




NTS Alert October 2010 (Issue 2)

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'CRYING OVER SPILT MILK': RESPONSES TO OIL SPILLS IN EAST ASIA

The previous issue of the NTS Alert (October 2010, Issue 1) examines the threats to human security from exploration and extraction activities within the traditional energy sector. This edition follows up on that by examining disaster responses and existing initiatives for addressing human insecurities in the energy sector in East Asia, with particular focus on the Montara oil spill off the coast of Western Australia and the Xingang Port oil spill in Dalian, China.



Montara oil platform on fire.

Credit: SkyTruth, flickr.com

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Introduction

The Deepwater Horizon oil spill in the Gulf of Mexico in April 2010 captured the world's attention due to the immense ecological damage it caused, and the long time taken to successfully cap the well. The incident raised questions regarding the transparency and accountability of the various stakeholders involved. Similar concerns have been expressed in relation to the energy exploration and supply activities in East Asia.

In the October 2010 (Issue 1) NTS Alert, the threats posed to human security by the activities of the traditional energy sector were discussed. This follow-up issue looks at responses to two recent oil disasters affecting parts of North and Southeast Asia, namely, the Xingang Port oil spill in Dalian, China, and the Montara oil spill off the northern coast of Western Australia which spread into Indonesian waters.

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Overview of the Xingang Port and Montara Oil Spills

The Xingang Port oil spill was the result of two pipelines exploding on 16 July 2010, leading to the reported release of 1,500 tonnes of oil into the Yellow Sea, creating a slick of more than 180 square kilometres (sq km). This slick later spread to cover an area of 435 sq km, according to official estimates (Dalian Oil Spill, 2010). The explosion caused a blaze that raged for 15 hours before it was contained. The pipelines at Xingang Port in Dalian in northeast China belong to China's largest oil producer – China National Petroleum Corporation (CNPC). The disaster was caused by the improper injection of highly oxidising desulfuriser into the oil pipeline after a tanker had finished unloading. Given that there were oil and chemical tanks in the immediate vicinity, the whole city of Dalian could have suffered catastrophic consequences if the fire had not been contained. As mentioned in Issue 1 of the October 2010 NTS Alert, the oil spill polluted beaches and poisoned seafood, causing local tourism to drop drastically and the price of shellfish to decrease by 15 per cent within six days of the spill (Oil Spill Severely Damages, 2010).

In the case of the Montara oil spill, an oil rig in the Timor Sea off the northern coast of Western Australia had a blowout on 21 August 2009. It leaked about 400 barrels of crude oil a day until it was finally capped 74 days later. Estimates of the area affected by the oil slick vary from a figure of 6,000 sq km given by the Australian Maritime Safety Authority (AMSA), to 28,000 sq km based on satellite imaging, and 90,000 sq km by the World Wildlife Fund (WWF) (Mustoe, 2009:6; Simamora, 2010; WWF, 2010). A significant proportion of that oil slick entered Indonesian waters, affecting the livelihoods of at least 18,000 fishermen (Satriastanti, 2010; Pasandaran, 2010; Simamora, 2010).

Submissions to the Montara Commission of Inquiry reveal signs of negligence by the operating company, PTTEP Australasia, a subsidiary of Thailand's state-owned PTT Exploration and Production. The explosion was the result of the rig not being fitted with a pressure cap. It was also revealed that PTTEP Australasia did not submit an Oil Spill Contingency Plan until months after it had drilled five wells on the Montara platform in January 2009 – a clear breach of the requirements set by Australia's Department of the Environment, Water, Heritage and the Arts (DEWHA) (Prestitino, 2010).

Table 1: Comparison of the Xingang Port Oil Spill and the Montara Oil Spill

	Xingang Port oil spill	Montara oil spill
When and where	16 July 2010, Xingang Port at Dalian, China.	21 August 2009, off the northern coast of Western Australia.
Operating company	China National Petroleum Corporation (CNPC).	PTTEP Australasia (a subsidiary of Thailand's state-owned PTT Exploration and Production).
Extent of oil slick	435 km ² .	Varying estimates of between 6,000 and 90,000 km ² . Part of the oil slick was in Indonesian waters.
Personnel mobilised	At least 3,600.	247.
Compensation	Local fishermen voiced their demands by, for example, collecting signatures and fingerprints from most of the households in Hezuizi village of Dalian.	Ocean Oil Spill Emergency Situations National Team (also referred to as the national Advocacy Team), set up a year after the incident, has presented a claim of USD2.2 billion to PTTEP Australasia. The company is asking for verifiable scientific data to support that claim.

