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An Integrated Approach to Oil Spill Preparedness and Response

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An Integrated Approach to Oil Spill Preparedness and Response

Proceedings of a Conference held on:

November 28 and 29, 2005

St. John's, Newfoundland and Labrador

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on behalf of

Newfoundland and Labrador
Environmental Industry Association

May 2008

Dedication

To the memory of Charlie Riggs,
former Executive Director of the Newfoundland and Labrador Environmental Industry Association, who played a pivotal role in the organization and success of this conference.

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Abstract

The planning and organization of a response to a major oil spill is a topic of continuing interest, concern and development. It is critical to understand the lessons learned from experiences elsewhere in the world and apply them in a local context. To this end a conference bringing together Canadian and international experience and expertise was held in St. John's Newfoundland and Labrador in late 2005.

This report records the proceedings of that conference in some detail. The Conference's Canadian and local focus was complimented by the participation of experts from Australia, Norway, the United States, the International Tanker Owners Federation, and international oil and gas and shipping companies. This collaboration produced useful insights for anyone concerned about the planning, organization and technical and jurisdictional co-ordination required in the event of a major oil spill. These insights are reflected in both the conference recommendations and the analysis of the outcomes of a table top spill response exercise carried out during the conference.

Sommaire

La planification et l'organisation d'une intervention à un important déversement de pétrole constituent toujours un sujet d'intérêt, de préoccupation et de rebondissement. Il est essentiel de comprendre les leçons tirées d'expériences vécues ailleurs dans le monde et de les appliquer localement. Dans cet esprit, une conférence mettant en commun l'expérience et l'expertise canadiennes et internationales a été organisée à St. John's (Terre-Neuve-et-Labrador) à la fin de 2005.

Le présent rapport fait état des délibérations de cette conférence. La collaboration canadienne et locale à cette conférence a été complétée par la participation d'experts de l'Australie, de la Norvège, des États-Unis, de l'International Tanker Owners Pollution Federation ainsi que de sociétés internationales pétrolières, gazières et de transport. Cette collaboration a donné lieu à des réflexions utiles pour quiconque se préoccupe de la planification, de l'organisation et de la coordination technique et territoriale nécessaire pour faire face à un déversement de pétrole important. Ces réflexions ressortent dans les recommandations de la conférence et l'analyse des résultats d'un exercice de simulation sur table effectué pendant la conférence.

1.0 Background to the Conference

The Newfoundland and Labrador Environmental Industry Association (NEIA) became directly involved with oil spill prevention and preparedness through on-site observations of cleanup operations in Spain following the *Prestige* oil spill in late 2002. Several individual NEIA member companies already involved in oil spill response also observed these response operations.

NEIA members noted, in particular, the challenges of managing large amounts of oiled waste associated with response operations. Within a few months of these observations, NEIA had organized an international conference in St. John's to specifically address the issue of oiled waste management and the situation in this province. This conference, *Learning from Experience — Fostering Leadership*, was held in November 2003 and focused on the specific issues, experiences and solutions associated with oiled waste management for spills off coasts around the world and the application of the lessons learned to Newfoundland and Labrador.

NEIA members had also noted in Spain and elsewhere — that spill prevention and response preparedness benefited significantly from integration of information, planning and resources among stakeholders. As a consequence, and with the support of the Environmental Studies Research Funds (ESRF), NEIA decided to address the question — *Is there integration in oil spill response planning among the stakeholders (potential polluters, governments and communities) in Newfoundland and Labrador? And, can it be improved?*

As it had done successfully on the topic of oiled waste management, NEIA decided to address this question through the mechanism of a focused international conference. This conference would call upon the experience and lessons learned from other areas of the world as well as on Canada's own spill preparedness regime. Conference speakers would be asked to address the extent of integration in their country's approach to oil spill prevention and response, the basis for that integration, and the benefits and challenges. Conference participants would then use this information to address the situation in Newfoundland and Labrador.

1.1 Conference Planning and Processes

The Conference planning committee was representative of the stakeholders involved in oil spills, and most members were familiar with ongoing efforts related to integrated oil spill response regimes. Through the committee, the Conference was able to identify and attract knowledgeable and experienced leaders as speakers, facilitators or rapporteurs. A list of conference speakers and their biographies is provided in Appendix A.

The planning committee developed a Conference format and program that would maximize the opportunities for the international experience to be presented, discussed and applied to the situation in Newfoundland and Labrador. The committee also ensured that over the two days of the conference ample time was available for informal discussions among the participants. The list of workshop participants is provided in Appendix B.

On Day 1, the spill response regimes currently in place in Norway, Australia and the USA were described from several view points to provide information to Conference attendees on the challenges and benefits of adopting an integrated approach to spill response preparedness.

These presentations provided the basis for the breakout sessions held at the end of the day. For the breakout discussions, delegates were divided into five groups, with each group having a cross section of representatives from each sector. Each group addressed the same questions in a facilitated discussion with a designated rapporteur providing feedback to the Conference.

On Day 2, Canada's spill response regime was outlined, again from a number of points of view relevant to Newfoundland and Labrador. The concerns and needs of two specific stakeholder groups, the communities and the media, were also presented. A tabletop oil spill simulation exercise provided an opportunity to view an integrated approach to spill response. The international guests were role players representing the responsible party, the communities, the media, NGOs, government agencies, and supporting groups such as response contractors. These presentations were followed by breakout discussions and a final general discussion based on the rapporteurs' reports.

1.2 Levels of Integration

During the Conference planning, there was considerable discussion of 'integration': What did it mean? How did it work? Who was involved or affected? It was agreed that there were three major 'levels' of stakeholder: the community, the responsible party, and regulatory agencies, and that within each of these levels, there were several groups. Integration would be achieved through both vertical and horizontal exchange, co-operation and collaboration. Jim Dempsey of Cormorant Ltd., a member of the Conference organizing committee, developed a graphic representation of these various levels of integration (Figure 1), which was used throughout the Conference.

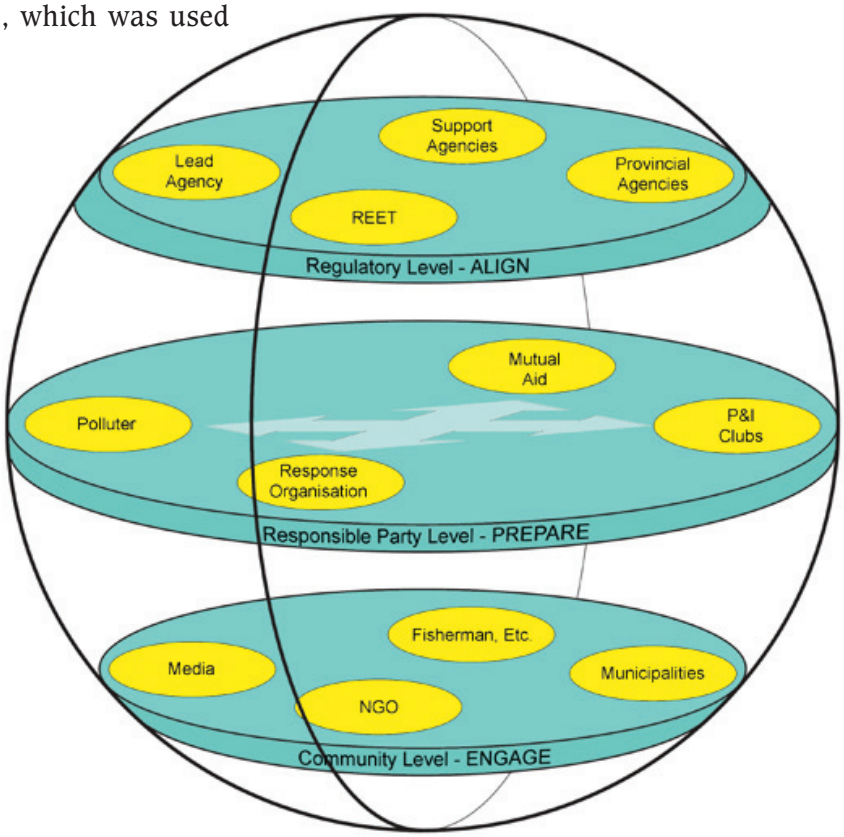

Figure 1: Levels of Organization and Integration Involved in the Response to an Oil Spill

2.0 Day 1 Conference Presentations

2.1 Welcome

Charlie Riggs
Executive Director
NEIA

Delegates were welcomed, with special greetings extended to invited international and Canadian guests. The 2005 Conference was a follow-up to the successful 2003 NEIA Oil Spill Conference that had also focused on a specific aspect of spill response preparedness. In 2003, the issue addressed was oiled waste management. The focus of the 2005 conference was integrated spill response.

2.1.1 Minister's Remarks

Hon. Tom Osborne
Minister of Environment and Conservation
Government of Newfoundland and Labrador

Oil spill prevention had been a subject of interest to the Minister for some time. How should this province and this country prepare for such an event? Were present resources adequate for a major spill? Could any existing response plans be improved?

Minister Osborne had recently visited Norway to view, first-hand, the impressive oil spill preparedness and response system that was in place. Norway had been attentive to building its oil spill response system for a long time and had been acquiring and placing equipment in strategic locations.

Equipment alone could not prevent a spill and if there was a spill, environmental damage could not be prevented. Having an effective plan in place, however, would ensure that damage was minimized. To this end, there was a need to get all partners — producers, the three levels of government, the transshipment facility, tanker owners/operators and the refinery — to work together so that the roles of each could be defined and understood by the others. The Canadian Coast Guard had a role in spill response, as did others. The Minister believed that there was room for improvement in response preparedness.

The Department was well represented at the Conference and the Minister looked forward to a report on Conference discussions.

KEY MESSAGES

- Do we have enough of the right equipment to respond to a major oil spill off our coasts?
- Is the current level of oil spill contingency planning within the province adequate to manage a major spill response?

- While there are many private and public sector stakeholders, the Canadian Coast Guard should have a primary role in response.
- The Province of Newfoundland and Labrador considers oil spill preparedness to be an important issue and is closely monitoring activities in the province.

2.1.2 Progress/Update from 2003 Conference

Charlie Riggs
Executive Director
NEIA

The focus of the 2003 NEIA oil spill conference was the management of oiled wastes resulting from a major oil spill and the question was 'are we ready?' Since the Conference, the federal government had supported the development of the 2003 planning document *Toward an Oil Spill Waste Management Strategy for Newfoundland and Labrador*. The Government of Newfoundland and Labrador had sponsored a review of the report's recommendations and was seeking to act on the report. Challenges remained, including engagement of community groups and other stakeholders.

The focus of NEIA's 2005 Conference was integration in oil spill response: integration of the efforts, information and resources of the community, regulators and industry stakeholders. The Conference premise was that an integrated planning process that engaged all players would increase the effectiveness of response preparedness.

In preparation for this conference, NEIA developed a graph to illustrate the integration of the three primary stakeholders in spill response: community, responsible party and regulatory agencies. In addition to interaction **among** stakeholders at each level, there were links **between** levels, making the need for integration multidimensional. This model (see Figure 1, Section 1.2), visible throughout the conference, was to remind participants to think about collaboration, both horizontally and vertically.

KEY MESSAGES

- This conference is a natural extension of the Oil Spill Waste Management conference sponsored by NEIA in 2003.
- Integration is multidimensional and involves many and diverse stakeholders.

2.1.3 Conference Facilitator

David Salt
Alliance Technical Director
Oil Spill Response Limited (OSRL)

Mr. Salt emphasized that the subject matter of the Conference, integration of an oil spill response, was one for which there was no easy answer.

The goal of a response was to minimize damage yet have a robust response.

This required a planned response with appropriate resources and depended on the management and integration of all players.

There was no one right answer. The challenge was how to look to the various models that had components that fitted into the environment and situation here in Newfoundland and Labrador.

KEY MESSAGES

- No easy answer to integration.
- Each community or jurisdiction must find its own model.

2.2 Plenary: An Integrated Response to Oil Spill Preparedness and Response?

Kathi Stanzel
Senior Technical Advisor
International Tanker Owners Pollution Federation Limited (ITOPF), London

It is essential that participants realize they are all stakeholders in a major oil spill.

It is important that there be co-operation and collaboration among all players, as all are stakeholders. Communication is key. The challenge is how to put these concepts into practice. Who and how to get things done?

To illustrate the characteristics and benefits of a well-planned integrated response, Ms Stanzel drew upon her involvement in an incident that occurred in a port in Brazil. A methanol tanker was anchored at a private jetty, adjacent to an oil jetty. There were other jetties in the area. The vessel had been discharging cargo but had also taken on 200 tonnes of fuel oil for continuation of the voyage. There was an explosion on the vessel resulting in an initial leak and concern about subsequent slow leakage of the heavy fuel oil.

The stakeholders included port authorities, owners of the vessel and of the cargo, neighbouring companies, and several insurers (the ship owners, owners of the cargo, third party liability and P&I clubs).

In Brazil, as in Canada, the ship owner is responsible for leading the response to an oil spill. It is not a government-led response.

An initial meeting among stakeholders was unproductive. The parties had conflicting plans and priorities. While all had their own plans, the individual plans had been created without parties consulting one other; so there was no clear understanding of who was in charge or how each role fit in with the others. The governments at the regional and national levels had had no experience with a spill. Pressure to act was mounting in the area.

Eventually the ship owner accepted responsibility and stakeholders agreed on a strategy.

Ms Stanzel identified several issues that hampered the response and that could have been addressed by collaborative pre-planning (an aspect of integration):

- The contingency plan had been written by someone who had never visited the site. Therefore, the plan did not consider local conditions.
- There was no database of response equipment.
- Maps of the area used different local names, resulting in confusion.
- There were no maps showing the location of protected areas.
- Stakeholders had not agreed on priorities for protection.
- Many people wished to be involved but without pre-assignment of roles, people were not informed as to tasks and work necessary.
- Because it was tourist season, political considerations could override the response plan priorities.
- The need to balance industrial priorities and those of residents involved in the traditional aquaculture industry had not been addressed prior to the spill.
- Throughout the situation, there were people living in remote areas who were impacted as they depended on the bay for food.

The issues that had to be addressed while the response was ongoing in this spill provided some valuable insights into issues that can and should be considered when pre-planning for oil spill responses.

