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January 12, 2011

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My comments on *The Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on the U.S./Canadian Transboundary Areas of the Pacific Coast Project Report* are from a Canadian perspective and intended to assist in meeting the project's goal of:

To review and document existing U.S./Canadian transboundary oil spill response plans and capabilities for the British Columbia/Alaska and British Columbia/Washington borders, acknowledging existing authorities and response management systems; and to recommend improvements as needed for both joint response and planning efforts, as well as for planning and capacity building within each jurisdiction.

The project report is very extensive on information pertaining to the *Canada-United States Joint Marine Pollution Contingency Plan (JCP)* and its regional annexes CANUSPAC and CANUSDIX. The project report reflects the challenges facing a transboundary oil spill. However, the project report findings does not foster confidence that the United States and Canada are strategically and operationally prepared for such a spill event. The JCP and its two annexes do not adequately incorporate the roles and capabilities of the shipping industry and its oil spill response organizations as described by each nation's oil spill response regimes. This is evident in the quote from the project report:

There is no specific reference to a "Responsible Party" in the Joint Contingency Plan (JCP) or the CANUSPAC and CANUSDIX annexes, although each document refers to the U.S. and Canadian national response systems, and both systems establish by law that the "Responsible Party" (RP) is responsible for conducting and funding the oil spill response and clean up.

Furthermore, the JCP and annexes do not fully embrace the roles and capabilities of other jurisdictions such as the province, state, local governments (counties) and First Nations (Tribal Bands) that could augment a Responsible Party's (RP) response under the Incident Command System and the Unified Command protocol. This is particular true for the Canadian Coast Guard which has its own response management system and a policy to not endorse Unified Command. The ramifications of Canada's federal approach to a vessel oil spill is a common theme throughout my comments. This concern is hardened by the findings of the 2010 report of the *Commissioner of the Environment and Sustainable Development* to the *House of Commons* on oil spills from ships that states:

Given the Canadian Coast Guard's role as the lead responder to ship-source oil spills, the lack of an up-to-date national emergency management plan and model for responding to a major incident presents risks to the Coast Guard's ability to effectively coordinate and oversee a response to a major incident. The Coast Guard recognizes that its plan needs updating and is developing a National Environmental Response Strategy that is expected to be in place by March 2011. The strategy is to be followed by the development of a national response policy and plan for directing its efforts, including those related to a major incident.

The isolation of the shipping industry and other jurisdictions strategic role in the planning and preparedness for a transboundary oil spill incident reduces the value of the JCP and its annexes in oil spill preparedness and response.

To the credit of the project's working groups, they have obviously tried hard to address the response preparedness gaps and to provide insights into seeking solutions. However, the solution rests not only with the USCG and CCG, but also with the shipping industry. The shipping industry needs to explain, plan and prepare for a transboundary oil spill using the principles and organizations of the Incident Command System and Unified Command as the guiding framework and building on their regional

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response capability already in place. It is not prudent to shift response paradigm in order to address different types of spill incidents, even if there are institutional challenges such as those created by an international border. Many statements within the JCP and its annexes infer a change in spill response management from the ship owner to the Coast Guards if there is a transboundary oil spill.

The Task Force should be putting less effort towards persuading the US and Canadian Coast Guards to address or clarify the issues identified in the project report. Instead, Task Force efforts should be directed more toward the shipping industry and its Response Organizations to:

- Recognize the differences between the US and Canadian approaches and capabilities to manage an oil spill;
- Develop an industry-based position and policy on the such important matters of using the Incident Command System, endorsing Unified Command, integration of Incident Management Teams, and locations of Incident Command Posts;
- Facilitate cross-boundary movement of response resources in particular when it comes to on-water operations and the transfer of oily wastes, and
- Establish compatible Joint Information Centres and Liaison Offices in organization and function.
- Exercise transboundary vessel casualties and spills

The role and capabilities of oil spill response organizations in Canada and the United States were part of the project's work. In British Columbia, there is only one Transport Canada certified Response Organization (RO): *Burrard Clean Operations (BCO)* - a division of the *Western Canada Marine Response Corporation*. BCO has been exemplary in using the Incident Command System as an emergency management approach to build organizational skills, as well as relationships within the spill response community. It has met and often exceeded the federal spill preparedness and planning standards required for RO's to maintain its certification. These standards are stipulated in *Response Organizations Standards* as referenced under the *Canada Shipping Act* regulation.

