ORDINARY MEETING
27 MAY 2009

OIL SPILL INCIDENT AND RESPONSE – 11 MAY 2009 – RAY FRY INVESTMENTS PTY LTD, TRADING AS NORSHIP 47-51 TINGIRA STREET PORTSMITH.


RECOMMENDATION:

That the report be noted.

INTRODUCTION:

On 11 May 2009 an environmental incident occurred at 47 – 51 Tingira Street Portsmith. The environmental incident which occurred was an oil spill that resulted in the release of heavy fuel oil to Smiths Creek and Trinity Inlet. This report outlines the nature of the event and the clean-up process that followed. Cairns Regional Council was involved in the investigation as Council licences the environmentally relevant activities (ERA) conducted by Ray Fry Investments Pty Ltd, trading as Norship.

BACKGROUND

The environmental incident that occurred was an oil spill which resulted in the release of heavy fuel oil to Smiths Creek and Trinity Inlet. Several parties were involved in the clean-up operation as several jurisdictions were impacted upon, these included Cairns Ports, Maritime Safety Queensland, Cairns Regional Council and the Department of Environment and Resource Management. Cairns Regional Council was involved in the investigation as Council licences the activities conducted by Ray Fry Investments Pty Ltd, trading as Norship, the above mentioned ERA.

Cairns City Council had in the past issued notices for certain activities to occur. Notices were issued in 1999 and 2000. Norship believes the company had completed the requirements of both the above mentioned notices.

COMMENT:

On Monday 11 May 2009 at 4:20pm three Cairns Regional Council Environmental Protection Officers attended the Norship site located at 47 - 51 Tingira Street, Portsmith following notification of the oil spill by Cairns Ports. At the time of the inspection it was noted that a significant oil spill had occurred as a result of actions Norship had undertaken to dismantle a vessel.
The vessel had been dismantled using a 20 tonne excavator with attached hydraulic shears. Oil had escaped the vessel as a result of the shears cutting through a heavy fuel oil storage tank. The tank was built into the hull of the vessel, within the keel. Fuel oil had made its way from the area where the vessel was being dismantled to a stormwater inlet that flows indirectly to Smiths Creek and then to Trinity Inlet.

At the time of the inspection several Norship staff members and management where undertaking a clean-up operation. In addition the Environmental Manager of Cairns Ports, a Principal Environmental Officer of the Department of Environment and Resource Management were onsite.

The following observations were made at the time of arrival onsite:

- Norship had made an attempt to bund the area where the dismantled vessel was,
- Norship had made an attempt to direct water and oil away from stormwater inlet,
- Norship had several differing types of absorbent material including absorbent bunds, booms and absorbent pads in various positions around the area.
- There was a pump truck onsite extracting oily water from site.

At this time Council’s Senior Environmental Protection Officer (SEO) directed Norship to conduct various actions to prevent further contamination to stormwater infrastructure, refer to Photo 1.

Council’s SEO then advised Norship to continue with the clean-up effort and that Council Officers would return to site on Tuesday 12 May 2009 to further discuss the events that resulted in the oil spill.

Council’s Environmental Officers (EO’s) then left the Norship site and inspected Trinity inlet. At this time, there was a significant amount of oil in Smiths Creek and Trinity Inlet. Cairns Ports staff were onsite with various control measures in place to contain the oil. Nearly 100% of the oil had been contained, on the incoming tide, between two floating booms located within Smiths Creek, refer photo 2 and 7. Maritime Safety Queensland (MSQ) staff arrived on site at 7pm.

Council’s EO’s returned to the Norship site on Tuesday morning 12 May 2009 to conduct further investigations. At the time of this inspection Council’s SEO discussed the clean-up operations with the Senior MSQ staff member.

MSQ advised that seven (7) tones of material, being a mixture of water an heavy fuel oil, had been removed via a surface skimmer from Smiths Creek.

Council’s SEO questioned MSQ about the vessel and what events MSQ believes occurred that resulted in the deposit of oil in Trinity Inlet.

MSQ stated that the vessel had sunk off Rockhampton approximately two (2) months ago and had since been recovered. MSQ stated that they were aware that the vessel had been cleared of oil, fuels and other contaminants and been given the clearance for demolition.
MSQ stated that the vessel had a heavy fuel oil tank that had been built into the hull of the vessel, possibly to increase the fuel capacity of the vessel or for the protection of the hull from corrosion. MSQ stated that this is very unusual and explained in detail how MSQ believed the tank had been constructed. Council’s SEO asked MSQ about the cost recovery procedures that MSQ had in place, MSQ advised that Cairns Ports would be recovering clean-up costs as would MSQ.

