildlife officers are necessary for any collection operations. This activity is beyond the capability and expectations of ACV crews
- With either MShort or SGlac aboard the Customs vessel with the oiled wildlife response equipment available it is certainly feasible for collection and primary treatment to be given to oiled birds and turtles
- Primary treatments include temperature management; hydration of fluids; and meeting some nutritional requirements
- Without the presence of experienced and dedicated wildlife officers on board for collection and to provide primary treatments in most cases oiled wildlife will not survive
- DEWHA needs to consider how best to maintain the continued support of experienced wildlife officers on site or on standby to support Customs operations in the field

2. Collect all dead wildlife and dispose of in accordance with waste management guidelines

- Dead oiled wildlife should be photographed with location details recorded (as a minimum) and samples (feathers or the whole carcass) taken for evidence collection purposes where possible
- Noting that for evidence collection samples cannot come into contact with any plastics (wrap in alfoil and then bag); and then samples need to be frozen in a specifically dedicated bio-hazard freezer to maintain their evidence value
- Quarantine may also have an interest in relation to diseases that the birds may also be carrying.
- All samples (evidence) then need to be managed in line with standard "Chain of Custody" procedures
- Waste management guidelines need to be developed specifically for any dead oiled wildlife that require disposal. These need to be undertaken in consultation with Customs and Quarantine to consider their requirements. If the slick continues to move closer to the Reserves then we are likely to see large numbers of oiled wildlife that will require disposal.

Remote site stabilisation

Objectives

1. Establish remote site stabilisation centres where necessary

- The remoteness and distances associated with the Montara Well Head Platform spill warrant the need to establish remote site stabilisation centres
- These are used where there is not the opportunity to transport oiled wildlife shortly after capture and / or transport times to the rehabilitation centre are excessive
- The oiled wildlife systems and actions established aboard the Customs vessels at Ashmore Reserve by DEWHA in effect are providing remote stabilisation in its simplest form
- The opportunities to house the animals suitably with the equipment available are currently very limiting at Ashmore. Remote site stabilisation care would normally be provided for 6 to 48 hours but the current systems are not able to support this once more than 5 animals are reached
- This was always to be the case with the available equipment immediately available to support the primary action of ground truthing wildlife at Ashmore and Cartier reserves
- If significant numbers of wildlife are identified at the Reserves then a review and increase in resources (equipment and personnel) to support an effective remote site stabilisation centre would be necessary

2. Stabilise all collected wildlife prior to transportation

- Where wildlife (birds and marine reptiles) are contaminated and alive then response measures to have the wildlife collected and provided with basic support care (adequate containerisation; temperature control; fluid hydration; nutritional needs; and a “quick wash” to limit the issue of chemical burns) are necessary
- These actions can only be implemented by suitably experienced and competent staff and are beyond the ability of Customs crews on site
- Ongoing arrangements for on site experienced wildlife personnel support is therefore necessary to achieve stabilisation
- Arrangements for the transport of these animals to a rehabilitation facility where the care process can be completed is then necessary

Transportation

Objectives

- 1. Develop transport systems specific to wildlife needs and geographical locations**
- 2. Transport wildlife as directed by the response plans**

- All live oiled wildlife that are to continue through the rehabilitation process need to be transported to Broome where a response centre has been proposed
- Minimal transportation times are critical for the survival of oiled wildlife through this process
- Air transport (float planes or long range helicopters) is by means the most effective and realistic option for transportation given the location of the Reserves. Transport systems need to be based on this approach

Development of a specific oiled wildlife rehabilitation centre

Objectives

1. Select a suitable site / facility to support the species needs for oiled wildlife rehabilitation

- A likely site to establish a temporary rehabilitation facility has already been selected by DEWHA in Broome