The Task Force members should be aware that the existing *Canada Shipping Act (CSA)* regulations will be repealed and replaced by new environmental response regulation and standard. The changes are largely administrative rather than substantive whereby:

- The *Response Organizations & Oil Handling Facilities Regulations* and the *Environmental Response Arrangements Regulations* will be consolidated into one *Environmental Response Regulation*;
- The *TP 12401, Response Organizations Standard*; and *TP 12402, Oil Handling Facilities Standards* will be consolidated into one *Environmental Response Standard*.

The current and proposed revised Response Organization planning and preparedness standards by Transport Canada will not likely meet public expectations or that of other jurisdictions. A review of the new *Environmental Response Standards* shows no evidence of any substantive change from when they were first established in 1995. They do not reflect lessons learned from spill events. There are deficiencies in the federal RO standards - both existing and proposed - related to:

- Wildlife rescue and rehabilitation;
- Managing a large oil spill workforce;
- Final oily waste disposal;
- Alternative response methods such as in-situ oil burning and dispersant use.
- Response to petroleum products not currently defined as "oil"

Furthermore, a Canadian Response Organization's services focus on the spill component of a vessel or oil handling facility accident – not on the casualty itself. An RO does not undertake the following consequences of a vessel casualty:

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- Salvage (emergency repair),
- Firefighting,
- Lightering (removal of cargo and fuels);
- Cleanup of non-oil pollutants such as hazardous materials, containers or bulk goods;
- Response to oils not stipulated under *Canada Shipping Act* such as biofuels, condensates, canola.

Consequently, Canada has a limited oil spill response regime, and does not have meaningful capability to manage a vessel casualty. Many of these limitations were noted in the project report.

The reason for dwelling on the Transport Canada oil spill standards - both current and proposed - is that a shipowner as the Responsible Party is highly reliant on a Response Organization that prepares within the standard's framework and functions within its constraints. Many of the Canadian response gaps and deficiencies discussed by the project's working groups go to the root of these standards, such as Canada's weaknesses in responding to oiled wildlife, in planning to manage oily wastes, and deciding whether to use dispersants and in-situ oil burning. Both Canadians and our neighbouring Americans cannot expect substantial and timely improvements in these operational areas so long as the proposed *Environmental Response Standards* drafted by Transport Canada show no measure of continuous improvement over the last 16 years. Reflecting on lessons learned from major oil spills worldwide is vital in drafting legislation and standards. Lesson evaluations are particularly important as Canada has never tested the current standards to its 10,000 tonne oil spill planning benchmark. The Task Force's Project Report helps point to the right direction on what Canada needs to do to prepare for a major oil spill, whether in internal or international waters.

Thank you for the opportunity to review your project report.

Sincerely,

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The following lists my comments provided directly in the Word document provided. Report excerpts are shown "in quotes" and a subjects of interest begin with the word "Regarding" - comments follow. Four types of comments are provided: Technical (**TECH**), Opinion (**OPIN**), Editorial (**EDIT**), Information (**INFO**), and combination thereof. Comments are provided in the order noted in the Word document with the page number provided.

**Comments on the
The Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on
the U.S./Canadian Transboundary Areas of the Pacific Coast Project Report**

**INTRODUCTION
(Pages 3 to 29)**

1. (TECH) REGARDING WEATHER CONDITIONS IN THE NORTHERN AND CENTRAL COAST:

Climate change is a risk factor for both transboundary response areas. Though antidotal evidence, the frequency of severe weather episodes are increasing in these areas – particularly in the North coastal regions of BC. It is the interface of the Northern Interior Polar and the Southern Pacific Ocean systems. Climate change is a vessel casualty risk factor that could be addressed in the area descriptions. (Noted on page 3)

2. (TECH) & (OPIN) REGARDING NAVIGATIONAL AIDS IN NORTHERN AND CENTRAL COAST:

In the Dixon Entrance, Portland Canal and throughout most of the Northern and Central coast, the aids to navigation in these areas and nautical charts have not kept up with the needs of existing vessel traffic, yet alone expanding traffic. This issue was noted in the *Enbridge Northern Gateway's Project's* Environmental Impact Statements on marine transportation. This risk factor could be mentioned in the report. (Noted on page 6)

3. (TECH) & (INFO) REGARDING TIDES IN THE STRAIT OF JUAN DE FUCA:

There could be a comment on ocean currents and its effect on oil spill trajectories. If a spill occurs West of Low Point (State of Washington) there would be a net outward migration of the release to the Pacific. A spill between and/or Easterly of Port Angeles/Victoria would be held in a circular gyre and migrate into the Gulf and San Juan Islands. The consequence is that the first scenario is that wave energy of exposed shoreline environments will tend to promote natural cleanup, whereas the sheltered island areas means a long, laborious shoreline cleanup effort. (Noted on page 8)

4. (EDIT) REGARDING CLARITY ON WHAT CONSTITUTES “TANK SHIPS”:

The report may want to explain that tank ships are defined by the VEAT as: *A self-propelled tank vessel of any gross tonnage, engaged in the transport of oil, chemicals, tallow or biologically derived plant oils.* Readers might assume the paragraph is addressing only oil tankers. (Noted on page 17)

5. (TECH) & (OPIN) REGARDING CANADIAN EXPORT OF OIL SAND PRODUCTS AS AN UNCONVENTIONAL CRUDE OIL – DILUTED BITUMEN AND SYNCRUDE.

An issue that is not appreciated by the project team is that the oil sand product is bitumen diluted with condensate. The combined product is viewed as a *heavy* and *unconventional* oil. There have been no marine spill incidents and very little science (lab or field work) on the fate and effect of this product in temperate marine environment. It is not known whether the product will emulsify and/or sink. As such, there is a degree of uncertainty that existing technologies can readily track the spilled product and that booms and skimmers designed for conventional oil can recover it. This is a new type of risk to both US/Canada transboundary areas and could be addressed in the report. (Noted on page 18)

6. (OPIN) REGARDING COMPARATIVE TANKER CASUALTY/SPILL RISK BETWEEN TWO COMPETING OIL HANDLING (PIPELINE/TERMINAL) COMPANIES:

Should the *Enbridge Northern Gateway Project* be approved, there will be the first time VLCC will access a B.C. Port. These will be largely transiting the *Great Circle Route via* the Aleutian Islands to Asian markets. The State of Alaska can expect an oil tanker from Panamax to VLCC sizes to pass by its region every day, loaded with either condensate (imported) of bitumen-based oil sands products (imported).

In contrast, the State of Washington will experience frequent transits of Aframax size tankers. To date, *Kinder Morgan Canada* has expanded its pipeline capacity to 300,000 bpd, but could go as high as 700,000 bpd if it goes ahead with its TMX project to meet project oil sands markets. *Enbridge* and *Kinder-Morgan* are competing pipeline companies.

These two projects raises an interesting question of comparative tanker casualty/spill risk in that for the same amount of oil being exported, it is generally safer to have few trips with VLCC than many more smaller Aframax tankers. The Canadian Government has not undertaken any comparative risk assessment. The US will share in this risk. The report could address this comparative risk issue. (Noted on page 18).

7. (OPIN) & (TECH) REGARDING THE STATEMENT OF ENVIRONMENTAL CONSEQUENCES OF A SPILL IN THE CANUSPAC REGION BY WASHINGTON DEPARTMENT OF ECOLOGY:

The consequences listed can be further expanded by two additional concerns: 1) that the technology and equipment to manage a spillage of oil sands product – an unconventional oil – have not been validated, and 2) there has been no response gap analysis to determine periods and durations, or areas where on-water response is unsafe, not practical, or ineffective.

An example of a response gap analysis is the work done by the State of Alaska. (Noted on page 18).