- **Logistical Arrangements** — There will be competing demands for transportation of equipment, food and workers, and knowledge of local infrastructure is essential.
- **Surveillance and Monitoring** — The location of re-fuelling stations must be considered. There must be consideration given to sites that are difficult to access. It may be that surveillance and monitoring helicopters and ships should also carry supplies to support the response effort.
- **Contracting and Health and Safety** — The availability of trained personnel is a concern. The legal aspects of employment must be addressed and vary from country to country.
- **Training** — Response operations may well be undertaken in challenging environments demanding a level of safety and/or environmental training. There will be a need for teamwork; so this must be part of the program.
- **Equipment** — It may be that the equipment required will be low-tech, such as shovels, sieves and buckets for beach cleanups. It is important to be prepared to adapt methods to suit the situation.
- **Funding** — Access to funding in the short term must be considered. For example, in Brazil, by day 20 of the spill response, there were expenditures of $2.7M.
- **Cleanup Methods** — Methods must be adapted to suit the circumstances. Different types of oil may require different cleanup methods. There can be public and/or political pressure to use active cleanup measures when, in reality, it is better to wait for nature to address the problem.

- **Integrated Decision Making** — Involving the stakeholders is time-consuming but leads to informed decisions. For example, the team had to decide whether or not to cut down the plants in the saltwater marshes. Saltwater marshes protect mangroves. The whole team visited the area and decided not to cut down the plants that were about to seed because that would help nature to address the issue.
- **Political, Environmental and Technical Aspects** — For integrated management, all three aspects must be considered.

Ms Stanzel pointed out that integrated management had to take political, technical and environmental aspects into consideration. Unfortunately, people tended to collaborate on planning only after an incident had taken place and not in the pre-planning stage.

Questions/Comments

1. **Q:** Was deflection booming employed?
   A: Yes.
2. **C:** Conference Facilitator, David Salt, noted that when there was a major incident, all of the issues to think about became apparent and that was what drove the response. He noted that legislation was retrospective. Events such as this conference provided an opportunity to look forward.

The recurring theme in all incidents is who is charge? In the UK, there is one person in charge. The situation is different in Australia with responsibility assigned by jurisdiction. The key to integration is communication between everyone involved. Priorities must be set. The responders must be adaptable to the situation. Nature is working against you. Nature is trying to spread the oil while you want to contain it.

KEY MESSAGES

- Communication between all stakeholders is a must.
- Many individual, stand-alone response plans cannot be successfully implemented.
- Integration involves technical, operational and environmental issues.
- Pre-planning among all stakeholders is needed so that response priorities can be assigned.
- It is critically important that all parties involved understand who is in charge of the response.
- Too often, collaboration begins only after an incident, not during planning.

2.3 Session 1 – The Norwegian Experience

David Salt opened this session by stating that Norway was an example of how one country had developed an integrated spill response system. Offshore petroleum production activities commenced offshore Norway in 1974 in an environment similar to that of the east coast of Canada. A major spill occurred within a short time after production had started and this

had prompted consideration of what was needed for a response system for such events and of the legislation needed to support its creation and enforcement.

2.3.1 The Norwegian Approach to a Fully Integrated Oil Spill Response

Tharald Brekne
Operations Director
Norwegian Clean Seas Association for Operating Companies (NOFO) Stavanger

Oil production in Norway is based offshore, in cold (including Arctic) and harsh environmental conditions.

The oil spill response system in Norway is based on co-operation between industry and government. The relevant legislation in Norway is based on the potential to pollute. Response planning must be proportional to its risk of pollution.

Municipalities respond to minor spills and in other situations (including shipping); the government responds through the Norwegian Coastal Authority. However, if the spill is from offshore petroleum operations, the response is by industry and the operators. The operators have established NOFO as their spill countermeasures co-operative.

NOFO, an industry spill response association, was established in 1978 after the first major offshore spill at Ekofisk. NOFO currently operates with a budget of $20M. This covers training, research and development, and the retaining of ten administrative officers and a staff of one hundred. Among its other roles, NOFO plays a part in spill notification and management.

Norway's oil spill response capability is based on co-operation and contractual agreements between operators, government and private interests. When required, the members have access to the resources of NOFO at cost.

The co-operation between the oil and fishing industries will be of interest. Agreements are in place for the use of vessels in the event of oil spills. There is an ongoing forum to ensure communication between industries and a dedicated Web site that helps to maintain communications.

Spill contingency planning sessions are held regularly and are open to the public. Training and exercises are an important aspect of NOFO's role, and planned events involving 200 – 400 people are held every year and include participation by municipalities. The importance of engaging communities in response planning, in training exercises and in response efforts is stressed.

In Norway, there is an expectation of continual improvement of the spill response system. One of NOFO's goals is to be able to operate oil spill responses in all conditions, night or day, in any visibility.

Norway's model of co-operation results in a highly effective oil spill response.

Questions/Comments

1. **Q:** Are helicopters used in surveillance?
   A: Yes. Industry is using helicopters anyway and spill surveillance radar can be installed quickly.
2. **Q:** Are resources expected to match the type of release?
   A: Resources are to match instantaneous release.
3. **Q:** Can government call on NOFO for resources?
   A: Yes, government can do so by law. NOFO is pleased to oblige as this also tests its resources and assists with staff training.
4. **Q:** Instant release is thick. Can dispersants be used?
   A: Yes, this is not an issue in Norway.
5. **Q:** Does the use of satellites contribute to faster cleanups?
   A: It is most important to detect a spill early. One example is a new field in the north. It is an underwater installation; so it is important to have early detection to be able to pick up underwater spills.

KEY MESSAGES

- The Norwegian spill preparedness and response system involves the community, the national government and industry.
- There is direct co-operation between industry and government in planning.
- NOFO is a spill response co-operative owned by all offshore operators.
- The offshore oil industry and the fishing industry have agreements and arrangements in place for direct co-operation in spill response.
- Spill contingency plan reviews are open and public.
- NOFO and the Norwegian government have an expectation of continuing improvement in spill response capabilities.
- Emphasis is placed on including coastal communities in response planning and operations.

2.3.2 Norwegian Oil Spill Control Association (NOSCA) Exercise Report

Jim Dempsey
Cormorant Ltd.
St. John's

In October 2005, NOSCA hosted its 12th seminar on oil spill response in association with a planned major oil spill exercise off the Norwegian coast, north of Stavanger. It was a significant event with 50 international representatives from 16 countries. The session involved government, operators and the community. NEIA attended as an observer. The scenario was

based on an incident in an area that was similar to the coastline of Newfoundland and Labrador.

The simulated event for the exercise was a collision between a tanker and a floating platform. In this scenario, the polluter, response organization, parties contributing to mutual aid and the lead agency from the regulatory perspective were involved.

The exercise gave participants an opportunity to view offshore exercises and participate in onshore briefings, as well as visit NOFO facilities and attend presentations at the NOSCA seminar.

KEY MESSAGES

- NEIA facilitated an opportunity for members and the provincial government to experience a major oil spill exercise using an integrated response approach.
- The seminar and gear demonstration associated with the exercise was co-ordinated by NOSCA.

2.3.3 An Exercise at ExxonMobil's Balder Field

Jan Allers
AllMaritim AS/ Nord Marine Services Limited
Bergen

The October 2005 exercise was designed to assess the adequacy of both operational aspects and equipment used in oil spill response by offshore operators in Norway and the UK operating in the North Sea. The Norwegian Oil Spill Control Association (NOSCA) was an observer at the exercise.

The exercise used popcorn and bark as 'oil' to simulate an oil spill. Several different vessels were used in the exercise, including a converted fishing vessel now operated by the coast guard for oil spill response, a large offshore vessel with a trained crew and skimmer system onboard, a landing craft for shore access, and a multipurpose vessel from the municipalities.

Questions/Comments

1. **Q:** What type of skimmer was used?
   A: A modified version of a 400-cubic-metre weir skimmer.
2. **Q:** Who were the owners of the vessels?
   A: The landing craft is privately owned and was on charter for the exercise. In Norway, with 64 fields active offshore there is a large pool of vessels available.
3. **Q:** Were there time limits to consider?
   A: Government dictates that there is a limited time in which there is to respond. It is a matter of hours depending on the circumstances. Generally, response is within hours of the spill.
4. **Q:** How is the involvement of local community groups funded?

A: There are regulations affecting municipalities that dictate participation in an oil spill cleanup. Community groups are funded by municipalities themselves. The cost of their actual involvement in a spill or exercise is paid by the polluter and government.

KEY MESSAGES

- Municipalities were actively involved in the exercise (Fire Brigade).
- Community involvement was funded by government and industry.

2.3.4 Municipal and Community Involvement

John Marius Ly
Norwegian Coastal Administration (NCA)
Oslo

Norway has 80,000 km of coastline. There is a large shipping industry co-existing with marine activities, fisheries and oil production. After the blowout of an offshore oil well, there was public and political pressure to ensure that an effective response capability was put in place.

The Norwegian Coastal Administration (NCA) is the regulatory authority for oil spills but not the regulatory authority for the petroleum industry. The goal of the NCA is to ensure national preparedness for oil spills.

The mandate of the NCA's Department for Emergency Response is to direct and co-ordinate and provide advice to the responsible party in an oil spill. The mandate also includes oil spill response training, surveillance and reviews.

The principles guiding preparedness in Norway are spill prevention and risk-based response capability (not the worst-case scenario).

The response objective is to get as close to the spill as possible to reduce further pollution. Response priorities are: (1) *life, health and safety* (2) *natural resources* and (3) *economic interests*.

The Pollution Control Act, 1981 outlines the responsibilities of the polluter and the response systems that are to be activated: the polluter pays for the cleanup and damages, and private industry is to respond to its own pollution and assist in its cleanup.

- Each private operator is to establish a plan for preparedness and assist municipalities and government in a response.
- Government is responsible for spills from vessels.
- Municipalities are responsible by law to plan, respond to, assist in and establish preparedness for minor spills, using a risk-based approach. The municipalities in the 21 response regions with coastal areas have agreements in place with NOFO.

Government takes command of major incidents, will assist with equipment, and has the authority to regulate and prepare for spills in areas not otherwise covered, e.g., maritime

traffic. In any spill event, NCA ensures that there is one incident commander with advisers who have access to information and liaisons with those who know the environment best.

The resources at the disposal of the NCA include 15 depots located along the coast with 10 supplementary vessels and aircraft. There is co-operation with the Coast Guard, and vessels and response equipment is appropriate for the environmental conditions, including those of the Arctic. Annual full-scale exercises involve all players.

Questions/Comments

1. **Q:** Does the on-scene commander have the authority to use dispersants?
   A: If use of dispersants is in the plan for the location and the plan has been approved, dispersants are approved for use.
2. **Q:** Does the NCA have authority to bring a stricken vessel into a port without the municipality's agreement?
   A: Yes, such decisions can be taken, but it is preferable to have consultations with the municipality.
3. **Q:** What is the preparedness risk-level?
   A: Based on scenarios of spills up to 20,000 tonnes.
4. **Q:** What is required in municipal contracts?
   A: Not all municipalities are located on the coast. The requirement is to have reasonable equipment and training.
5. **Q:** Can oil be spilled as part of an exercise?
   A: In a joint exercise involving private industry and government, an application can be made to use oil in the exercise. This can be approved in areas and/or times for small amounts, i.e., 60 cubic metres, most of which is recovered.

KEY MESSAGES

- An offshore blowout prompted development of Norway's oil spill preparedness regime.
- Preparedness is based on prevention and risk (not worst-case scenario).
- Under legislation, municipalities are required to have oil spill response plans.
- The NCA has an established organization chart that shows the roles of industry, government and communities. In any one event, there is one incident commander, supported by advisers who, in turn, have links to local information.
- Authorized oil spill response plans clearly state the operations and countermeasures that may be considered by the On-Scene Commander (e.g. Chemical Dispersants).

2.3.5 Norwegian Spill Response Regime: Summary

- An integrated system was created after an oil spill occurred. The system is based on response measures with legislation to support its creation and enforcement.
- The legislation is premised on polluters paying for the spill.
- Required preparedness and response plans are based on prevention and are risk-based. In efforts to prevent and reduce further pollution, the priorities are life, health and safety, natural resources and economic interests.
- Municipalities respond to minor spills. Government, through the Norwegian Coastal Authority, regulates, directs and may become involved in the response. Industry responds to spills from offshore operations through an industry alliance, NOFO. Government does take command of major spills and spills from vessels.
- The system is based on co-operation between government and industry. Industry must develop a plan proportional to its potential to pollute. There is an obligation to notify, an obligation to assist and an obligation to interact with others. By law, all necessary resources can be mobilized.

2.4 Session 2 – Oil Spill Planning In Australia

2.4.1 Integration and a National Contingency Plan

Paul Nelson
Manager Environmental Standards
Australian Maritime Safety Authority

Of the 20 million people who live in Australia, 90% of them live on the coast. The country is organized into six states and two territories.

Australia has a national plan for oil spill response that integrates government with industry. Emergency response planning, including response to oil spills, was initiated in the early 1990s, following three separate spills, each greater than 1,000 tonnes.

National oil spill and chemical spill plans are in place. Funding for the national plan is obtained from a levy imposed on ships carrying >10 tonnes of oil. In addition, there are local, state and industry response plans.

The Australian Maritime Safety Authority (AMSA or the Authority) is responsible for contingency planning, equipment and support systems as well as training. The Authority's mandate is to develop administrative plans to respond to pollution outside three nautical miles. The Authority has a national management structure overseen by a committee that includes the oil industry. The management committee meets once per year and the operations group meets three times a year.

The national response team maintains national contingency plans. A national database identifies trained personnel and equipment. The Authority undertakes research and development projects. An oil spill response atlas and an oil spill trajectory model are in place.

Regional Memoranda of Understanding (MOUs) with neighbouring states provide for mutual aid when required.

Training is provided to AMSA management and staff appropriate to their level and responsibilities in a spill event. Training is also provided for the local port authority employees, including the Harbour Master, Response Agency Management and the Incident Controller.

There are three tiers in response planning: Tier 1 >10 tonnes local response; Tier 2 10 to 1,000 tonnes regional response; and Tier 3 1,000+ tonnes national response. Equipment stockpiles are classified according to risk. Tier 2 and Tier 3 stockpiles are at specific locations with appropriate resources.

Over the past ten years, there have been 3,514 reports of spills and the Authority responded to about 50 per year.

Oil companies work together on spill response. As well, the industry, i.e. all companies, and AMSA subscribe to a mutual aid plan.

The Australia Marine Oil Spill Centre (AMOSC), set up as part of the Australian Institute of Petroleum and funded by industry, manages the stockpiles of response equipment. The equipment is fully packaged and ready to be deployed. AMOSC funds half of the cost of fixed-wing aircraft of the management structure for accessing equipment when it is required. Services also include dispersant distribution and use of fixed-wing aircraft, major airstrips and dispersant sites throughout Australia.