2. Make operational the oiled wildlife rehabilitation centre specific to wildlife needs

- The selected centre needs to be evaluated in detail to determine the needs to best establish it as a fully functional rehabilitation facility
- WA DEC staff at Karratha (Cath Samson's DEC contact phone 0438942787) have recently undergone training in oiled wildlife response that included the development of an operational rehabilitation facility. No other DEC personnel have received training in oiled wildlife response to this level. To expedite the process it would be logical to include these trained staff to the planning and implementation of the centres establishment
- Some of the operational requirements that need to be considered for a rehabilitation centre include but not limited too: wildlife housing; ventilation and temperature control systems; hydration and feeding activities; wildlife assessment resources; pre-wash stabilisation; washing, rinsing and drying facilities; post wash care; pool habitats; vet medical support; and disease management
- Establishing a fully operational oiled wildlife rehabilitation centre is complicated and challenging. It is very important that planning actions be put in place as early as possible to identify the establishment requirements necessary for a functional centre

Wildlife assessment and triage

Objectives

1. Clinically assess all incoming wildlife using standard oiled wildlife practices

- Because of the logistical issues of transport for this spill event this would ideally be done on board vessels at the Reserves. This process then through the triage phase determines what animals would continue through the rehabilitation process and hence need transportation and what animals should be euthanized locally on site. The alternate is that all collected wildlife are transported to Broome for assessment
- There is enough suitable equipment aboard the Australian Customs Vessel stationed at Ashmore to undertake a full oiled wildlife assessment for each animal
- The process does however require an experienced level of training and confidence to deliver this aspect
- MShort (DERM) is suitable to undertake complete wildlife assessment including the blood work
- SGIac (DEC) although having done the wildlife assessment in the past has not done so for a period of about 2 years.
- The changing of on-site personnel at Ashmore with SGIac remaining on site only will not allow for a complete assessment to be undertaken
- With live oiled birds identified and captured then a decision has to be made as to whether an experienced wildlife assessor is mobilised on site (e.g. veterinarian with seabird experience) to complete the assessment or if all the birds are to be transported direct to the proposed rehab centre at Broome to full fill this requirement. This will largely be driven by the number of oiled animals identified and collected.

2. Triage all wildlife based on standard protocols

- The triage process cannot be undertaken without the wildlife assessment and then suitably qualified personnel to interpret the information
- The change of wildlife personnel now require a consideration for a veterinarian to full fill this role
- Standard triage protocols for oiled wildlife will need to be used in the triage process based on species types, medical requirements and numbers of animals received
- Priority 3 animals will need to be euthanized
- Because of the legal requirements and location issues at Ashmore only a licensed veterinarian will be able to undertake euthanasia on site
- The presence of a veterinarian on site, where wildlife numbers warrant this, is therefore advantageous for the assessment, triage and potential euthanasia processes
- Alternatively all wildlife could be stabilised and transported to Broome for triage

Intensive Care Support

Objective

- 1. Establish a specialised support mechanism to meet the needs of any wildlife with critical health needs**

2. Provide medical support to any wildlife with specialised or critical need support

- Intensive care support generally requires the direct involvement from a licensed veterinarian. This requirement is based on their level of expertise and access to restricted drugs
- Veterinarians that form a part of specialised response must have experience and skills specific to seabirds. Most vets do not have this skill set and sourcing can be an issue.
- Considerations also need to be made in terms of time frames that suitable vets can commit. Most vets are unable to leave their practices for extended timeframes without the use of locum support approaches and this can take time to organise and may only be available for short time frames

Pre wash care stabilisation

Objectives

1. Stabilise all Priority 1 wildlife

- This involves providing adequate housing, temperature control, ventilation, fluid therapy, meeting nutritional needs and any medical requirements to support the animal
- In real terms this is improving the condition of the animal to cope with the rehabilitation processes

2. Assess wildlife in line with standard protocols

- Finalise standard wildlife protocols to be used for washing.
- These protocols are used as an indication to when the wildlife are in a good enough condition to cope with the wash process
- Assess wildlife using protocols every 2-3 days (as a general guideline) to determine a washing plan for individual birds

3. Select stabilised wildlife for the cleaning and drying phase

- Selection is based on wildlife meeting the required washing protocols as described

Provide pre-wash care stabilisation to Priority 2 animals when the opportunity arises