Council’s EO’s then conducted a meeting with Norship management. Present were Senior representatives of Norship management.

Council’s SEO explained the nature of the event with regards to the offence that has occurred under the Environmental Protection Act 1994, section 440ZG.

Pursuant to section 440ZG of the Environmental Protection Act 1994 Norship were advised that it is an offence to deposit a prescribed water contaminant to waters a roadside gutter or stormwater drainage and Schedule 9, of the Environmental Protection Regulation 2008, the prescribed water contaminant relating to this offence is oil.

Council’s SEO then asked Norship to explain the events which resulted in the release of fuel oil from the vessel.

Norship explained the events which resulted in the loss of heavy fuel oil from the site. Norship explained the way in which the vessel had been dismantled and the events that occurred once the fuel tank had been ruptured.

Norship were then questioned of the events that occurred post the escape of oil from the vessel. It was explained that staff proceeded to control oil onsite using machinery they had available. Norship stated that staff were immediately sent to the confluence of Smith Creek and Trinity Inlet to inspect for oil contamination. At this point in time it was believed that Norship stated that there was, at that time, no oil present at Smith Creek, Norship therefore assumed that they had managed to contain the oil onsite.

Council’s SEO asked why then is there several hundred litres of oil in Trinity Inlet. Norship explained that at the time staff inspected Trinity Inlet it was a high tide, therefore, the tide was pushing water back up the stormwater infrastructure at Norship and on the reverse of the tide oil was released to Trinity inlet.

Norship stated that as soon as it was noticed that there was a rush of oil from the vessel he immediately contacted a regulated water transport company and a pump truck arrived onsite at approximately 11:30am 11 May 2009.

Council’s SEO asked why the fuel oil was not detected prior to the demolition of the vessel. Norship explained that there was an irregularity with the vessel that was unforeseeable, Norship further stated that even MSQ didn’t expect that a heavy fuel oil tank to be located within the keel of the vessel and that it was concealed in the hull of the vessel.
Council’s SEO questioned why the vessel demolition occurred in close proximity to a stormwater inlet. Norship stated that the vessel had been cleared of oil, fuels and other contaminants and therefore the risk was considered minimal, again Norship staff stated that a fuel tank in the location it was in is very unusual. Norship further stated that MSQ would not allow a vessel to have such a tank as locating a fuel tank in the hull or keel of a vessel is illegal.

Norship were then advised that Cairns Regional Council would consider the offence and dully inform Norship of Council’s decision.

Council’s SEO stated that potential enforcement action may include a complete review of the facilities stormwater infrastructure, including a requirement to upgrade any identified areas that do not have a treatment process in place prior to discharge to the receiving environment, any formal notice may also include a requirement to review and update the companies environmental management system and include appropriate staff training with regards to environmental matters.

Council’s SEO stated that he would provide his recommendations to his management and that the decision on how to proceed would be made by the Manager for Environmental Assessment, Council’s SEO further stated that his manager may chose a difference action than that he has recommended.

Ray Fry Investments Pty Ltd have been advised that recommended action may include but not be limited to the following:

1. Conduct a complete environmental audit of the site.

2. A review of all activities conducted on site, activities prescribed by the Environmental Protection Act 1994.

3. A complete review of the stormwater management system and ancillary works must be conducted by Ray Fry Investments Pty Ltd at both properties described as Lot 2 on SP122862 and Lot 4 on SP122861. A detail plan must be supplied to Cairns Regional Council by a date to be negotiated.

4. Ray Fry investment Pty Ltd must prepare and submit to Cairns Regional Council a Site Based Management Plan (SBMP) for both properties that details improvements to environmental performance.

   The Site Based Management Plan must be submitted to Cairns Regional Council for comment by a date to be negotiated.

5. A timeframe for the implementation of any required environmental improvement identified by the SBMP, including any required stormwater infrastructure upgrades must be submitted to Cairns Regional Council for review by a date to be negotiated.
Clean-up operations continued on 12 May 2009, this included the washing of mangroves, cleaning of the shore line and the removal of rubbish. In order to prevent further damage to the environment, particularly the marine plants, it was decided that detergents would not be used to remove oil films. Instead, Norship and MSQ used high volume low pressure water washing, using two inch flex drive submersible pumps to wash oil from all surfaces, into Trinity Inlet were it was contained in booms and mopped up using absorbent pads.

Further clean-up operation continued on Wednesday 13 May 2009 that included continued washing and further clean-up onsite.