8. (OPIN) & (TECH) REGARDING THE RAMIFICATIONS OF THE VTS TRAFFIC SEPARATION IN DEVELOPING SPILL SCENARIOS:

The VTS separation poses significant jurisdictional and institutional challenges that requires a “comparative analysis” of legal and operational matters based on the following six scenarios showed by the table below. The report needs to explore how incident management would unfold for each situation, such as who is the Responsible Party by what laws (US or Canada), where would the incident command posts be located, what is the limit of financial liability, etc. A comparative analysis table helps cover all bases and assist the reader in appreciating the complexities. (Noted on page 19)

A vessel based spill that is in...		
US Waters & a US owned vessel	US Waters & an International Vessel	US Waters & a Canadian Vessel
Canadian Waters & a Canadian-owned vessel	Canadian Waters & an International Vessel	Canadian Waters & a US Vessel

9. (OPIN) REGARDING THE CANADA-UNITED STATES JOINT MARINE POLLUTION CONTINGENCY PLAN (JRP) AND JOINT RESPONSE TEAM (JRT):

The fundamental flaw of the JCP delivery by the JRTs is that vessel owners that service US and Canada - and potentially a Responsible Party (RP) do not appear to have had meaningful engagement the JCP/ Annexes delivery by way of discussions, processes and exercises. For example, the CANUSDIX exercises have been somewhat inclusive of an RP, but certainly not the CANUSPAC exercises. This industry engagement and sanctioning of the JCP delivery process are important given the purpose and principles stated in the JRP.

The purpose of the JRP states:

103.2 The JCP facilitates, on behalf of both parties, coordination of response activities undertaken by or on behalf of those responsible for a discharge of a harmful substance.

This purpose is based on the following JRP's principles for response:

201.1 Response to discharges of harmful substance incidents in Canada and the United States is predicated on the principle of the use, to the greatest extent possible of private sector resources augmented by public resources, as necessary, as determined by the CCG On-scene Commander or USCG On-Scene Coordinator in coordination with the entity responsible for causing the discharge.

There has been little indication that the shipping industry is fully amenable to this coordination on its behalf, and - if so - under what arrangement.

The inference is that the USCG and CCG manage the response as if in the "national interest". Given the multiple emergency management layers, different response systems between the CCG and USCG, and absence of the RP in exercises does not foster confidence in achieving a successful spill response.

The Task Force may want to canvas the shipping industry to see if they agree to item 103.2 and the principle 201 and what it really means to them strategically, organizationally, and operationally. (Noted on page 24)

10. (TECH) REGARDING THE CHALLENGES FROM THE 1989 NESTUCCA SPILL EVENT AND THAT REMAIN TODAY:

The Task Force may want to add to the list of challenges the US/Canada differences in natural resource damage assessment, as well as decision-making (and capability) for dispersant use and in-situ oil burning. (Noted on page 25)

11. (EDIT) "CANADIAN COAST GUARD, U.S. COAST GUARD, ENVIRONMENT CANADA AND TRANSPORT CANADA DECLINED TO PARTICIPATE AS OFFICIAL MEMBERS OF THE PROJECT WORKGROUP":

Did these agencies provide a reason for declining to participate? Did they provide inputs into the draft document? The report should elaborate on their inputs and influence in preparing this report as they are key agencies in transboundary matters. (Noted on page 28)

**TOPIC: INITIAL NOTIFICATIONS AND ACTIVATION OF THE JOINT CONTINGENCY PLAN
(Pages 30 to 33)**

12. (EDIT) “CANADIAN LAW REQUIRES A PERSON WHO HAD POSSESSION, CHARGE OR CONTROL OF A SUBSTANCE IMMEDIATELY BEFORE IT IS SPILL TO IMMEDIATELY REPORT THE SPILL TO THE PROVINCIAL EMERGENCY PROGRAM BY TELEPHONING 1-800-663-3456 OR 1-800-OILS-911”:

This statement needs to specify that this notification to the *Provincial Emergency Program* is according to Provincial law. The use of “Canadian” infers federal legislation.