AMOSC provides emergency services to an affected company at the Tier 2 level of response while the Port Authority is the Incident Controller. At Tier 3, the industry is responsible for response and must have a plan as well as logistical support. Since the *Exxon-Valdez* incident, equipment with a value of $10M has been stockpiled. The Authority can access resources and pays for their use. Resources are available for any type of spill at a fair cost and recovery of the cost is sought from the polluter.

Australia is also involved in a global response network. It is involved in the planning capacity for Southeast Asia. There is an effort under way to improve world coverage and move towards a call one, call all system.

In Australia, there has been a successful integration of planning, training and resources by government and industry. There is joint determination of how money is to be spent and, to ensure that equipment is compatible, what investment is to be made. Integration is achieved not through legislation but through a system of MOUs outlining the roles and responsibilities of each party.

Current issues include:

- Funding arrangements between five authorities for competency-based standards and training.
- A contingency plan for a chemical spill response.
- **Places of refuge.** A national 'places of refuge' assessment guideline has been developed; however, no places have been designated.

- **National towage scheme.** Because incidents have been minimal, there is no commercial towage capacity. There are plans to purchase an emergency towing (ER) vessel. It is proposed that the levy for oil be used to purchase this vessel and help outfit existing vessels in ports for towing capability.
- **National state authority.** A single management decision-maker model, comparable to the UK's system, is being considered.

The Australian model demonstrates the proven effectiveness of a genuine partnership. AMOSC provides the basis for effective integrated response.

Questions/Comments

1. **Q:** What is the largest oil spill that can be handled?
   A: Twenty thousand tonnes has been determined to be the largest spill that could be handled. AMOSC has a 10,000-tonne capability.
2. **Q:** What is the level of involvement of regional government in designating the place of refuge?
   A: The issue is within the jurisdiction of the state; however, the federal government can override the state.
3. **Q:** How are the sites of dispersant stockpiles managed?
   A: Through a risk assessment that includes, among other issues, traffic patterns.
4. **Q:** Who is in charge?
   A: The command lies with whoever has the jurisdiction. Within three nautical miles, it is the state with industry acting in an advisory role. At Tier 3, the industry is in command with access to AMOSC. In the event of a spill outside three nautical miles and oil drifting ashore, the state handles the shore response while AMSA manages the offshore aspects.

KEY MESSAGES

- Australia developed an integrated national approach to oil spill response following three major oil spills off the coast.
- Funding for the national plan is obtained through a levy on vessels carrying more than 10 tonnes of oil.
- Oil companies work together to respond to spills.
- All companies and the Australian Maritime Safety Authority have a voluntary mutual aid plan.

2.4.2 Australian Spill Response Regime: Summary

- Australia has an integrated system that was set up after three major spills. The system is based on a series of MOUs outlining roles and responsibilities and includes mutual aid. The system is not based on legislation.

- The Australian Maritime Safety Authority (the Authority) collects a levy imposed on shipping that is used to fund the national response team. The Authority also has research and development functions.
- The Authority has a national management structure that includes the oil industry. The Authority decides on budget allocation and other priorities for the national response plan.
- The Australia Marine Oil Spill Centre (AMOSC) provides emergency services for a Tier 2 spill (10 to 1,000 tonnes). The industry is responsible for Tier 3 spill or spills of > 1,000 tonnes with its own logistical support but can access AMOSC equipment at cost of use.
- There is an integrated training program that is jointly sponsored.
- The model is one of partnership. Co-operative approaches are used to examine new issues and advance the spill prevention and response agenda.

Luncheon Presentation –

Community Integration: CN Derailment and Spill at Wabamun Lake, Alberta

Rob Dickie
President
Nichols Environmental (Canada) Ltd.

A train derailment occurred on August 3, 2005 at Wabamun Lake in Alberta, spilling light Bunker C oil plus a quantity of pole treating oil onto the beaches and into the lake.

The lake's shores are home to an Aboriginal community of 700 people and, with cottage development, includes 1,500 properties. There are four major power producers and one commercial fishing enterprise on the lake.

There was a lack of emergency response preparedness both by the carrier and at the local level. As a result, no emergency response was initiated in the first hours following the spill. There was little communication with residents in the immediately affected area or with the villages across the lake.

Without leadership or direction, there was little activity for three days. Stakeholders blocked the railroad tracks and the resulting media attention facilitated response to the incident.

A strong and credible spokesperson for the area's stakeholders was effective in expediting cleanup operations, obtaining compensation and ensuring residents' participation in response planning and implementation.

The Alberta Department of the Environment issued an environmental protection order naming the carrier as the responsible party and assumed the role of lead agency for the response. An environmental consultant began working with the carrier. A Shoreline Cleanup Assessment Team was formed to implement the cleanup and treatment of waste. An advisory group was also set up and procedures were developed to assist with cleanup operations.

A headquarters was established for the incident and temporary command centres set up in churches. Public meetings were held with stakeholders present. Stakeholders were able

to explain the history of the lake and its uses. Two local people worked directly with these centres as representatives of the lake community.

Communication was a priority and a communications group was set up. This group would host public meetings as stakeholders wanted presentations to inform them of what was happening. The establishment of a Web site proved to be an effective communications tool.

The importance of a prompt response and open and effective communications among and between regulatory authorities and the community were among the lessons learned through this experience.

Questions/Comments

1. **Q:** What was the cost?
   A: The cleanup cost $60M to 75M.
2. **Q:** What was the response to oiled shores and properties?
   A: Excavation primarily both for the areas contaminated by bunker C and by pole-treating oil. This took two to three weeks to complete.
3. **Q:** How was the oil at landfill sites managed?
   A: Oil-contaminated soil will be used as cover material at secure landfills (lined, monitored).

KEY MESSAGES

- No pre-planning for emergencies had been done by the carrier, the regulatory agencies or the area residents.
- The lack of immediate leadership led to a political profile for the spill. In the absence of leadership or a plan, the community used political pressure to obtain action.
- Community involvement proved to be critical in providing information and assistance to the response team as well as in communicating with the community.
- Communication is key to resolving issues. Web sites can be an effective tool.

2.5 Session 3 – US Oil Pollution Act and Community Integration

2.5.1 OPA 90 – 15 Years Later: Operator's Perspective

David Fritz
Crisis Management Co-ordinator
BP America

The question of prime concern in any incident is "Who is in charge?" In the USA, this question has been answered by the Oil Pollution Act (OPA 90).

Historically, in the USA, there have been ad hoc responses to oil spills, with little co-ordination between government and industry and no agreed or common incident management system.

The enactment of OPA 90 following the *Exxon Valdez* spill fundamentally changed this situation.

National oil spill cleanup organizations were formed. A national fund was created. Oil companies established well-resourced and well-trained oil spill response teams. Regional and local response planning is in place. Planning requirements have been made mandatory and mandatory exercises are used to determine preparedness requirements. Vessels and facilities must have contingency plans with sensitive areas identified and equipment listed and available to assist in a response effort. Databases containing useful information have been developed, for example, a sensitivity atlas used for planning purposes.

An incident command system developed by the Forestry Services has been adopted for use in all national responses for all incidents. With a structure similar to that used in Australia, the responsible party takes the lead in the cleanup with oversight agencies ensuring that the spill is cleaned up to standards. Government can take control of the response if it is not satisfied. However, there is increased public and political credibility if all parties are working together.

The system established under OPA 90 has resulted in greater awareness of the importance of prevention of major spills. Since OPA 90, there have been fewer spills and, of the spills that have occurred, most have been related to bunker fuel, not cargoes. There is more equipment available and there has been tremendous consolidation of response capability. The net result of all of these measures is fewer contractors. Industry and government are working together and there is better co-ordination. There has been less public outcry related to oil spills.

Further proof that the system is working as it should be can be found in the southern USA. With all the damage caused by Hurricane Katrina, during which there were probably as many as 8 million to 9 million gallons of oil spilled, the media was silent because all parties were working together to resolve the situation.

Questions/Comments

1. **Q:** Who is in charge?
   A: The answer depends on where you are. Both state and national governments have roles. Personalities play a part in of this. There are differences in terms of coast vs. inland.
2. **Q:** When are plans most likely to be effective?
   A: The quality of response plans varies. If there is little stakeholder input, this can cause a problem. It is best if those who prepare the plans are also involved in implementing them in an incident.
3. **Q:** Is OPA 90 accepted in the industry?
   A: From a large company's viewpoint, OPA is a good thing. Smaller companies contract out; therefore their experiences can be different and it may cost them

more. At first there was resistance to OPA, but now the industry is happy it is there. Now the system is used in any crisis.

4. **Q:** Is ICS used outside the US?
   A: Officially, yes. However, sometimes it is a stripped-down version because the ICS tends to be bureaucratic.
5. **Q:** What is in the future for private spill contractors?
   A: Industry wants to use contractors for small cleanup jobs. Unfortunately, the equipment is dated. There is no incentive to upgrade equipment because there are not many incidents. The smaller response contractor industry has its head in the sand at the moment.

KEY MESSAGES

- A major spill prompted legislation and establishment of a national oil spill regime.
- There are mandatory planning requirements.
- There is increased public and political credibility regarding oil spill preparedness when all parties work together.

2.5.2 OPA 90 – 15 Years Later: Insurer's Perspective

Charles B. Anderson
President
Anchor Marine Claims Services Inc.

In an oil spill situation, P&I Clubs (insurance companies) cover third party liability including:

- cargo liability,
- pollution liability,
- loss of life and personal injury,
- damage to fixed or floating objects,
- liability for collision damage not covered by hull policy, and
- wreck removal.

From the P&I Club's point of view, initial actions that should be taken by the polluters include appropriate notifications to the relevant authorities, e.g., Coast Guard, national and local authorities. Polluters are encouraged to co-operate with the authorities. This is important in order to protect insurance coverage.

In a spill event, the involved P&I Club(s) try to have a qualified technical advisor on site. Ideally, this person would be integrated within the unified command system so as to better understand both the decisions being made and the progress of the response. This knowledge is helpful when interviewing witnesses, collecting samples and preserving evidence.

The legal framework is founded on the premise that the responsible party is to cover damages. Liability extends to:

- removal costs,
- natural resource damage,
- damages to real or personal property,
- lost revenue,
- loss of profits and earning capacity, and
- loss of public services.

Costs range from mechanical containment and recovery to media costs, fines and penalties and attorney's fees. Liability can arise from many sources but of primary concern are cleanup costs, Coast Guard costs, third party claims, media and PR costs, natural resources damage assessments (NRDA) and criminal liability.

Cost containment strategies, to some extent, can be developed in advance by updating contingency plans and pre-arranging contracts for cleanup. If possible, involve regulatory agencies in the development of response plans and assigning response priorities and techniques. Human factors, such as personality clashes, untrained responders, profiteers and political agendas should be expected and managed.

A property claims management process should be established as soon as possible with an easy method for claimants to initiate contact, e.g., a toll-free telephone number. A public relations and media plan should be developed: disclosure can establish public trust and confidence.

Criminal liability can attach to many who are involved in the incident, that is, the company, its directors and managers, ship owner and the ship's captain and crew. Potential polluters should understand their obligations and take actions such as the following:

- Maintain a high level of safety practices,
- Be aware that some states present a high trading risk,
- Update oil response plans,
- Take public relations issues into consideration,
- Provide prompt notice to the Coast Guard and state authorities,
- Set up environmental safety programs, and
- Handle evidence properly.

In recent years there have been fewer spills. Oil spills now attract both criminal and civil liability suits and the cost of spills (response and damages) is on the rise.

Questions/Comments

1. **Q:** Where does P&I Club refuse coverage?

   A: This is a timely question. Intentional acts are excluded. Deliberate acts are excluded. There is discretion with respect to extending coverage, depending on circumstances.

KEY MESSAGES

- The Braer spill prompted a new approach to oil spill response monitoring by P&I Clubs.
- Polluters are encouraged to co-operate with authorities to ensure that they have insurance coverage.
- Spill frequency is declining. Costs, however, are increasing.
- Criminal liability (as well as civil) is now a factor in oil spills.

2.5.3 Response Operations under OPA 90 – From the Beach to Unified Command

Heather Parker-Hall
Senior Scientist
Polaris Applied Sciences

When an incident occurs, response operations are required and the key questions are the following:

- Who are the responders?
- How do they interact?
- What agencies are there to co-operate with the responder?
- How will information flow? Who assumes leadership?

In the United States, there is an overarching national response system that defines the interactions between players on specific response levels: National, Regional and Area/Field.

The US Coast Guard is the prime federal agent and can step in if the federal co-ordinator is not satisfied with the response effort. There is one agency for the state and that agency acts as a representative for the Governor. The state agency is a member of the unified command. Co-operating agencies have no direct role in response, but there are places in the process where they can get involved or be consulted.

Among the strengths of the US system is the fact that it facilitates information flow between all involved, whether integrated horizontally or vertically. It also assists with planning at all levels.

There is a defined response directed by the unified command and all activities are to be in line with that direction. Horizontal integration is based on the pattern of unified command representation. Vertical integration is based from the field to command post to corporate/regional level to the national level.

Area contingency plans provide an excellent basis for co-operation. An area committee develops an area contingency plan that is co-chaired by the state and the Coast Guard. The area committees are set up along the lines of the Coast Guard zones, or 'sectors'. The contingency plans facilitate information flow, establish leadership within the response system, and ensure that the plan is integrated with other area contingency plans. The area

committees are responsible for maintaining and implementing the plan and act as a forum for stakeholders.

The incident command system is used primarily by actual responders to manage operations in the field. The incident command system is structured to promote good leadership. All decisions are made jointly and include the input of the entire unified command. Co-operating agencies and other stakeholder groups may be asked for input.

The system has evolved since OPA 90. There have been changes for each of the responders in terms of goals, progress and system achievements.

- The system has facilitated strong central leadership.
- Exercises have been conducted to ensure a state of readiness.
- There is consistency in contingency plan content.
- Scientific and technical expertise with an interest in oil spills and hazardous chemicals has been developed. Efforts are being made to continue testing and improving.

There are negative aspects to the system:

- Political agendas from outside unified command can interfere.
- Personalities play a role in the process. Personnel changes can impact decisions and the implementation of those decisions.

It is possible to have an integrated system. It takes a lot of investment in its growth and evolution, and a willingness to continue to integrate. There must be appropriate representation in the key roles and an understanding of the components of a successful system. Open dialogue and effective horizontal and vertical integration are essential in an integrated system.

Questions/Comments

1. **Q:** In British Columbia the issue is how to overcome the challenges involved in co-ordinating departments that do not have the necessary capacity to respond. Is this addressed in the US system?

   A: In the US, the problem is the rotation of people without the necessary experience to contribute to the response.

2. **Q:** How do you address changeover of staff? Do you have a policy of new staff shadowing more experienced staff?