Cleaning and Drying

Objectives

- 1. Remove all contaminants from wildlife (washing and rinsing)**
- 2. Dry wildlife**

- Use standard wash practices for oiled wildlife
- Ensure water hardness is considered as a part of the establishment of the washing and rinsing systems
- Water temperatures are critical at 39-41C
- Water pressure for rinsing is critical using between 45-60psi
- Waste water management systems need to be formalised for this process
- Washing is specialised and requires skilled experienced personnel
- Note: that effective rinsing is critical as the detergents are also a contaminant

Post Wash Care Stabilisation

Objectives

1. Stabilise wildlife from the “Cleaning and Drying” phase

- This involves providing adequate housing, temperature control, ventilation, fluid therapy, meeting nutritional needs and any other requirements to allow the bird to get over the stress associated with the washing process

2. Prepare wildlife for release

- For all aquatic birds this involves the provision of pools to facilitate the waterproofing process and may take some days
- Waterproof management and implementation is a specialised activity and requires specialised support from experienced personnel

3. Select wildlife to be released based on protocols

- Protocols include adequate body weights; good blood values; normal behaviour and waterproof testing (minimum 6 hours for terns, noddys, boobies and most coastal species; true pelagic species will require 24 hour tests)

Release

Objectives

1. Arrange for banding/tagging of all wildlife to be released

2. Select suitable sites for wildlife release

3. Make arrangements for release of wildlife

4. Transport wildlife to release sites

- Release opportunities are driven by both the health of the animals being met so that they are suitable for release and secondly that the risk of oiling or contamination has been removed from the release site.
- The removal of contamination risk for this spill event may take some time.

- Once the rehabilitation centre is fully established and operational birds are typically only in care for between 7-10 days. These tight time frames often mean that there is often oil still on the water and a risk of secondary contamination when birds are ready for release
- The oil discharge from the Montara Well Head Platform is expected to continue for some time (AMSA to confirm status)
- Where there is still oil in the environment and there is a risk of secondary contamination the birds cannot be released directly to that area
- Birds that are oiled a second time during the same spill event, having already gone through rehabilitation process once often do not survive a second time due to the stress associated with the rehab processes
- Where there is still oil in the environment the options include:
 1. Take the risk that the animals will not be oiled a second time when released to an oiled environment – typically this risk is too great and not recommended
 2. Maintain the animals in captive care until the environment has been classified as clean – this is problematic as most birds then develop diseases associated with being in a captive care environment and often die – though some species cope better with captive care (e.g. Pelicans) and with specialised care facilities this can be effective – this is very much a species by species situation that needs to be individually reviewed
 3. Release the animals well away from the oiled environment – the animals will in most cases return to their normal area of use. Sometimes this strategy is used whereby the animals are taken a great distance so that by the time the animals have travelled back to their collection site the oil has been cleaned up. This relies very heavily on good species life strategy data but has been effective for some species (e.g. penguins in South Africa, Treasure spill, 2000).
- In most cases where there are multiple species multiple strategies are often adopted for release
- Permanent banding prior to release requires authorities from the ABBBS. Applications also require that the project applicant be an A Class bander. This authority process does take time and needs to be actioned when birds are taken to a rehabilitation care facility
- Transport specifics need to be planned to meet this release objective
- Transport arrangements need to meet optimum release times

Post Release Monitoring

Objectives

- 1. Develop a post release monitoring program to assess survivorship and off spring success of released wildlife**
- 2. Instigate post release monitoring programs**
- 3. Review the effectiveness of the oiled wildlife response through this research**

- Post release monitoring (known as Type II monitoring) is not covered under the National Plan arrangements.
- Funding for this activity then needs to be sourced by the wildlife responding agency through its own funding systems or the application of specialised funding grants.
- Specialised studies need to be designed to achieve these objectives.

Compliance

Objective

1. Provide support to the needs of the compliance units associated with the pollution investigation

- Ensure that all opportunities including evidence and witness statements are provided to the pollution investigations

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