There is good cooperation – but not perfect – between federal and provincial spill call centres to exchange incident notifications – such as *Provincial Emergency Program* (PEP) and *Marine Communications & Traffic Services* (MCTS). Where a ship is not under control due to loss of steerage or engine system, the federal notification of the Province is somewhat poor. There is a better cooperation with marine spills. (Noted on page 30)

13. (EDIT) & (OPIN) “RECOMMENDATION UNDER NOTIFICATIONS THAT CONTACT INFORMATION FOR SPILL NOTIFICATIONS SHOULD BE MAINTAINED REGULARLY”:

There use to be a regularly maintained “*Environmental Emergency Contact List*” for the Pacific Region jointly compiled by Environment Canada, Burrard Clean Operations, Ministry of Environment, and the CCG. It was a large white binder with very comprehensive emergency contact listings by many categories. Environment Canada kept the Word documents up-to-date when changes occurred and made regular distributions. The last version was 2004. It hasn’t been maintained since probably due to downsizing of departments and lack of interagency coordination. The task force report could reference the above binder and research its status.

**TOPIC: COORDINATION OF CANADIAN/U.S. RESPONSE STRUCTURES AND COMMAND POSTS
(Pages 35 to 51)**

14. (TECH) & (OPIN) “MOST CANADIAN ORGANIZATIONS SUBSCRIBE TO ICS AT SOME LEVEL; IT FORMS THE BASIS FOR THE BRITISH COLUMBIA EMERGENCY RESPONSE MANAGEMENT SYSTEM (BCERMS) AND THE CANADIAN FEDERAL EMERGENCY RESPONSE MANAGEMENT SYSTEM (FERMS) WHICH INTEGRATES THE GOVERNMENT OF CANADA’S RESPONSE TO EMERGENCIES”:

The FERMS was developed by Public Safety Canada and reflected in the *Federal Emergency Response Plan 2009*: <http://www.publicsafety.gc.ca/prg/em/ferp-eng.aspx>. This plan states:

*The Federal Emergency Response Management System (FERMS) is a comprehensive management system which integrates the Government of Canada’s response to emergencies. It is based on **the tenets** of the Incident Command System and the Treasury Board Secretariat’s Integrated Risk Management Framework. (Emphasis added).*

The plan is speaks about the tenets of ICS, but does not provide the ICS organization nor protocols, forms, etc. The integration of federal agencies under the FERMS is primarily at the supporting levels at Emergency Operations Centres (EOC). There are no site (command post) level federal plans of designated lead federal agencies that actually use the ICS as *per* the NIMS type ICS. Only BC, BCO, shipping and oil handling industry have ICS-based plans that can readily harmonize with those of the

United States (organization, terms, protocols, forms, etc). As such, the highlighted statement is misleading that the federal government is ICS savvy. For more discussion on this issue of emergency management harmonization and capacity building by the federal government of Canada visit EnviroEmerg.ca Discussion site at: <http://web.mac.com/enviroemerg/Site/Discussion/Discussion.html> and read the article titled. *Building Emergency Response Capability And Capacity With The Federal Government And Amongst Canada's Response Community*. (Noted on page 34)

15. (TECH) “CANADIAN STANDARDS ASSOCIATION’S STANDARD (CAN/CSA-Z731-03 (R2009)) ON EMERGENCY RESPONSE PLANNING MANDATES ICS FOR CANADIAN INDUSTRY”:

This standard does not mandate or even mention the ICS. It is more that the petroleum, chemical, transportation industries have chosen ICS at the emergency management system to meet the intent of the CSA standard. However, since about 1992, the *BC Guideline for Industrial Emergency Planning* does recommend the use of ICS. See: <http://www.env.gov.bc.ca/eemp/resources/guidelines/bc.htm> (Noted on page 34)

16. (TECH) & (OPIN) “THE CANADIAN COAST GUARD’S RESPONSE MANAGEMENT SYSTEM (RMS) IS ICS-BASED AND USES AN ICS-TYPE STRUCTURE”:

The CCG’s Response Management System (RMS) should not be considered ICS based as there are too many differences such as not using the ICS forms, different terminology, do not use of Unified Command, and more. This statement infers that other agencies are both capable and willing to work under the RMS which is probably not the situation (Noted on page 34)