Thursday the 14 May 2009, clean-up continues. Council’s SEO advised Norship that flushing of the stormwater infrastructure was required to ensure that Council has a high degree of certainly that there was no remaining oil in the stormwater system.

Friday 15 May 2009. Flushing of the stormwater infrastructure occurred. Eight thousand (8000) litres of water was flushed through the stormwater pipe with only a very slight sheen presenting in Smiths Creek. Several control measures including a vessel, three (3) hydrocarbon booms and Norship staff armed with absorbent pads were positioned prior to flushing the stormwater pipe.

A site inspection of Trinity Inlet was conducted on Monday 18 May 2009. At the time of this inspection there was very little evidence that an oil spill had occurred. At the time there were a few areas of sheening that persisted. Booms will remain in place over the coming weeks to ensure any remaining oil is contained for clean-up, refer photos 5, 6 and 7.

Tuesday 19 May 2009. A meeting conducted with Senior management of Norship. During this meeting Council’s SEO discussed Cairns Regional Council intent to require Ray Fry Investments Pty Ltd to draft a Draft Transitional Environmental Program or may issue a Direction Notice for a total review of the environmental performance of the site and the upgrade of any areas that are identified as requiring improvement. Ray Fry Investments Pty Ltd advised that there preferred option was draft a voluntary Transitional Environmental Program to ensure compliance with all their development approval conditions over time.

Wednesday 20 May 2009. Council’s SEO attended site to inspect the drainage line in Smiths Creek on the receding tide to gauge the effectiveness of the flushing of the stormwater infrastructure. At the time of the inspection there was no evidence of further oil sheening on the concrete surface or the mangroves or creek banks. A small amount of sheening, less than 0.5m² remained on the up stream side of one of the booms.

Cairns Regional Council SEO is satisfied that the clean-up operations are close to completion with only spot cleaning to be conducted in the event that hydrocarbon sheening presents in Smiths Creek or Trinity Inlet.
CONSIDERATIONS:

Corporate and Operational Plans:

Actions implemented in response to the incident are consistent with Cairns Regional Council’s Corporate Plan, with particular reference to sections:

1.1.1 An improvement in the quality of stormwater so that:
- it is consistent with the ecological needs of the natural water bodies and receiving water; and
- waters pose no health risk to the community

1.1.2 Better managed catchments including natural creeks and gullies, where,
- environmental degradation of receiving waters is prevented

Actions implemented in response to the incident are consistent with Cairns Regional Council Environmental Protection operational plan as the environmental protection unit has a duty to investigate matters of environmental pollution, nuisance and/or harm.

Statutory:

Cairns Regional Council has a duty to investigate matters of environmental pollution, nuisance and/or harm as defined by the Environmental Protection Act 1994

A penalty infringement notice has been issued under section 440ZG of the Environmental Protection Act 1994.

Policy:

Actions implemented in response to the incident are consistent with Cairns Regional Council’s PROCESS FOR ENVIRONMENTAL INCIDENT REPORTING policy.

Financial and Risk:

As a result of this incident there was no direct financial liability to Cairns Regional Council all clean-up cost either have will be the responsibility of the client. Clean-up cost will be recovered by the Cairns Ports and Maritime Safety Queensland using various statutory tools. Indirect financial costs to Cairns Regional Council include 30 hours of Officers time in responding to the incident and associated clean-up

CONSULTATION:

General Manager Planning & Environment
Manager Environmental Assessment
Team Leader Environmental Protection

OPTIONS:

Ray Fry Investments Pty Ltd draft a voluntary Transitional Environmental Program to ensure compliance with all their development approval conditions over time.
CONCLUSION:

That the Report be noted.

ATTACHMENTS:

Photos: 1, 2, 3, 4, 5, 6 and 7

Luke Nicholson
Senior Environmental Protection Officer

Laurie Phipps
Manager Environmental Assessment
Photo 1 – Dismantled vessel showing oil removal and bunded area

Photo 2. Oil contained between booms in Smiths Creek - 11 May 2009. Note that a additional boom is down stream of the extent of this photo, refer photo 2.

Photo 3. Downstream boom from that referenced in photo 1. 12 May 2009. Note that this boom was in plane on 11 May 2009

Photo 4 – Section of the hull containing the concealed fuel tank.
Photo 5 – Cleaned mangrove section. This section was heavily impacted on.

Photo 6 – Section of Smiths Creek as depicted in Photo 2.

Photo 7 – Booms in place in Smiths Creek 12 May 2009.