Response to the Evoikos Incident and Shared Responsibility

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Ladies and Gentlemen,

In my presentation I will first review EARL's involvement and response to the Evoikos incident and the lessons learnt from EARL's perspective. I will next discuss the role and relationship of the International Tier Three Response Centres in a response. Finally I will review the need to recognise shared responsibility and its importance in the effectiveness of a response.

The response arrangements in Singapore are similar to that in most parts of the world where the government, through its designated national authority typically the transport agency, is in charge and in command of a response. In Singapore the designated national authority is the Maritime and Port Authority (MPA). All other resources including that of the spiller and, if he is a shipowner, his Protection and Indemnity club (P&I club), industry, response centres, contractors and other interested parties are in support of the government. This is consistent with Article 6 of the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC) which identifies the national authority or authorities as being responsible for oil pollution preparedness and response. The Treaty on the International OPRC Convention was adopted in November 1990 by a Conference convened by the International Maritime Organization (IMO) and became part of International Law on May 13, 1995.

The Evoikos and Orapin Global collision occurred at 8.54 p.m. October 15, 1997. EARL was informed of the collision and oil spill at 10.00 p.m. October 15, 1997 by MPA. EARL promptly put its response team on alert and requested MPA for details of the owner of the stricken ship as a signed third party contract was required before EARL could be activated. At 2.10 a.m. October 16, MPA requested EARL to attend a meeting with Spica Services Ltd, the representative of the shipowner's P&l Club. At 3.00 a.m. October 16 Spica Services Ltd signed the contract on behalf of the U.K. P&l Club. EARL deployed two fast response vessels which arrived at the Evoikos spill site at 5.30 a.m.

For the duration of the response EARL took instructions from Spica and ITOPF and the MPA who were in command and control of the response. For the first three days the response was mainly dispersant application from vessels and a total of 31 ,600 litres (158 drums) of dispersants were used. Aerial dispersant application using a helicopter and Simplex helibucket was deployed on the afternoon of the third day (October 1 8). Corexit 9500 was used on this run and the dispersant was reported to be effective after a few hours to allow the dispersant to work on the heavy oil. EARL also deployed protective booms around the Evoikos.

EARL was involved in containment and recovery operations from the third to the seventh day (October 1 8 to 22). EARL procured additional vessels and barges from marine contractors to supplement EARL's vessels for these operations. Under the contract, these additional vessels would not be provided by EARL but by the spiller. Approximately 130 tons of oil and oily water were recovered.

Seven hundred and fifty metres of protective booms were deployed to protect Raffles Marina on the western side of mainland Singapore on October 21.

From the eighth to eleventh day (October 23 to 26) the response was mainly to use absorbents for thin oil layers and sheen removal. Absorbent snares and booms were used on the beaches, jetties and near shore waters of the Southern Islands which were impacted by oil. EARL was stood down at the end of the eleventh day, October 26.

EARL's own staff of 20 responders was insufficient to perform the response activities requested notwithstanding the extended working hours of up to 16 hours a day. EARL contracted additional specialist manpower from the United Kingdom (5 from OSRL), Australia (6 from AMSA) and Malaysia (5 from Sri Mukali). The Singapore Civil Defense Force (SCDF) provided 15 men to assist daily.

The oil companies and the Singapore Polytechnic also assisted with manpower for vessel operations and logistics support.

A total of 1,950 metres of both offshore and nearshore booms were deployed and used with 5 skimmers for containment and recovery operations Three EARL fast response vessels with three support vessels were deployed for dispersant and containment and recovery operations. In addition, twelve contract vessels and storage barges were

deployed. Nine boat dispersant spraying sets and two helicopter spray buckets were deployed for dispersant application and a total of 31,600 litres (158 drums) of dispersants were used. One hundred and forty three bales of absorbents - in pads, booms, snares and blanket form were used.

The use of the ADDS pack for aerial dispersant application was proposed but rejected by the MPA.

The impact of oil on shorelines was significant but could have been worse were it not for favourable winds and currents. While all incidents are unfortunate we must learn from them to be better prepared in the future. My comments will focus on the lessons learnt from EARL's perspective.

A key lesson for EARL is in managing expectations. This is particularly important in a major spill incident when resources become insufficient. The authorities had expectations of EARL as one of the many response contractors. The P&l Club who had contracted EARL had expectations as a client and 'payer' of the cleanup costs. Unfortunately these expectations were not what EARL could provide or was contracted to provide. Furthermore, the authorities' expectations and the P&l Club's expectations were often different and EARL experienced difficulties in performing cleanup operations from instructions which were sometimes in conflict. Managing expectations and clarifying them before an incident is therefore essential.