17. (OPIN) “IF THE POLLUTER IS UNKNOWN, UNWILLING OR UNABLE TO TAKE ON THE DUTIES OF THE ON-SCENE COMMANDER, OR HAS REACHED HIS LIMITS OF LIABILITY AND DECLINES TO CONTINUE THE MANAGEMENT OF THE RESPONSE, THE CANADIAN COAST GUARD WILL ASSUME THE MANAGEMENT OF THE POLLUTION INCIDENT AS THE ON-SCENE COMMANDER (OSC)”:

In this report’s statement, the terms “unwilling” or “unable” is open to interpretation. If an RP is unwilling to deal with oiled wildlife because the birds are not endangered, but is undertaking all other assignment satisfactorily, is this reason enough for the CCG to assume the OSC position? The CCG has no written criteria for these terms and could be tested in court if they take over and incident simply based on their opinion. The only hard fact is when a ship owner reaches its limit of financial ability, then it will be both “unwilling” and “unable” to continue emergency management and operations. This ability to be released from further obligations is supported by Canadian legislation to cease (*Marine Liability Act*). (Noted on page 34)

18. (OPIN) “IT IS NOT CLEAR WHETHER THE CANADIAN COAST GUARD WOULD ASSUME THE FEDERAL MONITORING OFFICER OR THE ON-SCENE COMMANDER ROLE DURING A TRANSBOUNDARY SPILL”.

This statement is the million dollar question that puts the whole transboundary response in jeopardy, because if the CCG does take the On-Scene Commander (OSC) role it would try to “punt” the Province, First Nations, Local Government, and the RP (spiller) out of Unified Command and then use its RMS that is not readily understood by the USCG nor Response Organizations. The shift in response paradigms of ICS/US to RMS and no UC would be extremely political and dysfunctional. (Noted on page 35)

19 (TECH) “IN BRITISH COLUMBIA, THE MINISTRY OF ENVIRONMENT WILL HAVE A PRESENCE AT ALL SPILLS IMPACTING PROVINCIAL LANDS, AND WILL BE THE LEAD AGENCY WHEN IT IS A LAND-SOURCE SPILL FROM PROVINCIAL LANDS”:

This statement is somewhat incorrect. The statement appears to have originated from the federal government on determining when and where a province is engaged in a spill. This wording is often seen in federal response plans that try to stipulate other jurisdiction’s strategic role in emergency response.

The Ministry of Environment is the lead (key) provincial agency for all spills regardless of origin and source...this by provincial mandate and law (Ministry of *Environment Act* and *Emergency Program Act*). Refer to information on MoE’s emergency delivery at: <http://www.env.gov.bc.ca/eemp/overview/erd.htm>

This statement should be corrected with input from the BC Ministry of Environment’s Emergency Management Program. (Noted on page 35)

20. (OPIN) “ENVIRONMENT CANADA AND OTHER CANADIAN AGENCIES ARE ABLE TO OPERATE ACCORDING TO FERMS AS WELL AS THE RMS SYSTEM USED BY THE CANADIAN COAST”:

This statement is not true, more an assumption than fact. There should be more research behind this statement by contacting Environment Canada and other federal agencies that could be involved in an oil spill and ask them if they know of the RMS and have ever exercised under it. (Noted on page 35)

21. (TECH) “A NUMBER OF OTHER CANADIAN AGENCIES MAY BE INVOLVED IN A RESPONSE..... INCLUDING FIRST NATIONS”:

“First Nations” in this sentence is a “jurisdiction” and should not be lumped into a list of federal agencies. This should be corrected. (Noted on page 35)

22. (OPIN) “THE LEAD AGENCIES IN A TRANSBOUNDARY SPILL DERIVE THEIR AUTHORITY FROM THEIR OWN JURISDICTIONS; THIS BASIC FACT MAKES IT DIFFICULT TO ESTABLISH ONE JOINT COMMAND CENTER. THE LEGAL AND LOGISTICAL CHALLENGES TO OPERATING OUTSIDE OF ONE’S HOME JURISDICTION WOULD BE ESPECIALLY CHALLENGING IF THE RESPONSE WAS AN EXTENDED ONE. ON THE OTHER HAND, THE USE OF SEPARATE COMMAND POSTS WILL POTENTIALLY RAISE THE COST OF RESPONSE BY REQUIRING THE RESPONSIBLE PARTY (RP) TO STAFF TWO COMMAND POSTS”.