   A: No, there is no policy. We have an ad hoc response depending on the circumstances. For example, in some situations the weather drives the response. Sometimes it is as simple as changing people if given the opportunity.

KEY MESSAGES

- The incident command system promotes good leadership. It allows for joint decisions and consideration of all views, resulting in clear direction.
- OPA 90 has resulted in strong central leadership.
- Integrated systems require effort, time and willingness.

- Open dialogue and effective horizontal and vertical integration of information and co-operation are essential to integration.

2.5.4 Lessons Learned from the Cook Inlet Regional Advisory Council

Susan Saupe
Director of Sciences & Research
Cook Inlet Regional Citizens Advisory Council, Alaska

Oil and gas production has been ongoing in Cook Inlet since the 1960s. There are 14 platforms operating in the area. The infrastructure is dated and includes an undersea pipeline. There is extreme tidal action in the head and mouth of Cook Inlet with currents circulating counter clockwise. There are sensitive environmental issues in the area, e.g., shoreline habitats and high sediment loading.

Prior to the *Exxon Valdez* spill, there had been a certain complacency on the part of the oil industry and government officials, and there was distrust between local communities and the oil industry.

Following the spill, the Cook Inlet Regional Citizens Advisory Council (RCAC) was set up as a mechanism to build public confidence and trust by enabling public participation. The mission was to represent the citizens of Cook Inlet in promoting environmentally safe marine transportation and oil facility operations in Cook Inlet.

The Cook Inlet RCAC is an advisory body only and has no legislative authority. The mandate is established pursuant to OPA 90. Its role is to help monitor the environmental impacts of oil and gas production and it has specific duties relative to prevention, response, operations and safety. Funding of $1M is sourced through an allocation under OPA 90.

The Cook Inlet RCAC has a board of directors representing community interests. It has an organization structure with three key departments: public outreach, operations and science and research. Projects are undertaken through partnership arrangements to fulfil the mandate. Projects have included developing tools for use in response mapping an example being the Web-based coastal habitat inventory and conducting intertidal reconnaissance surveys.

The RCAC is a single point of contact for all interest groups, makes it possible for Cook Inlet residents to be heard and provides access to expertise and educational resources. There is an opportunity to leverage funds. The existence of the Cook Inlet RCAC prevents complacency.

The Cook Inlet RCAC was a demonstration program under OPA 90. Lessons learned include:

- There is a need for continual funding.
- Citizens can be independent of industry even with industry funding.
- Federal oversight and mandate ensures citizen input and funding,
- It is impossible to meet the needs of each representative organization.
- There is a need for a strong outreach and education program.
- Citizens are more effective through having a formal relationship with agencies.

- Complacency is a continual threat.
- Sometimes lack of "teeth" is frustrating.

Questions/Comments

1. **Q:** Is the area better off with the RCAC?
   A: Overall, there has been a positive response to the RCAC. It has helped with the identification of deficiencies and with citizen participation. The RCAC has been asked to participate in incidents and exercises.
2. **Q:** How does the RCAC communicate with communities?
   A: Through its annual reports, outreach efforts and public meetings. There are quarterly Board meetings at different locations within the region. As well, specific projects get some public profile; a recent example was a discussion about ports of refuge.
3. **Q:** Are the fishers on the Board?
   A: Yes.
4. **Q:** Does RCAC address produced water? Is it considered an issue as it is elsewhere, for example in Norway?
   A: Any new facilities would be expected to address the issue of produced water, but it would not be economically feasible to require this of the existing platforms. Formations are considered unable to accommodate re-injection.
5. **Q:** How long has RCAC been monitoring environmental effects?
   A: Extensive monitoring has been ongoing since 1993. No effects have been discerned although this may be related to the high levels of sediment in the water that make measurement difficult.

KEY MESSAGES

- The Regional Citizens Advisory Council (RCAC) is a means of building confidence and trust between citizens, regulators and the oil industry.
- The RCAC provides a single point of contact/access for citizens, industry and researchers.

2.5.5 USA Spill Response Regime: Summary

- The United States introduced the Oil Pollution Act (OPA 90) in response to the major *Exxon-Valdez* oil spill. As a result of the legislation, leadership in a co-ordinated oil spill response has been defined. An incident command system has been adopted for all national responses for all incidents, including oil spills.
- A unified command structure is in place for oil spills under the responsibility of the Coast Guard. An incident command system is present at the site to manage the cleanup. Both systems are integrated horizontally and vertically. The responsible party takes the lead in cleaning up according to standards. Government will assume control if it is not satisfied with the response.

- Preparedness requirements include developing plans, training with mandatory exercises, contracting with responder organizations and providing resources for response teams.
- To ensure that the insurer's rules are followed and coverage is not compromised, it is important that all relevant authorities be notified of the spill and that the responder be proactive.
- The system established under OPA 90 promotes good leadership, preparedness and access to resources (human, equipment and information) in the event of an oil spill.
- Communities have a stake in oil spill response and can be an asset. It is important to have a mechanism to facilitate the input of communities, a mechanism that must be funded and sustained to combat complacency.

2.6 Breakout Session 1

Breakout sessions at the end of each day of the Conference were used to gather the key messages about integrated spill preparedness and response arising from the day's presentations and, where possible, relate them to the Newfoundland and Labrador context.

Conference delegates were assigned to one of five breakout groups. Efforts were made to try to have a mix of expertise and mandates in each group. A facilitator and rapporteur were assigned to each group. Following the individual breakout sessions, the rapporteur assigned to each group presented a summary of the group's discussions and key points to the full conference.

Discussion points were provided to the rapporteur and facilitator to ensure a focus and consistency in the issues discussed by each group. The discussions and presentations on the results of the breakout sessions addressed the following:

- What were the key messages delivered during the session?
- Leadership (e.g. authority, exercise of authority, timelines, credibility)
- Resources (e.g. funding, knowledge, skills, training, infrastructure)
- Management/Implementation (e.g. planning, community involvement, exercises)
- Disclosure/Communication (e.g. strategy and plan, among agencies, to the public)
- What is working with respect to integration?
- What are the challenges for successful integration?
- How are the challenges to be addressed?

The question posed to the breakout groups at the end of Day 1 was:

What are the key features of integration?

The reports of the breakout groups are compiled in Section 2.5.1 and the key messages based on discussions during the plenary session are summarized in Section 2.5.2.

2.6.1 Breakout Group Reports: Compilation

What were the key messages delivered during the session?

Leadership

- There is a need for someone to assume leadership in the event of an oil spill.
- The leaders must have the authority to take control.
- The leader must be credible and knowledgeable about the industry and the local environment, including communities.
- The leader must build trust among all stakeholders.
- There is a need for a champion to promote the development of an integrated oil spill response.

Resources

- There is available knowledge within the industry that can be used to develop an effective oil spill response capability.
- Knowledge of local communities, the environment and resources must be incorporated.
- There is a need for co-ordination of the available local resources (financial and trained personnel) in order to respond successfully.
- Financial support for local communities would encourage participation in an integrated response.

Management/Implementation

- Industry players have plans in place.
- Even with the plans in place, there can still be uncertainty as to who is in control under the Canadian regime.
- Exercises are essential for testing and improving plans.
- Volunteers need their duties defined and must be given training.

Communications

- Communication is essential between all players including the public.
- There must be timely information about a spill.
- Using many forms of communications, e.g., Web sites, public meetings, is important so that information is shared and everyone is kept informed.
- The media will be involved at the time of crisis and should also be involved when exercises are under way.

What is working with respect to integration?

- In Newfoundland and Labrador, people in the response community know one another and there are existing formal and/or informal relationships. This is a positive asset in a response scenario.
- Local communities have resources, including knowledge of local circumstances that can be very helpful, if accessed.

What are the challenges to successful integration?

- Because there has not been a major oil spill affecting this province, complacency is evident.
- The plans in place are not integrated.
- Trust has to be developed and sustained by all players.
- It takes time to establish relationships and trust after there has been turnover of personnel.

How are these challenges to be addressed?

- There are resources available but there are gaps. These gaps need to be identified through a gap analysis.

2.6.2 Breakout Session Discussion: Summary

- Every one of the five breakout groups emphasized the need for a single entity with a clear leadership role in a spill event. Leadership for spill response is clear in the jurisdictions reviewed, i.e., the UK, Norway, Australia and the USA. There does not appear to be a clear identification or clear understanding of the leadership role in the Canadian spill response regime.
- For the most part, communities in the province are not actively seeking integration. Tankers have been passing the coast now for years and there has not been a major spill. It was suggested that the apparent complacency may, in part, come from the fact that there has not been a specified role for communities in spill response.
- Conference participants involved in preparedness planning and/or experienced in spill response know that communities will become involved in a spill, willing or not, because they serve as staging areas or stand to accommodate response workers and provide waste storage. Communities themselves are not necessarily aware of this.

2.7 Day 1 Wrap-Up

David Salt thanked delegates for their participation and said that Day 2 would focus on the oil spill prevention and preparedness regime in Canada and specifically in Newfoundland and Labrador.

3.0 Day 2 Conference Presentations

3.1 Opening Remarks by Conference Facilitator

On Day 1 of the conference, the spill preparedness and response systems in Norway, Australia and the United States were reviewed. Although each system has its own unique characteristics to ensure an integrated approach to preparedness and response to an oil spill, two specific similarities were noted:

- Someone needs to be given the task of considering inputs from all levels and making a decision after all inputs are received
- Integration needs a champion to provide a focal point and leadership. The champion must have a recognized mandate.

The stakeholders in integration must have common objectives, be willing to co-operate with one other and have open communication. Data and resources must be shared in order to respond successfully. The plan that is developed should be skill-based, not based solely on jurisdiction, to ensure that a spill response manager can access the most appropriate skills and resources to suit the circumstances.

The spill prevention and response regime in place in Canada has yet to be tested by a big oil spill. Based on the discussions on Day 1, there appears to be a perception that the regime is fragmented and there is keen interest in finding a mechanism to ensure that the knowledge, skills and resources needed for response preparedness are available, whether they are within government, industry or the community. The framework supporting oil spill preparedness and response must be sustainable and led by an agency or 'champion' with authority and credibility.

3.2 Session 4 – The Canadian System

3.2.1 The Canada Shipping Act and Oil Response

David Yard
Sr. Marine Safety Inspector
Transport Canada

The Canada Shipping Act (CSA) and its regulations govern commercial and recreational vessels in Canadian waters. The legislation applies to all Canadian vessels and vessels in Canadian waters.

There are five key environmental objectives for the CSA:

- Accelerating the phase-out of single-hull tankers and to eliminate substandard vessels.
- Stopping the illegal discharge of oily waste in Canadian waters.
- Ensuring the effectiveness of spill response, liability and compensation regimes.
- Reducing air emissions from ships, particularly in environmentally sensitive areas.
- Preventing the introduction of alien species from ballast water.

Canada's Preparedness Response Regime was established in 1995. The regime is built on a partnership between government and industry. A key principle is that the polluter pays for preparedness and pays for reasonable response costs. All oil handling facilities and all ships of a certain size are required to have an emergency response plan.

There are four governing statutes (CSA, Arctic Waters Pollution Prevention Act, Fisheries Act and Oceans Act). The 60th degree of latitude divides the waters between Arctic and non-Arctic waters. International conventions are also part of the regime, e.g., International Convention for the Prevention of Pollution from Ships, MARPOL 73/78.

Transport Canada is charged with overseeing the CSA. Transport Canada's responsibilities include setting standards, certifying response organizations, designating handling facilities, overseeing national preparedness, performing a monitoring function, and enforcement.

The Canadian Coast Guard (CCG), a division of the Department of Fisheries and Oceans, is responsible for the provision of national preparedness and oil spill management. CCG assumes responsibility for spill management when the polluter is unknown, unwilling or unable to respond.

In the event of a spill, the polluter is the on-scene commander and will use its contractor, the accredited Response Organization, for response operations. CCG monitors the response and if not satisfied that it is adequate, can assume spill management. The Regional Environmental Emergency Team (REET) provides advice to the on-scene commander. The REET typically includes provincial and federal representatives from relevant departments and agencies and can be a means of integrating local knowledge as well.

Transport Canada is responsible for trans-boundary joint planning with the US, Denmark (Greenland), France and Russia, as well as US-Canada joint marine pollution control, and ensuring an appropriate degree of preparedness and response.

An oil spill risk assessment has been undertaken in response to the increased traffic related to oil exploration and production along the south coast of the Island of Newfoundland. The study assesses the risks posed by this traffic over the next ten years and will be of use in planning marine oil spill response and emergency preparedness. Transport Canada is working closely with other federal government departments and stakeholder groups, including NEIA.

Questions/Comments

1. **Q:** What are your enforcement measures?
   A: Increased aerial surveillance through fixed wing aircraft, increased awareness of illegal discharges, increased fines and streamlined enforcement capability.
2. **Q:** How quickly do you receive data from your satellite?
   A: Data are received near real time within 1 hour and 20 minutes Atlantic time and it takes a little longer in British Columbia.
3. **Q:** Is the federal response to a major spill in the Canadian Coast Guard system parallel to that of industry?
   A: Yes, when a major spill occurs, government has to be able to monitor all aspects of the response and be on top of priorities, review plans, etc.

4. **Q:** Does the Canadian Navy play a role in oil spill response?
   A: The Navy plays a support role, e.g., spill reporting and enforcement. Also the resources of the navy such as C-130s can be put to use in response, when required.
5. **Q:** Could you comment on the model that is based on partnership with industry?
   A: Prior to 1995, oil spill response was the responsibility of the Canadian Coast Guard and not tied with industry. Since 1995, a partnership has existed. The shipping industry pays for services used. There have not been any issues about government accessing equipment from companies in the event of major disasters. This is a model used in other types of disasters.

KEY MESSAGES

- The polluter is on the On-Scene Commander.
- Government assumes responsibility for response if the polluter is unknown, unwilling or unable to respond.
- The Canada Shipping Act, the legislation governing the oil spill response regime, is being updated.

3.2.2 The C-NLOPB and Spill Response Offshore Newfoundland and Labrador

Dave Burley
Manager Environmental Affairs
Canada-Newfoundland and Labrador Offshore Petroleum Board (CNLOPB)

The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) is responsible for regulating the offshore petroleum industry. The C-NLOPB reports to the ministers responsible for energy in the federal government and the government of Newfoundland and Labrador.

The responsibilities of C-NLOPB are broad and include:

- Administering a rights issuance and land tenure system,
- Ensuring that activities are conducted in a safe, environmentally prudent manner,
- Assessing and ensuring conservation of petroleum resources, and
- Promoting industrial and employment benefits.