In this incident, EARL deployed only a part of its equipment stockpile. The limitation to deploying additional equipment was manpower and suitable marine craft. However EARL provided all the equipment and manpower requested by the P&l Club under the contract and, in fact, provided more by providing logistical support and contracting additional resources when requested.

In our view EARL fully met its role and design as a regional response centre. In fact, it did more than its obligations under the contract to provide response services. Yet there were murmurs of dissatisfaction of EARL's contributions! This may be due to unrealistic expectations and misconceptions of the role of the International Tier Three Response Centres.

Let me therefore talk about the International Tier Three Response Centres and their role and relationship with the authorities and others in a response. The oil industry in the I 980's decided that they needed to position oil spill response resources at strategic locations in the world to cover their risks to oil spills from their operations or in the transportation of oil. They established three International Tier 3 Response Centres namely Oil Spill Response Limited (OSRL) in Southampton, Clean Caribbean Cooperative (CCC) in Florida and East Asia Response Limited (EARL) in Singapore.
These Tier 3 Response Centres have deployment arrangements for rapid response to oil spill incidents in their respective regions and globally. As such, the industry believes that the need to replicate similar high cost equipment stockpiles around the world can be avoided. Experience has shown that it is more cost effective and far easier to maintain expertise and equipment maintenance standards at a few selected locations than at many scattered sites. The establishment of these three International Tier 3 Response Centres is a demonstration of the support of the oil industry to the OPRO Convention. The industry has worked through IPIECA with IMO and governments to develop and enhance contingency plans and oil spill response resources in the world.

Access to the resources of the centres is through membership. Members pay annual fees and have a service agreement with the centres. In the event of a member spill, a Tier 3 centre would respond and work with the member and the government and other responders in combatting the spill. In the event of a non-member or third party spill, a Tier 3 centre does not guarantee a response, but if it does respond on an ad-hoc contract, it would endeavour to work with the spiller, government and other responders.

Whilst the International Tier 3 Centres are established and now well-known to the industry, oil spill community and government authorities, there is often a misconception or misunderstanding of these centres in terms of their role and capability. Perhaps we have "oversold" the Centres by telling what they are and what they can do but not telling what they are not and what they cannot do. I would like to clarify this misconception and misunderstanding which can detract from an optimal response.

The centres have a stockpile of varied equipment and a small core group of specialists that were designed to supplement a national resource and capability but not to replace it. We are one of many resources that can cooperate in a response. The centres are not "one-stop" shops with unlimited resources waiting, like the cavalry, to save the caller

when he summons. We are also not designed to take command and control as that role should stay with the national authorities.

In addition to the stockpile of varied equipment each of the three centres has the specially designed Airborne Dispersant Delivery System (ADDS Pack). There are only a few of such units in the world. The ADDS Pack is a roll-on-roll-off aluminium tank with a capacity of 5,500 US gallons to be used from a Hercules L-382 aircraft for aerial dispersant spraying offshore. EARL and OSRL each has a dedicated Hercules L-382 on charter and on standby 24 hours a day while CCC obtains one from the commercial market when required. The ADDS Pack is increasingly recognized by industry and governments as the only effective means of significantly reducing the threat of massive shoreline impact from a major offshore spill.

Dispersants are a powerful option in a response provided the conditions are suitable for dispersant application. EARL had successfully used the ADDS pack in the "Once" spill in Thailand in 1996. Two thousand five hundred barrels of Massilla crude was dispersed in two days with no significant shoreline impact. In a response all options or a combination of options including dispersants, containment and recovery and shoreline clean up should be considered.

The centres are designed as part of the oil industry's tiered response concept. They provide an international tier 3 response and are a source of expertise and equipment to supplement the resources available under tier 2 should the latter be insufficient to meet the demands of the response effort.

The centres had used capacity labels to describe their equipment stockpiles, for example, "a 3OKT stockpile". However these capacity labels led to a misunderstanding and expectation that a centre had equipment and manpower to clean up a 3OKT spill. In the "Evoikos" spill, EARL was criticized for not having the resources, both equipment and manpower, to clean up the spill of 28KT.

One method of describing the size of an equipment stockpile is to calculate the total skimming capacity of all offshore skimmers. An efficiency factor is applied to the nameplate capacity (manufacturer's rated capacity) and it is assumed that the skimmer is in use for a fixed number of hours a day and for seven days. This calculation includes all types of skimmers and for both light and heavy oils and that all skimmers are

deployed simultaneously. The US Coast Guard standard is based on the nameplate capacity of all types of skimmers multiplied by a 20% efficiency factor and by 24 (for a 24-hour operation) and by 7 (for a 7-day operation). The assumption is that all the skimmers are deployed simultaneously and are in use continuously. However neither method is meant to describe the oil recovery capacity but rather to indicate, very approximately, the relative size of equipment stockpiles. We all know that the amount of oil a skimming unit can recover depends on many factors including the type of oil, its viscosity and spreading characteristics, the location of the spill, the thickness of the oil layer encountered, and the wind and currents. Typically, only about 10% to 15% of an oil spill can be recovered by mechanical means.