This excerpt is one of the very few places in the report that suggests what might be expected of a Responsible Party (RP). However, the location and number of Command Posts would be largely determined by the RP to ensure effective management of the spill – e.g. span-of-control. The driver will probably not – and should not - be to accommodate national jurisdictions, *per se*.

What federal, provincial, state, local govt jurisdictions should consider is establishing their own Emergency Operations Centers (EOC) that supports the RP’s Incident Command Post(s) and manage the consequences of the incident to each jurisdiction. (Explanatory Note: Responders located at the Incident Command Posts manage the incident, whereas those at EOCs manage consequences (e.g. vessel traffic closures) and supports their respective Incident Commander at the Incident Command Post functioning under Unified Command.) The goal of each EOC is to minimize the number of responders at the Incident Command Post. Responders that attend an ICP should only those that have direct operational mandates that also includes in planning, logistics, and admin/finance, as well have a specific need to integrated as a

RP/government incident management team(s). The RP would appreciate that the EOC's screen and rationalize who actually works at the site (Command Post) and field (tactical) levels of response.

Providing some liaison staff between the EOC could be done. Sending liaison people at the Incident Command Post does not work very well.

When there is more than one Incident Command Post, an Area Command (AC) is generally established as *per* the Incident Command System. The Area Command should only address the transboundary issues – such as people clearing customs - and the allocation of resources between the command posts. The Area Command could also be unified and integrated. The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling report on DECISION-MAKING WITHIN THE UNIFIED COMMAND is an important reference to garner some lesson-learned. (See: <http://www.oilspillcommission.gov/library#supporting-documents>).

A major challenge of a transboundary spill is how to consolidate local governments and First Nations as many will be affected. Most do not know how to be engaged in Unified Command, and if knowledgeable, would want their own Incident Commander present. Too many IC's could be attending and dividing Unified Command. Each as a right to be in UC under the ICS, but some thought should be in having one IC representing the collective interests of local government, and another the collective interests of First Nations (Tribal Bands). Probably wishful thinking here.

Recommended is a guideline explaining on how and why to invoke EOC(s), AC, and ICP(s), and UC representation for the purpose of optimizing response staffing and efforts. The guideline could provide criteria for managing the incident (ICP), allocation resources (AC), managing consequences & support (EOC) and designation of Incident Commanders (UC). This guideline could be prepared in layman's language and level of detail; avoiding the complexities around NIMS and other response systems.

The JRP and the Task Force project has not explored the relationship of EOC's with one or more Incident Command Post invoked by an RP, nor the application of Area Command. This is a significant shortcoming in the JRP and should be a focal point addressed the Task Force's Report. (Noted on page 35)

23. (OPIN) “ALTHOUGH THERE ARE A NUMBER OF DISTINCTIONS BETWEEN THE U.S. AND CANADIAN MODELS FOR RESPONSE, THE PRIMARY DIFFERENCE LIES IN THE COMMAND STRUCTURE. UNDER THE ICS SYSTEM, THE RESPONSIBLE PARTY (RP) WILL BE IN A UNIFIED COMMAND WITH THE FEDERAL ON-SCENE COORDINATOR (OSC), PLUS AFFECTED STATE AND TRIBAL OSCS. UNDER THE RMS SYSTEM, THE RP MAY BE THE INCIDENT COMMANDER (IC), WITH THE CANADIAN COAST GUARD SERVING AS A FEDERAL MONITORING OFFICER. AS A RESULT, AN RP'S IC COULD HAVE THE FINAL SAY IN CANADIAN WATERS, WHEREAS THE USCG'S FOSC WOULD HAVE THE FINAL SAY IN U.S. WATERS”:

The CCG's policy is not to adopt Unified Command and instead uses its role as the Federal Monitoring Officer (FMO) functioning at arms-length from the RP, as well as from the province, First Nations, and local governments. This federal policy does not stop other jurisdictions from seeking Unified Command with the RP and each other. As stated, in Canada the RP generally has most of the say...as they are paying for the response. It is also understood that resource agency sets the protection priorities.