Under its mandate, the C-NLOPB works with other agencies, both federal and provincial, and accomplishes this through Memoranda of Understanding (MOUs). MOUs have been negotiated with the departments responsible for environment, fisheries and transportation. The MOU with the environment departments recognizes the Regional Environmental Emergency Team (REET).

The definition of "spill" is a discharge, emission or escape of petroleum other than one authorized by legislative authorities. C-NLOPB has a relatively narrow jurisdiction. However, the C-NLOPB is the lead agency for drilling and production currently taking place at three

sites on the Grand Banks and for exploratory drilling units when on site. The C-NLOPB is a resource agency in other cases, e.g., for supply vessels and shuttle tankers.

The response regime is similar to that of the CSA and is based on the "polluter pays" principle. The polluter is responsible for the cleanup. The C-NLOPB can intervene if the operator response is not satisfactory. Contingency plans must be developed and filed with the C-NLOPB.

The oil spill response planning elements are typical for this type of response. Tier 1 is in the field; Tier 2 is in provincial waters; and Tier 3 is national or international. The operator's plan is the basis for the specific command and control structure and communication procedures, identifies resource requirements and has provisions for personnel training. Resource-sharing provisions are in place among the operators.

Questions/Comments

1. **Q:** Does the C-NLOPB have copies of the contingency plans of operators?
   A: Yes.
2. **Q:** Do all operators have their own contingency plan? Are they integrated?
   A: All operators have their own plans. There is a degree of integration since the plans must acknowledge one another's existence and demarcate boundaries. Each must consider REET and summarize where each player fits within model.
3. **Q:** In an oil spill situation, what is the jurisdiction of the C-NLOPB?
   A: The C-NLOPB's mandate applies to spills from units on sites under its jurisdiction. If there is a leak in the sub-sea as well as in the intra-field flow lines, in the loading system itself or in the loading flange at the tanker hose break, the C-NLOPB is responsible.
4. **Q:** While there are insurance regimes involved in oil spills, what is the financial liability in the legislation?
   A: This is not as developed as it is in the ship source world. The question of insurance turns on liability; if there is no fault, there is a limit as prescribed in legislation. If there is negligence, then the insurance policy and the law govern.
5. **Q:** Is it correct that transshipment is not under the jurisdiction of the C-NLOPB?
   A: That is correct. The transshipment terminal is an oil handling facility.

KEY MESSAGES

- Offshore oil and gas operators must provide spill contingency plans to C-NLOPB.
- Under offshore petroleum regulations, the polluter is responsible for cleanup.
- C-NLOPB can intervene in a cleanup if operator response is not satisfactory.

3.2.3 The Role of REET in Private-Sector Response

Roger Percy
Head of Emergencies
Environment Canada

Environment Canada's role in oil spill response is to work with other agencies to provide technical advice. It does not have operational responsibility, except when a federal incident occurs.

The primary mechanism that Environment Canada uses to fulfil its role and provide expertise on environmental sensitivities is through the Regional Environmental Emergency Team (REET).

In Atlantic Canada, REET is chaired by Environment Canada and acts as the principal adviser to Transport Canada, the Canadian Coast Guard and the C-NLOPB. It provides co-ordinated advice to lead agencies in emergencies, participates in exercises, is active in both civil and pollution emergencies, and participates in both planning and response modes. REET relies on partners to provide the response effort with the resources required.

The benefits of REET are that it:

- offers a focus for advice provided to the lead agency in a spill,
- provides a forum for consensus building and dispute resolution,
- helps set priorities in a cleanup,
- minimizes environmental damage through pre-planning efforts, and
- maximizes the use of limited regional resources.

Questions/Comments

1. **Q:** The Migratory Bird Convention Act (MBCA) parallels the CSA. The MBCA has broad scope and can reach into boardrooms. How are investigations conducted and by whom?
   A: There is a joint effort. Environment Canada will consider environmental issues and the Department of Justice will decide if the prosecution is going forward. There are MOUs in place between the two departments. There have been recent amendments to the Act.
2. **Q:** REET is regional in focus. How does this operate locally? And can REET be a mechanism for engaging communities?
   A: When an incident occurs in Newfoundland and Labrador, the focus is on the local office with support provided from the regional office. National resources are available when required.

KEY MESSAGES

- REET provides a forum for pooling information from a number of agencies in order to provide co-ordinated advice to the oil spill response team.
- REET can mobilize quickly and incorporate local, non-governmental expertise.

3.2.4 Oil Spill Preparedness: Industry Planning, Collaboration, and Co-operation

Urban Williams
Environmental Coordinator, Hebron Project
Chevron Canada Limited

The Canadian Association of Petroleum Producers (CAPP) offers the perspective of companies engaged in the oil and gas industry. There are 150 members in CAPP with 500,000 employees in this industry across Canada. There are three projects in active production on the Grand Banks: Hibernia, Terra Nova and White Rose. Another field, the Hebron Project, is under consideration.

The focus of the industry is on prevention of oil spills. Prevention is the most effective way to avoid damage. All aspects of project design and operations incorporate a philosophy of prevention first, and mitigation of environmental impacts should a spill occur. The systems are designed to prevent releases into the environment. Policies and procedures, training and equipment are all designed to reduce the probability of a spill and minimize the effects if one should occur.

The offshore operators and regulatory agencies work together in six key areas.

- **Mutual aid** — Mutual aid is a requirement in the C-NLOPB safety plan guidelines. In the plans, there must be evidence of sharing of resources between operators. There is an MOU between CAPP and the C-NLOPB respecting mutual aid, specifically emergency response assistance. The mutual aid provisions can be activated if there is an incident or if one is imminent. The industry has access to Canadian Coast Guard spill response equipment if needed. There can be access to international resources.
- **Response organizations and training** — There is a common response organization, Eastern Canada Response Corporation (ECRC). Training is available through ECRC, Oil Spill Response Limited (OSRL), the Canadian Coast Guard and local companies such as Cormorant Limited.
- **Oil spill response plans** — Each company has its own response plan.
- **Standard equipment and procedures** — Operators require equipment suitable for the offshore operating environment of the Grand Banks. Typical equipment includes surveillance and tracking through aircraft and tracking buoys, Breco bird scaring devices and sorbent booms. The operators have among them five Single Side Sweep (SVSS) oil containment and recovery systems.
- **Seabird programs** — There are populations of seabirds on the Grand Banks that have been identified as at risk in the event of a major oil spill. The operators support a seabird monitoring program.
- **Annual oil spill response exercise** — There is an annual exercise involving all stakeholders in the industry. This exercise tests the plans and identifies areas for improvement.

KEY MESSAGES

- Mutual aid agreements are in place among all offshore operators.
- Operators can access equipment through ECRC and the resources of the Canadian Coast Guard.

3.2.5 Industry Planning, Collaboration and Co-operation: Oil Tankers and Onshore Arrangements

John Henley
President
Newfoundland Transhipment Limited (NTL)

Newfoundland Transshipment Limited's (NTL) Whiffen Head transshipment terminal is located in Placentia Bay on Newfoundland's south coast. There are two piers for vessels with pipelines connecting from the jetty to a tank farm. Operational support includes two tugs with associated administrative support, equipment and facilities, as well as a containment boom. There is security at the site. The site is fully fenced and monitored.

Under the CSA regulations, the terminal at Whiffen Head has been rated as a Level 4 Oil Handing Facility (OHF), meaning that it handles crude at a rate of 3,000 metric tonnes per hour. A level 4 OHF must meet the standards set by the CSA to contain a spill of 50 metric tonnes per hour. NTL has an arrangement with the Eastern Canada Response Corporation (ECRC) to provide 10,000 metric tonnes response capability. There is a containment boom available on site and workboats are available in the event they are required.

In addition to the CSA, the terminal and associated tankers must also abide by international conventions such as the MARPOL requirements and other conventions. Canada is a signatory to the Civil Liability Convention (CLC). There must be P&I coverage and other certificates before entering Canadian waters. Liability limits are set in accordance with the CLC. P&I Clubs and the International Oil Pollution Compensation Fund (IOPCF) cover the cleanup. In Canada there is an additional compensation fund, the Ship Source Oil Pollution Fund (SSOPF), with limits that exceed those of the IOPCF.

A tanker is subject to strict liability in the event of a spill. The tanker will lead the recovery operation. The tankers must have an arrangement with a certified response organization while it is in Canadian waters. Mr. Henley presumes that the Canadian Government will intervene if the response is not timely or adequate. The industry will assist if a tanker experiences a spill.

The goal is prevention. However, it is important to plan for an event and to be positioned to respond. Efforts by NTL to mitigate include:

- Vetting of all vessels to weed out high-risk vessels. The facility exercises the right to allow vessels to use the terminal only if they meet acceptable standards.
- Escorting of all laden vessels with purpose-built tugs. Escort tugs are not required but have been introduced by NTL.

- Participating in annual on-water exercises to test plans. The facility uses lessons learned from the exercises and there is continuous training of employees and contractors.
- Participating in local committees, e.g., Placentia Bay Traffic Committee.

NTL has the capability to plan and respond since its stakeholders have access to trained personnel and equipment. Co-operation and collaboration among the petroleum industry is good. Resources can be accessed from abroad as well. Specifically, there have been planning measures undertaken to ensure preparedness in the event of a spill in Placentia Bay. The industry has a vested interest in ensuring that high standards are maintained.

The industry has a good track record. There is no incentive to cut corners. NTL is focused on preventing spills and if a spill occurs, the focus would be on containment and cleaning it up.

KEY MESSAGES

- NTL puts significant effort into spill prevention through its operational practices, including vessel vetting, escort tugs, exercises and communication with other groups using Placentia Bay.

3.2.6 Canada's Oil Spill Response Regime: Summary

- Since 1995, Canada has had a spill preparedness and response regime in place to handle spills of 10,000 tonnes. Newfoundland and Labrador has not experienced a major oil spill.
- Canada's oil spill response regime is based on the 'polluter pays' principle and has legislation that can be used to support an oil spill response. An oil spill at an offshore rig or platform is subject to comparable requirements in the Atlantic Accord. Canada is also a signatory of several international conventions and requirements.
- There is no one agency charged with the command of an oil spill response.
- Transport Canada is responsible for administering the Canada Shipping Act (CSA). The Canada Newfoundland and Labrador Offshore Petroleum Board is responsible for the Atlantic Accord. The Canadian Coast Guard, Department of Fisheries and Oceans, is responsible for oil spill management. Environment Canada is to provide technical advice with operational responsibility when a federal spill occurs. The Regional Environmental Emergency Team (REET) is a multi-agency advisory group for the responsible party.
- The preparedness and response regime is based on a partnership between government and industry. There is a capacity to handle a spill of 10,000 tonnes. The system is based on the "polluter pays" principle. All designated oil handling facilities and vessels of a certain size are required to have an emergency response plan.
- The offshore petroleum industry is focused on prevention and on working together. Response plans have a consistent format including a mutual aid component, training and joint exercises.
- Government and industry response plans are not integrated.

3.3 Session 5 – Community Planning

3.3.1 Emergency Services in Newfoundland and Labrador

Fred Hollett
Director of Fire and Emergency Services
Department of Municipal Affairs

Ten significant emergency events occurred in this province between 2000 and 2005, including storm surges, major flooding, hurricanes, fire, emergency evacuation of isolated communities, and search and rescue.

The vision of the Fire and Emergency Services Division of the Department of Municipal Affairs is for the people of the province to enjoy safe, healthy communities through effective fire protection and emergency preparedness.

The Division helps communities draw up emergency plans and conduct exercises. At this time, however, there is no legislative requirement for communities in the province to have emergency plans.

The Division offers emergency management and fire protection training courses that meet international standards.

The Division also administers the federal/provincial Disaster Financial Assistance Program to compensate for losses in events such as floods. It is not an insurance program but an assistance program that provides funding to help people live at a reasonable or safe standard.

The Director of the Division is also responsible for the province's Emergency Measures Organization (EMO). EMO works with representatives at the municipal level. It also has stakeholders in the federal and provincial governments, the not-for-profit sector and other interested parties.

EMO recognizes that small communities are challenged to do emergency planning because they have limited resources. They will have to develop partnerships with organizations that have access to the necessary resources. Communications is the key to the successful activation of an emergency response plan. Most plans will be based on engaging communities and stakeholders.

Local volunteer fire departments are not necessarily ready to respond to an oil spill. They need specialized emergency planning and resources. Partnerships should be built with those who have knowledge of oil spills. Most communities will respond to the extent of their capability.

Emergency situations can be managed. Key components include determining who has the jurisdiction, providing training and exercises, and establishing effective communications.

Questions/Comments

1. **C:** The fire departments in the province are under-resourced and under-staffed, and staff are under-trained. In Australia, there is a levy imposed and some funds are

provided for fire departments. In Norway, by law, fire departments are required to engage in emergency planning.

2. **Q:** There is a gap in Newfoundland and Labrador because a limited amount of funds goes back to communities for fire protection. Please comment on this situation.

   A: Mr. Hollett agreed with the delegate. Norway makes it possible for fire departments to respond. We do not have the same capacity in this province. Manitoba has a fire tax levy that is part of the insurance premiums to offset the costs of fire fighters. After all, how much can be expected from a volunteer service?

3. **C:** Norway fire departments do not have government funding. Municipalities have to fund the service themselves and they do this through group efforts. There are regional partnerships to share resources and there are cost-sharing agreements in place to help provide the services. Mr. Hollett supports the regional approach. The cost is not one that a single municipality can bear.

KEY MESSAGES

- The Province does not require communities to have emergency response plans.
- EMO offers emergency management training and can help communities draw up and implement emergency plans.
- EMO takes an "all hazards" approach to emergency management.
- Communications is the key to successful emergency response.

3.3.2 Community Planning, Resources and Engagement

Joan Cleary
Mayor
Come By Chance, Placentia Bay, Newfoundland and Labrador

Come By Chance is a town of about 300 people located in Placentia Bay near a crude oil refinery and the NTL transshipment terminal at Whiffen Head. The town has benefited from the presence of the oil industry. The town has a good tax base; so it has money to invest in community facilities such as a fitness centre and a network of trails. There is a high level of employment. Unlike many small communities experiencing depopulation due to out-migration, there are young families with children in the community. And unlike many rural communities with an economy based on the fishery, there are only two fishers in Come By Chance. There has been a harmonious relationship between the fishery and the oil industry.

Most residents of Come By Chance do not think about an oil spill. The town had talked about developing an emergency preparedness plan for 10 to 15 years. A recently arrived resident with an interest in emergency planning is now heading up a committee to develop a plan in consultation with EMO. The committee and the town realize that in order to have an effective plan it will be necessary for the plan to be based on working with other agencies.

Some communities do have emergency plans but typically these plans, have been developed without knowledge of the plans of other communities. For example, the town of Come by Chance does not know what other communities/plans may be expecting of them. The roles of the other stakeholders need to be defined.