In the event of a large spill, many parties are involved in the response and they all share in the responsibility for an effective and successful cleanup.

The national authority is in overall charge and its contingency plan should address how resources will be mobilized, who will mobilize them, how these resources will interface with each other and how they will be controlled and used. For a national plan, the responsibility for its development and exercising resides with the national authority.

During a spill, the national authority will mobilize its own resources and call upon other resources that it will need for the response. These other resources will come from many local sources such as other national agencies, the oil industry, contractors and others.

The International Tier 3 Response Centres are one of these resources that may also be called.

The Tier 3 centres are, therefore, one of many resources that can be mobilized in a response. They were not designed nor resourced to clean up a spill on their own. To describe some other aspects of this shared responsibility let me use the example of a chain of activities when a centre is activated. To mount a response at the spill site, equipment and manpower needs to be deployed from the centre to the site. When the centre is activated the centre, in this case EARL, will mobilize and arrange for the equipment and manpower to be transported to the airport, loaded on the plane and flown to the designated airport. EARL is responsible for these activities. On arrival, the client (spiller) is responsible for clearing customs and immigration and transportation

to the spill site. The client is also responsible for storage, procurement of labor, boats, barges and waste disposal. The client will also be responsible for liaison with the national authority in the response. EARL will support the client and government authority with advice as necessary.

If the spiller is an oil company and if the company is an EARL member, EARL will be activated by the company. The company is responsible for receiving EARL's equipment and providing support and other equipment such as boats for the response. The company would normally have their company contingency plan and response team to perform these tasks. The national authority may provide equipment if it has access to them within the country. The government can exert considerable power and influence during an emergency. However in the case of a third party spill from a ship, the shipowner and his P&I club may not have staff or resources at the spill site to provide the support to EARL. In this case the national authority or its designated agency or contractor has to provide the support. These different scenarios should be considered in the national plan and the resources and interfaces that need to be mobilized and integrated should be identified.

The national authority is responsible for control of the cleanup. The spiller is responsible for the cost and the provision of whatever resources he can muster to support the cleanup effort led by the government. EARL provides equipment and manpower to support the national authority and spiller in the response. For the response to be successful, all parties must share in the responsibility for the cleanup.

I have described the role and relationship of the national authority, the spiller and response resources like EARL. But how prepared are we?

Having a well-written contingency plan is not in itself "being prepared". But having one that has been regularly tested to prove it will work in the event of a spill, is. The contingency plan needs to be tested for robustness and the cooperative arrangements, in particular, the relationships, roles and responsibilities of all involved need to be exercised.

Tests and exercises should be as realistic as possible as it is tempting to make them easy so that everybody feels good when they are over. "Easy" drills lead to over-confidence and complacency. An oil spill is a stressful situation and, in such a crisis,

interfaces and relationships of all involved are severely tested and human behaviors change. Friends may become foes and prior agreements and understanding can become disagreements and misunderstanding that result in confrontation rather than cooperation. Realistic testing leads to lessons learnt and the subsequent changes and improvements lead to enhanced preparedness. Even though every eventuality cannot be anticipated, confidence and preparedness will grow. A rigorous exercise program needs the support of all parties and the commitment of resources to really test the contingency plan and the roles and relationships between the different interest groups.

Oil spills create an arena of potential conflict of objectives: a government to "punish" the spiller and cleanup the spill to return the environment to its pre-spill condition; a spiller/shipowner and his P&I club to minimise the cost and impact of the spill on his company's reputation and business; a person who has suffered injury or property damage to seek maximum compensation; environmental and other special interest groups to publicise their cause. Cooperation of all these interest groups can be achieved with strong leadership or it can quickly degenerate into conflict and confrontation.
Conflict saps energy, is demoralising and diverts resources from what should be the common foe, the oil spill. Although there are many diverse interest groups the government needs to mobilise them to work collectively to effectively fight the spill.

In conclusion, I have reviewed EARL's involvement and response to the Evoikos incident and the lessons learnt from EARL's perspective. The International Tier Three Response Centres are one of many resources that support a response effort and I hope I have clarified the role and capability of these centres and that of EARL in our region. For spill response to be effective, the recognition and commitment to shared responsibility and cooperation by all parties is essential. To be well-prepared, national contingency plans and arrangements need to be exercised and I urge the responsible authorities to give this the priority it deserves.

Thank you.