Source: Indonesia Demands \$2.4 Billion (2010), Simamora (2010), Wang (2010), WWF (2010).

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Disaster Response to the Two Oil Spills

The general objectives of disaster response to oil spills are: (1) to maintain the safety of human life; (2) to stabilise the situation; and (3) to minimise adverse environmental and socioeconomic impacts by carrying out timely, effective response (Tuler and Webler, 2009:105). In the case of the Xingang Port and Montara oil spills, authorities did take proactive measures to address these objectives. However, there were areas where response could have been improved, particularly in achieving the third objective, which covers a variety of aspects such as clean-up operations to decontaminate seawater, and the easing of public anxiety on the implications that the oil spill would have on their sources of livelihoods as well as on their health.

Chinese authorities from various layers of government responded to the Xingang Port oil spill to ensure the safety of human life and stabilise the situation. The Dalian municipal fire bureau mobilised all fire engines and more than 2,000 firefighters while the Liaoning provincial government dispatched another 1,600 firefighters from adjacent cities. The Chinese central government also responded rapidly, mobilising two air force planes to transport fire extinguishing supplies to the accident site. In terms of clean-up operations, Chinese authorities mobilised fishing boats as well as specialist clean-up vessels. Dispersants, absorbents and oil-eating bacteria were used (China Dalian Oil Spill, 2010). The state's response was topped off with Vice Premier Zhang Dejiang leading a ministerial team to supervise the response operation from the site of the incident. CNPC was seen to cooperate with the Chinese authorities, playing an assisting and coordinating role.

Australian authorities also played a significant role in addressing the Montara oil spill. In line with processes under Australia's National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances, PTTEP Australasia formally handed over the oil leak response to the AMSA. Australia received regional assistance from countries such as New Zealand and Singapore, primarily in the immediate response phase (AMSA, 2009). It also brought in several companies in the oil industry, such as Santos, Esso, Caltex, Woodside and Shell, to assist in the response operation. Clean-up operations largely involved the spraying of dispersants (the six types of dispersants used had gone through laboratory acute toxicity testing and been approved for use in Australian waters) and the use of two vessels joined by a 300-metre containment boom, with a skimmer operating in the boom 'pocket' to recover the oil (AMSA, n.d.).

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Shortcomings in the Two Disaster Response Cases

While the cooperation seen during the oil spill response operations (discussed above) is commendable, there is room for improvement. Firstly, coordination amongst the various parties involved could be more efficiently organised. While active government involvement ensured rapid mobilisation and reliable logistic supplies during the Xingang Port oil spill, the presence of at least three ministries resulted in an overlap of responsibilities and thus increased the coordination cost. This problem has long existed in China's emergency response systems, and it has hampered China's ability to cope effectively with crises (Zhong, 2007).

In the case of the Montara oil spill, where the damage was more extensive and had spilled over from Australian national territory into Indonesian waters, questions were raised as to whether more personnel could have been mobilised to tackle the incident. WWF-Australia, for instance, criticised the fact that only 247 people worked to contain the spill, with many undertaking more than one rotation through at least one of the positions in the response organisation, and that despite this, PTTEP Australasia refused offers of help from other nearby rigs (AMSA, n.d.; WWF, 2010).

Secondly, there is a need for improved safety measures for those involved in emergency response. As a means of increasing the pace of clean-up operations, the Dalian municipal government had organised the manual collection of spilled oil by local farmers, paying them according to the amount collected. However, it was reported that many joining the clean-up effort lacked protective gear (Martin, 2010). Observations from past oil spills, such as the 2010 Gulf of Mexico spill, suggest that exposure to chemicals from spilled oil and dispersants could have adverse health effects. Health risks from the inhalation of mist or vapours, for instance, are considered the highest for oil spill responders, wildlife rehabilitations workers and direct observers of cleanup activities (CDC, 2010). In view of this threat, Greenpeace handed out masks and gloves to the Dalian farmers who had been collecting the spilled oil with their bare hands.



Firefighter in Dalian submerged by oil.