Among the greatest challenges facing small communities in Newfoundland and Labrador is the ability to work together as a region. Small communities must aim for co-operation. The plan being developed for Come By Chance incorporates collaboration and co-operation and may be a template for other small communities.

Questions/Comments

1. **C:** Come By Chance harbour is a highly vulnerable place for an oil spill. Fasteners should be pre-situated at both sides of the river so that in the event of an oil spill booms could be quickly put in place as a preventive measure to keep oil from getting into the river.

KEY MESSAGES

- Communities have to stop being complacent about emergency planning.
- Communities need to work together for a regional approach to emergency planning.

3.3.3 Community Planning: Summary

- The Emergency Measures Organization (EMO) has a province-wide mandate although it is a small organization.
- EMO will help communities draw up emergency response plans. At present, the province does not have legislation in place requiring communities to have emergency response plans, although others in Canada do.
- An “all hazards” approach is used in emergency response planning. The plans are drawn up using an emergency management plan template incorporating mitigation, preparedness, response and recovery measures.
- The key to emergency planning is building partnerships to obtain access to necessary resources and effective communication with stakeholders.
- Residents of one small community located near a crude oil refinery and oil transshipment terminal are complacent, but the town council has started to draw up an emergency response plan with EMO assistance.
- It will be important for communities in rural Newfoundland to work together to achieve effective response preparedness through regional co-operation.

3.4 Session 6 – Media Involvement

3.4.1 Getting the Story Out

Russell Wangersky
Editor
The Telegram, St. John's, Newfoundland and Labrador

In the event of an oil spill, industry must appreciate that a spill is a public event. The challenge for industry is to determine how the media will fit into the story. If industry decides on a policy of limiting media access, industry should explain to media why access is limited. Industry should also be aware that no matter how much effort goes into limiting access, reporters will find their way onto the scene.

The first thing reporters will want is a photograph of an event, such as an oil spill, to provide a visual image. An oil spill cannot be treated like the release of an annual report of interest to a select number of people. The spill is an event of interest to the general public.

Reporters are not easily managed. It is better to give the media what they need or they will find alternatives. Speak or the oiled birds will do it for you. If the media does not get what they want, they will sense there is something else to be had.

The best strategy is to provide information to the media as honestly and as accurately and as timely as possible. Otherwise, industry is providing lots of room for misinterpretations and mistakes. Offer facts: size of the spill, progress of cleanup efforts, effects on people, cost of the cleanup and where there is hiring being done. Don't wait for the whole story; the media cannot wait. Provide what facts you can immediately.

Work with the media. The media is not your enemy; it is not your friend. Information will not always be what you want. Remember, the story does not belong to the industry. It is important to correct inaccuracies quickly because errors can create a larger problem. If information is provided to a reporter in the wrong way, report that fact to the reporter before it goes further.

Industry should develop relationships with the media and maintain them. Don't wait for a crisis. For example, long before a crisis occurs, tip off a feature-based story to develop a rapport with the media before the crisis occurs. When an event occurs, make it into a media experience.

In working with the media, develop an understanding of how the business works. Know the deadlines for both local and national media. Be sure to understand the deadlines and also the deadline for filing a correction. Use this understanding to schedule regular updates.

Industry should have a media plan in place. Be sure to have a trained spokesperson available on a 24 hour basis during an event. Do not speak off the record. In addition to having a media relations professional, provide front-line staff with training on how to deal with the media. Refer inquiries up the line to the media spokesperson.

There is no guarantee that a reporter will write what you want to be written. Reporters have their own perspective and editors may not be aware of a reporter's blind spots. If there is an error, correct it quickly and remain calm.

The key is to be available, accessible and accurate. If you hide, the story will continue — without you.

Questions/Comments

1. **Q:** During the previous presentation, there was discussion of the flood in Badger. How was that story handled from the media's point of view?

   A: The EMO staff worked with the media to come to an understanding of what was happening and how it was being managed. EMO facilitated the work of the media by establishing a positive relationship and setting the ground rules. The EMO staff had regular briefings and asked the media what they needed and tried to provide it.

2. **Q:** What triggers are at play to make a local story into national story?

   A: Sometimes a local story becomes a national issue when there is slow day on the national scene. Small communities do get noticed particularly when it is a strange story. The harder the story is to get, the less likely it will become a national story.

KEY MESSAGES

- Work with the media to ensure that timely (be mindful of their timelines) and accurate information is available.
- Provide regular, scheduled updates.
- Be available to the media 24 hours a day during an emergency.
- Build an informed media before any emergency event, e.g., provide information regarding milestones and feature events.

3.4.2 Media and Oil Spills: Bridging the Two Solitudes

Boyd Neil
Senior Vice-President and National Practice Director
Corporate Communications, Hill and Knowlton

Crisis communications is a specialty area. It is important to control the relationship with the media in events such as oil spills because miscommunication can lead to other problems.

In a spill event, industry tends to focus on technical aspects of the risk. However, the public deals with the perceived risk. The public asks, "How will this spill impact me and my family?"

The challenge for industry is to overcome the desire to be technical. The media will transmit information about the public's perceived risk and the media's interest will be based on reporting stories of human interest with key details delivered to the media on a timely basis. The media will not be interested in the technical information.

Oil spills attract the attention of the media. The media will be looking for the 'grabber' to capture the public's interest. The media will be interested in the human side, simplicity, explained statistics and fast information. They will not be interested in complexity and technical information.

The closer the media is to the event, the more coverage it receives. Industry cannot be sure of the angle that will be taken: political? environmental? economic? Each media outlet will have its own slant. If the media can find 'a chink in the armour', e.g., a lack of co-ordination in the response effort, it will be used to develop the story.

The recommendation is that industry take a proactive approach by seeking out the media. Call a news conference as soon as possible and ensure a regular information flow to the media. Inform your own employees very early on in the crisis because they can help defend the company in the situation. Proactive actions can include hand-delivered letters to stakeholders and contacting non governmental organisations, such as environmental interest groups.

The foundations of success lie in substantiating key messages and having direct dialogue with stakeholders. The messages delivered should be based on the "CAP" formula: Concern (75%); Action (20%); and Perspective (5%). Planning in advance of a spill is important. A stakeholder map ought to be developed with key messages to be delivered identified.

The media universe is expanding. There is a shift in power relationships because information is widely available through developments in technology. Instant communication is changing the media world. Be sensitive to these changes when developing a media plan for an oil spill.

You will be judged on how much care was taken to prevent the event, how quickly you responded, and how well you communicated.

KEY MESSAGES

- Crisis communications requires special training and attention.
- Understand the perceived risk of your business/emergency and try to address this in your information.
- Do not deluge the media or the public with statistics; provide meaningful information.
- Have direct dialogue with stakeholders.
- Understand that the message you give should be based on CAP:
- Concern =75%; Action =20%; Perspective =5%.

3.4.3 Media and Oil Spills: Summary

- An oil spill is a story of interest to the general public. The media cannot be controlled. It is recommended that industry work with the media to get the story out.
- Industry should not resist efforts by the media to obtain information. However, the interface should be based on a plan and relationships with the media, both developed before the event.

- There should be one spokesperson for the responsible party. The spokesperson must ensure a timely and accurate disclosure of information to the media. Since the media will try to have all information disclosed, there must be a solid basis for any restrictions.
- The basis of a good media response: Deliver messages based on the "CAP" formula (Concern =75%; Action =20%; and Perspective =5%).
- The media world is changing. New methods of passing on information are making information more accessible to the public; so events such as oil spills are increasingly in the public view.

Luncheon Presentation –

Pacific Coast Integrated Planning

Duncan Ferguson
Assistant Manager, Flood Hazard & Emergencies
British Columbia Ministry of Environment

Oil spill management in British Columbia (BC) is based on an integrated approach and involves the provincial government, industry and participation in a Task Force of Pacific States of the USA.

The BC Ministry of the Environment sets response priorities, ensures that there is an integrated response system, and activates the system in the case of an emergency. The Ministry has 17 officers and two teams in place to respond. Response teams have access to the Ministry's technological resources. The Ministry is the responder of last resort and is equipped to deal with small spills.

In an integrated response, overlapping jurisdictions must be considered and the roles of each player defined in advance. In BC, there are risks of oil spills posed by vessels, pipelines, trains, vehicles and a variety of coastal facilities. There have been major spills near to but not in BC, such as the *Exxon-Valdez* incident in Alaska.

The BC Emergency Response Management System (BCERMS) is a planning system for dealing with all types of crises. It is based on a central command system with an understanding established among the partners, all levels of government, First Nations and industry. A Task Force set up in conjunction with the Pacific States of Alaska, Oregon and Washington is also integrated into response activities when required. The provincial emergency response program is available to help local communities cope with spills. A joint management structure is used to oversee team efforts.

Stakeholders participate through various forums such as the BC Marine Spill Co-ordination Committee. Technical co-ordination is provided by an inter-agency committee with industry participation. It meets on an ad hoc basis. There is also a community-based forum in BC that deals with chemical spills.

The Pacific States Task Force was set up in 1989 following two spills: *Nestucca* and *Exxon-Valdez*. The agreement covers mutual aid arrangements including a plan for equipment and personnel transfers. The Task Force is comprised of senior-level personnel, e.g., the Deputy Minister. Its members meet once per year. Program managers who make up the co-

ordinating committee meet on a quarterly basis. There is a full-time executive co-ordinator. Task Force activities include efforts to improve tug rescue capability along the Pacific Coast, assessing ship risks, phasing out single-hull tankers, and promoting information sharing. Additional information regarding the activities of the Task Force is available on the Web site: www.oilspilltaskforce.org.

Because there has not been a major spill in some time, there is a degree of complacency in some agencies.

To sum up, an integrated approach to spill response is in place in British Columbia. The success of the response is based on partnerships. A unified command model is preferred, although this approach is not used by REET, which presents some problems. The integrated structure set up by the Task Force is working across international boundaries. The benefit of the Task Force is the ability to leverage limited resources. It makes it possible for BC to work with other jurisdictions and use systems in accordance with OPA 90.

Questions/ Comments:

1. **Q:** What is the difference between the system in BC and REET?
   A: BC has a truly unified command system whereas REET does not. The federal government will not use the unified command model.

KEY MESSAGES

- BC has worked diligently and proactively to have in place an integrated response capability both within the province and internationally through the Pacific States Task Force.
- The Pacific States Task Force was set up in 1989 following two major spills, *Nestucca* and *Exxon-Valdez*.
- The success of integrated response is based on partnership.

3.5 Session 7 – Panel Discussion on Large Oil Spill Scenario

In the panel session, several of the international experts participated in a table top response exercise related to a hypothetical spill incident in Placentia Bay, an area in Newfoundland and Labrador recognized as being at risk of a major oil spill.

The table top exercise was intended to achieve two objectives:

- To demonstrate the inter-connected character of the various stakeholders' actions and requirements and the need for clarity in roles and responsibilities in an integrated approach to an oil spill response, and
- To provide an opportunity for invited spill response experts to provide input for a Newfoundland and Labrador scenario.

3.5.1 Expert Panel

The role players had been assigned prior to the conference and had had time to prepare for their roles. This added an important level of realism to the table top exercise.

The role players provided realistic commentary on behalf of the agencies/organizations that they represented. They demanded information, showed frustration and impatience, questioned the effectiveness of the response, sought additional resources, expressed anxiety about compensation, and demanded a place on the command team. The positions and actions of the 'stakeholders' were tracked for the first 36 hours as well as during the first week of the incident, and are provided in Section 3.5.3.

The expert panel discussion was facilitated by Heather Parker Hall with input from David Salt.

Panelists:

GROUP	ROLE	PARTICIPANT	AFFILIATION
Community			
	Media	Boyd Neil	Hill and Knowlton
	Local Municipalities	Sue Saupe	Cook Inlet RCAC
	Resource Industries	Jan Allers	AllMaritim
	NGO	Kim Elmsie	IFAW
Responsible Party			
	Tanker Owner/Operator	Kathi Stanzel	ITOPF
	Cargo Owner	David Fritz	BP
	Response Contractor	Thorvald Brekne	NOFO
	Insurer	Charles Anderson	Anchor Marine
Government			
	Lead Agency	Paul Nelson	Australian Maritime Safety Authority
	Support Agencies	Johan Marius Ly	Norwegian Coastal Administration
	Provincial Agencies	Duncan Ferguson	BC DOE

3.5.2 Scenario Background

A brief summary of the scenario that was used is outlined below to provide context for the response outlined in Section 3.5.3:

Initial Incident and Spill

On October 15, the tanker Blue Horizon is inbound to the Head of Placentia Bay with a full load of crude oil. On its first visit to the bay, the ship overruns the pilot boarding station and then runs aground on a shoal at the mouth of the eastern channel of Placentia Bay. The No.1 starboard tank is pierced and 5,000 m^3 of crude oil is lost over a 12-hour period.

The grounding occurred at low tide and, even at full flood, the escort tug sent to meet the tanker is unable to move the ship off the shoal.

The Captain contacts the ship's owner and the Newfoundland agent to inform them of the incident. The agent contacts the Response Organization to activate the ship's response agreement.

First 36 Hours After the Spill

This phase of the response, is characterized by discharge of oil; a call is issued from the Response Organisation; personnel, equipment and vessels are mobilized; the spill management infrastructure is mobilized; there is early prioritization of response actions; and there is local and national media coverage.

First Week After the Spill

On the third day after the spill, a storm system passes south of the island bringing with it high winds that spread oil into other parts of the bay.

This phase of the response is characterized by full mobilization of spill response personnel, equipment and vessels from national and international sources; a management infrastructure is established, including field staging areas; the grounded vessel is successfully salvaged and the remaining oil is offloaded; and there is intense local, national and international media attention.

3.5.3 Panel Discussion

The panel discussion, as moderated by Heather Parker Hall, is presented in Table 1.

3.6 Breakout Session 2

The breakout groups and discussion points for the groups' facilitators and rapporteurs were established on Day 1 and stayed the same in Day 2. Discussion and the presentations on the results of the breakout sessions addressed the following:

- What were the key messages delivered during the session?
- Leadership (e.g. authority, exercise of authority, timelines, credibility)
- Resources (e.g. funding, knowledge, skills, training, infrastructure)
- Management/Implementation (e.g. planning, community involvement, exercises)
- Disclosure/Communication (e.g. strategy and plan, among agencies, to public)
- What is working in terms of integration?
- What are the challenges to be met for successful integration?
- How are the challenges to be addressed?