Credit: Peter Ma, flickr.com

Thirdly, there is the issue of transparency and accountability. In China, while the press office of the Dalian municipal government held regular briefings on the progress of the response operations, CNPC was absent from most of the press briefings, and few comments from the company on the accident were available. Moreover, CNPC has not yet been summoned to attend any inquiry on their responsibility for the disaster. China's Ministry of Environmental Protection has commenced an investigation into the spill (Wang, 2010).

In terms of compensation, Chinese villagers and fishermen affected by the spill have expressed the need for confirmation by the local government that they would be compensated by CNPC for loss of vital sources of livelihood (their means of economic security). They are aware that the process may take up to two years, possibly longer (Wang, 2010). The slow pace of the compensation process is also seen in the Montara oil spill, where the Ocean Oil Spill Emergency Situations National Team (also referred to as the national Advocacy Team) headed by Indonesian Transport Minister Freddy Numberi to negotiate reparations from PTTEP Australasia was formed only in July 2010 –

a year after the disaster occurred – and other important governmental organs, such as the National Energy Commission, were engaged much later (Satriastanti, 2010).

This issue of accountability is complicated by the fact that the objectives of various stakeholders largely determine the planning and implementation of oil spill response (Apostolakis and Pickett, 1998). Since the various stakeholders represent different interests, their preferences and perspectives on the response operation may differ. This is clearly reflected in developments within Indonesia as well as between Indonesia and Australia following the Montara oil spill. The different stakeholders within Indonesia have quoted varying amounts for the damage caused by the Montara oil spill. In August 2010, the Indonesian government's Advocacy Team presented a USD2.2 billion claim to PTTEP Australasia, coupled with a request for an immediate USD5 million downpayment for local fishing communities affected by the loss of business. Transport Minister Numberi indicated that the 'pragmatic' amount his team had come up with was less than what had been quoted by stakeholders at the provincial level in East Nusa Tenggara. The West Timor Care Foundation, an Indonesian non-governmental organisation, estimated the damage to be USD15 billion. According to reports, PTTEP Australasia had agreed to pay compensation, but only on claims substantiated with verifiable scientific data; the Advocacy's Team claim was not accepted due to the lack of such data (Pasandaran, 2010; Satriastanti, 2010; Poke, 2010).

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Towards Disaster Preparedness

The developments seen in the post-oil spill period in both the Xingang and Montara cases are, to a large extent, similar to previous offshore oil spills. While addressing the damage left by the oil is itself a tedious task, this is compounded by inadequate response measures, often due to the parties involved attempting to cut costs. This can and has had adverse implications – not only on the firms, but more so on those involved in disaster response, and on communities whose livelihoods depend on the damaged environments. Specifically for the latter, the compensation processes – such as obtaining scientific data to back up their claims of the loss of livelihoods and navigating the bureaucratic channels that facilitate such claims – are often long and, for the most part, result in minimal compensation.

The international community has acknowledged the need for better preparedness for oil exploration accidents, and reached a consensus, defined in the International Convention on Oil Preparedness, Response and Co-operation (see Box 1). However, these are only broad guidelines; the various countries would need to formulate, or in the case of China, strengthen, their own national strategies. In addition, more effort would need to be channelled into formulating pre- and post-emergency plans, that is, measures to ensure improved safety standards and greater accounting of environmental risks, respectively. Some steps have been taken in China, such as a proposal to levy an environmental tax on emissions of carbon dioxide and discharges of polluted water (China May Launch Environmental Tax, 2010). In Australia, biodiversity surveys on the impacts of the Montara oil spill, such as those prepared for WWF-Australia and DEWHA, reflect attempts to place environmental risk at the mainstream of policymaking, and the increasing relevance of such efforts (Mustoe, 2009; Watson et al., 2009).

In conclusion, while such oil-related incidents do cause immense damage – whether ecological, economic or social – measures can be taken at every juncture to reduce their impact. While it is largely impossible to put an end to offshore oil exploration in the near future, the recent oil spills highlight the need for increased governmental legislation and multi-sectoral preparedness to prevent future mishaps.

Box 1: International Convention on Oil Preparedness, Response and Co-operation (1990)

The International Convention on Oil Preparedness, Response and Co-operation is intended to encourage the establishment of:

- oil pollution emergency plans on ships and offshore installations, and at ports and oil handling facilities.
- national and regional contingency plans.
- a framework for international co-operation.

As of 30 September 2010, China and Australia have acceded to this convention, while Indonesia has not.

Source: International Maritime Organisation (n.d.).

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