The question posed to the breakout groups at the end of Day 2 was:

> **What do we need to do in Newfoundland and Labrador to create the right level of integration among oil spill response stakeholders?**

The reports of the breakout groups are compiled in Section 3.6.1 and the key messages based on the plenary session discussions are summarized in Section 3.6.2.

3.6.1 Breakout Groups' Reports: Compilation

What Were the Key Messages Delivered During the Session?

Leadership

- There must be a champion for integration.
- There must be a leader, supported by regulatory authority, to drive integration efforts.
- Trust must be established to engage and involve communities and the public.

Resources

- An inventory of existing resources is needed to identify areas of duplication and gaps.
- All existing resources must be considered, e.g. EMO and provincial wildlife authorities.
- Communities must be encouraged to develop community emergency response plans that include oil spill response.
- More use should be made of the lessons learned from exercises.

Management

- All plans must be integrated, including communities' plans, and everyone must understand their roles.

Communications

- Communications between all the players must be improved beyond what they currently are.

What is working in terms of integration?

- ECRC and CCG are integrated. The informal arrangement should be formalized so it carries on through staffing and other changes.
- In the offshore petroleum industry, there are mutual aid agreements in place but there is no integration of spill resources and plans.

What are the challenges to be met for successful integration?

- There is a question as to who should lead integration efforts.
- There is no implementation at the community level. There is a lack of trained people and limited involvement to date. Both of these issues must be addressed.
- Best practices should be identified and disseminated to all players.

How are these challenges to be addressed?

- Leadership must be acknowledged. There must be authority provided through a legislated mandate. Leadership must assume control of that mandate.
- The community needs funding to participate, develop plans and provide training.
- Mechanisms for communication among all players must be developed.

3.6.2 Breakout Session Discussion: Summary

- The breakout groups discussed leadership from the point of view of who would lead an effort to integrate the activities and resources of industry, government and communities to achieve integrated spill prevention and response in Newfoundland and Labrador. It was agreed that integration would require a champion: someone or some agency with the necessary credibility and authority. In other jurisdictions, integration had been led by the national government, either on the basis of legislation or voluntary partnership
- With regard to resources, the breakout groups suggested that much of the information needed for response planning is available in Newfoundland and Labrador.
- Communities have not been actively included in spill response planning and are an unused resource.
- Communities are not automatically invited to participate in response planning or exercises and, typically, do not have the capacity or funding to participate. Industry players (operators, tanker owners and ECRC) are required to hold exercises involving their plans, people and equipment on a regular basis. Exercises could provide an excellent opportunity to involve the communities.

3.7 Wrap-up and Adjournment

After receiving the reports from the breakout sessions, David Salt noted that common themes had emerged during the two days of presentations and discussion. The leadership role in a spill event must be clear. Communities should be actively included in planning and response. This will require funding, possibly also resources and the building of relationships.

Discussions in the breakout sessions indicated that many resources and much of the information needed to support an integrated system already exist in the province, although, within various groups or agencies for the most part.

The action plan to achieve integration of the resources and plans for spill response preparedness in the province will need to involve a lot of people, particularly at the community level. Mr. Salt encouraged people to work together to use the advice and information from the conference to create an integrated system. Lastly, he thanked the delegates for their participation in the conference.

4.0 Appendix A: Conference Speakers

Conference Chair

Dave Salt

Alliance Technical Director Oil Spill Response Limited (OSRL)

Mr. Salt has been with OSRL for over 20 years. Prior to his current position, Mr Salt served as OSRL operations manager and general manager. He has worked as an engineering officer on tankers and as the pollution officer at a major North Sea oil terminal. Mr. Salt's direct response experience includes numerous international spills, including these major incidents: Haven, Nagasaki Spirit, Evoikas, Natuna Sea, Exxon Valdez, Patmos, Sea Empress, Katina P., and Toledo. He has given presentations at many international oil spill conferences, including NEIA's 2003 Oil Spill Waste Management Conference.

Conference Speakers

Jan Allers

Managing Director, AllMaritim AS, now Chairman and special adviser

Jan Allers has extensive experience in the oil pollution control business. He participated actively in the Ekofisk Bravo blow-out in the North Sea in 1977, was an observer and adviser at the IXTOC I blowout in Mexico 1979, the Mercantil Marica grounding in Norway 1989 and the Prestige tanker spill in Spain 2003.

Mr. Allers has attended more than a dozen oil-on-water exercises with NOFI booms and Ocean Buster in the North Sea, has worked actively in the development of the NOFI booms, more specifically the NOFI VEE-SWEEP and the NOFI Current Buster, and has presented papers at a number of national and international venues.

Born in Norway, Jan attended the School of Economics in Norway and the University of Seattle. His career includes: Export Manager, Norsenet Ltd., Bergen, Norway, with stops in Halifax and Stephenville; Marketing Director, NOFI Bergen AS; Marketing Manager, Oil Pollution Control Equipment, Bennex AS, Bergen, Norway; and his current position with AllMaritim AS.

AllMaritim is engaged in sales and marketing of oil spill response and other environmental products to the maritime and industrial markets. AllMaritim is the market leader in Norway and is represented in Newfoundland and Labrador by Nord Marine and in the rest of Canada by DSS Marine in Dartmouth, N.S.

Charles B. Anderson

President, Anchor Marine Claims Services Inc., New York

Charles Anderson was educated at Columbia University and graduated in law from Columbia Law School New York. He received a master's degree from Princeton University and was a George C. Marshall fellow at the University of Copenhagen with a grant from the American Scandinavian Foundation.

In 1998, he accepted an appointment as President of Anchor Marine Claims Services Inc., general US correspondents for Skuld. Previously, he was a partner in Haight, Gardner, Holland & Knight, an internationally recognized law firm, which he joined in 1980, and where he specialized in maritime and admiralty law. He has represented both ship owners and charterers in numerous New York arbitration cases involving charter party and cargo matters, and has written and lectured

extensively on marine insurance law. He serves on the Committee on the CMI in recognition of his work in the area of international shipping and maritime law. He is also the author, together with Colin de la Rue, of *Shipping and the Environment*, published by Lloyd's of London Press in November 1998.

Tharald Brekne

Managing Director, Norwegian Clean Seas Association for Operating Companies (NOFO)

Mr. Tharald Brekne has a degree in mechanical engineering and in economics. He has worked in the petroleum industry since 1976 and been involved with some of the largest projects in the North Sea. The positions he has held include Operation Service Manager in Statoil, Platform Manager (OIM) on Statfijord B and Statfijord A, and Director of HSE, Development and Operations, within the Norwegian Oil Industry Association (OLF).

NOFO is an oil spill response organization established by the operating companies on the Norwegian continental shelf. NOFO's objective is environmental protection. The organization ensures that the authorities' oil spill recovery guidelines are followed. This is undertaken on behalf of, and together with, the operating companies.

Dave Burley

Manager Environmental Affairs,
Canada-Newfoundland and Labrador Offshore Petroleum Board

Dave Burley was born in St. John's and is a graduate of Memorial University. He has been involved in regulation of the Newfoundland and Labrador offshore petroleum industry since 1982, initially with the Newfoundland and Labrador Petroleum Directorate and, since 1986, with the Canada-Newfoundland and Labrador Offshore Petroleum Board. As the Board's Manager of Environmental Affairs, Dave is the principal point of contact between offshore operators and the Board concerning environmental matters, including environmental emergency response.

He has received spill response training from Transport Canada, Oil Spill Response Limited, Owens Coastal Consultants and Tri-State Bird Rescue and Research Inc. and since the early 1980s has attended numerous marine spill response exercises and oil-on-water experiments.

Mr. Burley serves on the Management Board of the Environmental Studies Research Funds and on two advisory committees to the federal Program on Energy Research and Development.

Joan Cleary

Mayor of Come by Chance, Placentia Bay,
President and Chief Executive Officer, Bull Arm Site Corporation

Joan Cleary has been a member of the Bull Arm Site Corporation Board since 2004. She worked at the Bull Arm site as a senior health specialist for three years during the construction of the Terra Nova FPSO, a position that provided her with first-hand knowledge of the physical construction of the site to enable rapid emergency response. Her four years working in the oil industry also included 18 months as senior site medical officer for the construction of the storage tanks for offshore oil at Whiffen Head.

Ms. Cleary, currently mayor of the Town of Come By Chance, is a member of the Bull Arm Committee serving towns from Clarenville to Whitbourne; a member of the Regional Council Group encompassing towns from Little Harbour to Goobies; a member of the Liaison Committee for the Whiffen Head Storage Facility NTL; a member of the Community Liaison Committee for the North Atlantic Refinery; a member of the Chamber of Commerce sub-committee on the feasibility of high-speed Internet for the area; and representative for Come By Chance on the Arnold's Cove Area Chamber of Commerce.

Joan Cleary most recently served as chairperson of the Workplace, Health, Safety and Compensation Commission. A registered nurse by profession, she has worked at the hospital in Grand Falls -Windsor, as a public health nurse for the district covering Swift Current to Little Harbour, and partnered with her husband in setting up a medical clinic in Arnold's Cove.

Jim Dempsey

Cormorant Limited

Cormorant Ltd. is an independent consulting company in St. John's, Newfoundland and Labrador, specializing in the operational side of marine environmental issues.

Cormorant has been particularly active in marine oil spill response, physical environmental monitoring, and marine operational services. Cormorant employees have a combined expertise that, spans marine biology, physical oceanography, marine weather, coastal geomorphology, coastal mapping, computer solutions for small business, and instrumentation applications.

R.W. (Rob) Dickie

President, Nichols Environmental (Canada) Ltd., Edmonton, Alberta

Mr. Dickie is a professional geologist who has over 20 years of industry and consulting experience. As President of Nichols Environmental (Canada) Ltd., he leads a full-service geo-environmental consulting and remediation firm that provides environmental and engineering solutions to a wide range of industrial, government and private-sector clients. Mr. Dickie has conducted environmental site assessment and remediation work across Canada and into the U.S, as well as provided emergency spill response for clients across western Canada.

Mr. Dickie's family has owned property on Lake Wabamun since 1912. He has worked in the Lake Wabamum region over the last 25 years, recently sitting on numerous committees dealing with industrial activities related to environmental concerns at Lake Wabamun. Currently, Mr. Dickie is the Chair of Lake Wabamun Watch, a stakeholder committee that disseminates information to stakeholders about an industrial operator on Lake Wabamun. www.nicholsenvironmental.com

On August 3, 2005, approximately 1.3 million litres of heavy bunker fuel oil as well as 90,000 litres of pole treating oil (similar to diesel fuel) were spilled when 43 cars derailed along the CN main line adjacent to Lake Wabamun and within the Village of Whitewood Sands.

Duncan Ferguson

Acting Manager, Flood Hazard & Emergencies,
BC Ministry of the Environment, Government of British Columbia

Mr. Ferguson is responsible for developing policy for and providing central co-ordination of, Ministry responses to environmental emergencies. He has worked with the BC Ministry of the Environment for the past 15 years with supervisory roles in contaminated sites information, climate change and industrial pollution prevention. He has also worked as an air policy analyst and an environmental management officer.

Mr. Ferguson played a key role in developing a large amount of government environmental legislation and policy initiatives, including legislation and initiatives having to do with oil and gas development and motor fuel quality.

Prior to working in government, he worked from 1980 to 1990 as an engineer in a refinery owned by a major Canadian oil company. Duncan Ferguson is a graduate in chemical engineering from the University of British Columbia.

David Fritz

Crisis Management Coordinator, BP America

David Fritz is a Crisis Management/Emergency Response Co-ordinator for BP America in Naperville, Illinois, providing support for the company's oil refining, transportation, and marketing businesses in the United States. He helps to train and drill emergency response and crisis management teams. In addition to providing oil spill technical and scientific expertise for BP's oil spill response teams, he is active in the oil spill R&D community and has helped develop many response guides and reference documents that promote alternative response technologies.

John Henley

President, Newfoundland Transshipment Limited

John was born and raised in St. John's, NL. He graduated from the mechanical engineering program at Memorial University in 1981 and the Massachusetts Institute of Technology in 1983 with a Masters degree in Offshore Engineering and Ocean Systems Management.

John joined Mobil Oil Canada in 1983 and worked as a project engineer on the Venture project in Halifax, the Hibernia project in St. John's, and as a plant engineer at the Harmattan complex in Olds, Alberta. He returned to Newfoundland in 1988 to become the Manager of Naval Architecture and Computer Engineering at NORDCO Limited.

John rejoined the Hibernia project team as a consultant in late 1990 and was extensively involved in the project from 1990 until joining NTL in October 2001. He served in various senior roles including facilities/marine adviser, start-up engineering adviser at Bull Arm, crude scheduling co-ordinator, and strategic planning team leader. John was very involved in the design and selection of the crude transportation system and offshore loading systems for Hibernia. In 1999 he was seconded to Mobil's US operation as a production supervisor in the Gulf of Mexico. He returned to Hibernia in 2000 as the onshore/offshore installation manager and then transferred offshore to be a production supervisor.

In October 2001, John was appointed President and Director of Newfoundland Transshipment Limited.

Fred Hollett

Fire Commissioner, Office of the Fire Commissioner,
Newfoundland and Labrador

Johan Marius Ly

Head of Section, Norwegian Coastal Administration,
Department for Emergency Response

Johan Marius Ly graduated from the Royal Norwegian Naval Academy as a naval engineer in 1991. After holding various at-sea and onshore positions in the Royal Norwegian Navy, he joined the Norwegian Pollution Control Authority (SFT) in 1996. Within SFT, and later the Norwegian Coastal Administration, he has worked on contingency planning, equipment projects, training programs, regulations related to Norwegian oil spill preparedness, and international co-operation activities. He has been involved in, and attended, most of the larger-scale oil spill response operations in Norwegian waters since 1996, was part of the EU mission of observers following the *Erika* accident, and managed the Norwegian assistance to the Spanish authorities following the *Prestige* accident. The Norwegian Coastal Administration (Kystverket) is the Norwegian national agency for coastal management, marine safety and communication.

Boyd Neil

**Senior Vice-President, National Practice and Director,
Corporate Communications Hill and Knowlton, Toronto**

At Hill & Knowlton, Boyd Neil uses his over twenty years of experience in the public and private sectors as a communication strategist to provide senior-level counsel to a variety of clients. He is especially skilled in crisis and reputation management around complex and sensitive public issues. As national practice leader, corporate communications, Boyd is responsible for guiding Hill & Knowlton's team of experienced corporate communication consultants.

In addition to a career as a magazine journalist, Boyd has held senior communication positions in government, the plastics industry trade association and consulting firms with practices in crisis management, private-sector change management communication, as well as social services, environmental, and trade association communication and issues management. Boyd has developed and guided corporate and crisis communications strategies for companies in the oil and gas, pharmaceutical, financial and professional services and manufacturing industries. He has provided communications counsel to governments on waste management, urban growth, provincial-municipal relations and the launch of new programs. He has managed stakeholder relations on environmental issues, including landfills and hazardous waste management, and has worked with public hospitals on sensitive government relations, issue control and community relations programs. The range of services he has provided to clients include reputation and corporate brand management programs, consultation strategies, the development of issues and crisis management strategies, issues and crisis counselling, advice on stakeholder relationship building, media relations and writing.

Boyd holds Master of Arts (M.A.) and Master of Business Administration (M.B.A.) degrees from the University of Toronto. As an associate of Royal Roads University (RRU) in Victoria, he is currently teaching in RRU's M.B.A. program in public relations.

Tom Osborne

**Minister, Department of Environment and Conservation,
Government of Newfoundland and Labrador**

Minister Osborne graduated from Cabot College in St. John's and continued his studies at Memorial University of Newfoundland. He worked with Statistics Canada, with Small Business Enterprise, and with the Penney Group of Companies until the general election in 1996, when he was first elected to the House of Assembly in the district of St. John's South. Mr. Osborne was re-elected in the general elections of 1999 and 2003.

Mr. Osborne served in Opposition as Caucus Vice-Chair, Parliamentary Assistant to the Leader of the Opposition, and served as Opposition critic for Industry, Trade and Technology, Government Services and Lands, and Environment and Labour. He has also served as a Member of the Public Accounts Committee.

On November 6, 2003 Mr. Osborne was sworn in as Minister responsible for Environment and Labour. On February 20, 2004, the government announced a restructuring of government departments, which saw the creation of a new Department of Environment and Conservation.

Edward Owens

Principal, Polaris Applied Sciences, Inc., Seattle, Washington

Dr. Owens has been involved in oil spill cleanup and counter measures, operations and studies related to the environmental impact of oil spills worldwide since 1970. Dr. Owens has responded to spills in North and South America, Russia, Australia, and the Arabian Gulf. He has conducted foreign missions for the International Maritime Organization (IMO) as an expert consultant on

the impact and persistence of stranded oil and on shoreline treatment. Dr. Owens has been closely involved with shoreline and near-shore oceanography research and has published more than 150 scientific papers and reports.

Educated in the UK, Canada and the US, he began his career with the Canadian federal government at the Canadian Hydrographic Service. During this period, in 1970, he was seconded to the *Arrow* oil spill at Chedabucto Bay, Nova Scotia. After working for the Geological Survey of Canada at the Bedford Institute of Oceanography, he joined the research faculty of the Coastal Studies Institute at Louisiana State University.

Since 1979, Dr. Owens has been a full-time consultant and is a recognized world authority on shoreline protection and treatment. He has participated in spill response operations in North America, South America, the Middle East, Australia, the 1991 Kuwait "Desert Storm" spills and the 1994 Komi pipeline spills in Russia. He was the technical adviser to Exxon's Shoreline Cleanup Assessment Team on the *Exxon Valdez* spill in Alaska from 1989 to 1993 and recently developed frontier response strategies for Exxon's operations on Sakhalin Island and for Arco in the Colville River Delta area of the Alaskan North Slope.

Dr. Owens has conducted missions as a United Nations expert consultant for the International Maritime Organization on projects in the Caribbean, South America and Africa and was a member of the US National Academy of Science, Oil Spill R&D Committee. Dr. Owens' Shorelines and Oil Spill Response training course has been presented more than 100 times on five continents and he has published more than 150 papers in scientific journals and conference proceedings. He is a professional geologist and a certified environmental professional in the US.

Roger Percy

Head of Environmental Emergencies, Environment Canada,
Environmental Emergencies Section,
Regional Environmental Emergencies Teams (REET)

Roger Percy has a BSc from Carleton University in Ottawa and an MSc degree from Guelph University. He is currently the Regional Environmental Emergencies Co-ordinator for Environment Canada, Atlantic Region. In this capacity he plans and directs the Environment Canada response to oil and hazardous material spills.

He serves as chair of the Regional Environmental Emergencies Team (REET), a multi-agency body responsible for delivering of co-ordinated expert scientific and technical information and advice during a response. Through REET, Mr. Percy has co-ordinated and participated in major prevention and field projects such as the recovery of the barge *Irving Whale*, the Vinland well blowout response, sinking of the M/V *Flare* and the Swissair 111 response.

Mr. Percy led the Canadian Environmental Advisory Team to the Persian Gulf oil spill in 1991.

Paul Nelson

Manager, Environmental Protection Standards,
Australian Maritime Safety Authority (AMSA)

Paul Nelson has been involved with ship-sourced marine pollution-related matters at the Australian government level since 1983. This function became the responsibility of the Australian Maritime Safety Authority (AMSA) in 1991, and since 2001 Mr Nelson has been Manager of AMSA's Environment Protection Standards unit.

Paul has been closely involved in the work of the International Maritime Organization (IMO) for a number of years. He has been a member of the Australian delegation to the IMO Marine Environment Protection Committee since 1998, and leader of the Australian delegations to the Committee since 2002. He has also been the Australian delegate to meetings of the International Oil Pollution Compensation Fund, and several IMO Diplomatic Conferences. This work has included

a particular focus on Particularly Sensitive Sea Areas, including development of guidelines and assessing submissions.

His current duties also include management of a team providing policy, administrative, environmental and scientific support for the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances. Paul is currently overseeing Australian domestic consultations with a view to adopting several additional IMO treaties, including those related to anti-fouling systems, civil liability for spills of fuel oils carried by ships, air pollution and maritime safety aspects of the new Ballast Water Convention.

Paul has a Master of Environmental Law from the Australian National University (1994) and a Master of Arts in Maritime Policy from the University of Wollongong (2000).

Susan Saupe

Director of Science and Research,
Alaska Regional Citizens Advisory Council Cook Inlet, Alaska USA

Susan Saupe is the Director of Science and Research for the Cook Inlet Regional Citizens Advisory Council (RCAC) overseeing an environmental monitoring program designed to assess potential impacts by oil industry operations in Cook Inlet. Major projects in the program include coastal biophysical habitat mapping, physical oceanography and modeling, and contaminants monitoring — for natural background, sources, and potential anthropogenic inputs. Through her position at Cook Inlet RCAC, Ms. Saupe was also the Lead Scientist for the State of Alaska and developed and implemented the National Coastal Assessment for the Gulf of Alaska under the federal Environmental Monitoring and Assessment Program. Ms. Saupe has a Bachelor of Science degree in Chemistry (1985) and a Master of Science in Chemical Oceanography (1990) from the University of Alaska Fairbanks. In the 1980s, she worked in the Alaskan Arctic on several marine foodweb studies and for three years at the Ecosystems Centre in Woods Hole, MA on a project identifying carbon and nitrogen sources and sinks in east coast estuarine systems. In 1991, she returned to work for the University of Alaska conducting several intertidal field programs until she joined the Cook Inlet RCAC in 1996.

On March 29, 1989, the oil tanker *Exxon Valdez* ran aground on Bligh Reef in Alaska's Prince William Sound. The ill-fated tanker spilled 11 million gallons of crude oil into the water and created an environmental disaster that ranks among the worst in the history of North America. The incident also changed forever the way crude oil is transported in the United States.

Kathi Stanzel

Senior Technical Advisor,
International Tanker Owners Pollution Federation Limited (ITOPF) London, UK

Ms. Stanzel is a marine ecologist with a Master's degree in Tropical Coastal Management. Before joining ITOPF in January 1999, she worked as a senior scientist and consultant on marine park and fisheries projects in Indonesia, Singapore and Australia.

ITOPF is a not-for-profit organization, funded by the vast majority of the world's ship owners. It devotes considerable effort to a wide range of technical services, the most important of which is responding to oil spills. Our technical advisers have attended on-site at 500 spills in 90 countries.

Russell Wangersky

Editor, The Telegram, St. John's

Russell Wangersky is an editor, columnist and author with 20 years' experience in the Newfoundland media. A four-time National Newspaper Award finalist, his columns appear regularly in The Telegram and the Corner Brook Western Star, and have appeared in the National Post, the Edmonton Journal, the Ottawa Citizen, the Calgary Herald and the Vancouver Province.

Wangersky's work has also appeared in magazines across Canada, including Macleans, Time Magazine, Canadian Geographic and Saturday Night Magazine.

Urban Williams

Petro-Canada

Urban Williams is an employee of Petro-Canada where his position is Team Lead, Environment, Emergency Response & Security for Petro-Canada's East Coast operations. In addition to his security and emergency response duties, Urban is responsible for all environmental issues related to Petro-Canada's East Coast Operations such as environmental effects monitoring, oil spill response planning, chemical screening, waste management, environmental protection plans, fish habitat compensation, environmental regulatory issues, compliance monitoring planning, environmental R&D, and fisheries liaison. In July 2005, Urban was seconded to Chevron as the Senior Environmental Specialist on the Hebron Project with primary responsibilities covering environmental permitting and planning.

Prior to his employment with Petro-Canada, Urban served for 22 years as a biologist with the Canadian Department of Fisheries and Oceans. While working with that department, Urban was responsible for the provision of scientific and technical advice for the protection of various fisheries and their supporting habitat. He has conducted research into the impacts of oil on aquatic resources and has authored over 30 scientific papers in that area.

David Yard

Senior Marine Safety Inspector, Marine Safety Transport Canada

David Yard is a Senior Marine Safety Inspector with the Marine Safety Directorate of Transport Canada. Mr. Yard deals with the development and enforcement of regulations related to pollution from ships, and the co-ordination of joint enforcement protocols with Environment Canada, and acts as a technical adviser on issues related to the Marine Oil Spill Preparedness and Response Regime. Mr. Yard has been involved in marine pollution prevention, preparedness and response issues since the late 1980s and represents the federal government at regular Canadian Marine Advisory Council (CMAC) and International Maritime Organization Marine Environment Protection Committee meetings. Prior to his employment with Marine Safety, Mr. Yard spent 15 years in various positions with the Environmental Response Program of the Canadian Coast Guard. He graduated from the Marine Institute in St. John's, Newfoundland, with a Diploma in Mechanical Engineering Technology.

Mr. Yard has participated in a number of responses to marine pollution incidents and was a member of the Coast Guard National Response Team deployed to the Persian Gulf during the 1991 conflict.

5.0 Appendix B: List Of Conference Participants

AMEC:
– John McClintock – Dave Robbins

Argentia Management Authority:
– Ken Browne

Canadian Coast Guard
– Ray Browne – John Butler
– Larry Crann – Robert Grant
– Wayne Halley – Terry Harvey

Canadian Ice Service:
– Mark Arkett
– Marie France Gauthier

Canship Ugland Ltd.
– Allan Bell – Lloyd Button

CAPP
– Paul Barnes – Jill Fleming

Chevron Resources Canada
– Sandy McKay

CNLOPB
– Wayne Chipman – John Crocker
– Colin Dyer – Hal Stanley
– Joan Whelan

C-NLOPB
– Kim Coady – Darrell Gover
– Ken Taylor

Cobequid Wildlife Rehabilitation Centre
– Dr. Helene Van Doninck

Cormorant
– Terry Buckley – Roger Crowley
– Phil Day

Crosbie Industrial
– Paul Reiser

Dept. of Environment & Conservation
– Craig Bugden – Ken Dominie
– Stephen Dyke – Marie Ryan

Dept. of Fisheries & Agriculture
– Christa Ramsay

Dept. of Fisheries & Oceans
– Helen Griffiths
– Dounia Hamoutene – Dawn Mercer

Dept. of Government Services
– Rick Conway – Guy Perry

Dept. of Natural Resources
– Wes Foote – Darren Hicks

ECRC
– Paul Nippard – Rick Reid
– Robert Starkes

Environment Canada
– Robert Keenan – Hugh O'Neill
– Brian Power – Jerry Pulchan
– Greg Robertson – Pierre Ryan
– Glen Worthman

ESRF
– Earl Johnson

FGA Consulting Engineers
– Bill Scott

Hi Point Industries
– Bill Butler

Hibernia
– David Day – Robert Dunphy

Husky Energy
– Donald Williams – Greg Janes

IFAW
– Kim Elmslie

Industry Support Services
– Harold Murphy

JWEL
– Matt Hynes – Kathy Knox
– David Pinsent

Leslie Grattan & Associates
– Leslie Grattan

LGL Limited
– Bob Buchanan

LORAX
– Craig Hollett

Matrix Environmental
– Bob Bugler – Jerry Scott
– Loretta Tremblett
– Darlene Whelan

McInnes Copper
– Debbie Hutchings

McInnes Copper (Nova Scotia)
– Sarah Kirby

Narwhal Environmental Consulting Services
– Narcissus Walsh

Newfoundland Environmental Association
– Stan Tobin

Newfoundland Transshipment Ltd.
– Gerry Beresford – Howard Kelly

NL Hydro
– Ron Healey – Wayne Rice

Norsk Hydro
– Knut-Magne Halvorsen – Jim Keating

North Atlantic Refining
– Roger Bennett – Joan Lane
– John Lane – Mary Squires
– Jerry Stacey

Oceans
– Judith Bobbitt – Diana Cardoso
– Ivan Victoria

Offshore Safety & Survival Centre
– Craig Parsons

One Ocean - Marine Institute
– Maureen Murphy – Matthew Pittman
– Gordon Slade

Petro Canada
– Bob Hand – Thomas Murphy
– Stewart Strong – Derek Sullivan
– Francine Wight

Pinchin LeBlanc Environmental
– David Carter – Robert Cuthbert
– Andrea Lundrigan – Dave Muise

Point Tupper Marine Services
– Melvin Pierce

Pol-E-Mar – John Dicks

Poseidon Marine Consultants Ltd.
– Craig Simmons

RMRI
– Vanessa Pennell

SGE Acres
– Larry Moores

Stewart McKelvey Stirling Scales
– Kimberley Walsh

Town of Gander
– Cluny Matchim

Town of Marystown
– Phonse Ward

Town of Placentia
– Margie Hatfield

Transport Canada
– Gerry Berigan – Richard Day
– Bruce English – Mike Keefe
– Maurice Landry – William J. Scott
– Cinthia van Ginkel

Vikoma International Ltd.
– Fergus Perry

Western Canadian Spill Services
– Al McFayden – Marvin St. Louis

White, Ottenheimer & Baker
– Robert Hickey

Students from the Marine Institute
– Kristina Benoit – Joy Blundon
– Justin Dearing – Tara Dunphy
– Megan Foley – Shannon Hayden
– Kaylen Hill – Amanda Hurley
– Richard Murphy – Allison Reddy
– Bobbi Smith – Andrew Song
– Stephanie Tilley

Notes

Notes