Should the RP not adopt UC and team integration, there will be significant political pressure. This could occur if the CCG's FMO, the RP's lawyer or advisor recommends against Unified Command. If ICS/UC is not applied, then the last two decades of marine oil spill exercises with Burrard Clean Operations and the shipping industry in Canada is basically thrown-out-the-door.

As for who has the “final say”, Canada generally lets the RP be the spokesperson for UC as they are paying and caused the problem so takes-the-heat. As *per* the ICS protocol for UC, the spokesperson can change depending on the phase of the incident, such as the Province (MoE) may assume this role during the shoreline cleanup operations.

If there is issues that cannot be resolved by UC, they can be taken to the Executive/Policy Group...aka Crisis Management Team - of the respective jurisdictions such as those of the RP, feds, Prov to deal with in order to allow incident management to continue forward. From a Canadian perspective, consensus and cooperation is important.

If the CCG takes the USCG’s FOSC approach and was not part of the UC consultations, there will be political outcry for certain. Perceived political power shouldn’t trump respect for other jurisdiction’s values and interests. For more discussion on this issue go to EnviroEmerg.ca discussion site at: <http://web.mac.com/enviroemerg/Site/Discussion/Archive.html> and read article *Unified Command is More Than About Authority - It Also About Respect*

The first contentious issue for Canada will probably be the establishment of UC, followed by the dynamics between the Environmental Unit driving response priorities or the federal *Regional Environmental Emergency Response Team* (REET). (Noted on page 35)

24. (OPIN) “THE CANADIAN COAST GUARD FEDERAL MONITORING OFFICER WILL PROVIDE ADVICE/GUIDANCE TO THE ON-SCENE COMMANDER AS NECESSARY. IF THE POLLUTER IS UNWILLING OR UNABLE TO RESPOND TO THE SATISFACTION OF THE FEDERAL MONITORING OFFICER”:

Providing advice as an FMO is not the same as participating in establishing the response objectives and strategies and the Incident Action Plan with the RP. If the advice provided by the FMO is to vet the inputs of the other jurisdictions function within UC will have significant political ramifications. (Noted on page 40)

25. (OPIN) “THE CANADIAN COAST GUARD WILL ASSUME THE MANAGEMENT OF THE RESPONSE AS THE ON-SCENE COMMANDER. IN THOSE CIRCUMSTANCES, THE CANADIAN COAST GUARD WILL INFORM THE POLLUTER OF ITS INTENTION IN WRITING”:

As commented on already, the CCG has not established criteria on what constitutes a polluter being unwilling or unable to respond satisfactorily. Generally, any “turn-over” would result when the shipowner has reached its limit of financial responsibility. This transboundary report should list find out from the CCG what factors define “unwilling” or “unable”. (Noted on page 40)

26. (OPIN) “THERE MAY BE CIRCUMSTANCES DURING A RESPONSE FOR THE USE OF PUBLIC SERVICES AND RESOURCES TO AUGMENT THE POLLUTER’S RESPONSE EFFORTS. THIS MAY BE AT THE REQUEST OF THE POLLUTER’S ON-SCENE COMMANDER. WHEN SUCH A REQUEST IS MADE BY THE POLLUTER’S ON-SCENE COMMANDER, THE FEDERAL MONITORING OFFICER SHALL MAKE A DETERMINATION AS TO WHETHER OR NOT IT IS IN THE BEST INTEREST OF THE PUBLIC TO USE NON-PRIVATE SECTOR SERVICES OR/AND RESOURCES TO AUGMENT THE POLLUTER’S RESPONSE. WHEN DEEMED NECESSARY BY THE FEDERAL MONITORING OFFICER, THE CANADIAN COAST GUARD MAY DEPLOY ITS RESPONSE EQUIPMENT TO ASSIST THE POLLUTER’S RESPONSE”:

The situation of is more likely that the federal politicians will demand that all of CCG’s resources be engaged in the marine oil spill, BUT the Responsible Party refuses these resources for spill operations as

the FMO is not part of UC and hence nor included in the Incident Action Plan (IAP) assignments. If federal resources are not part of the IAP, the RP essentially has little say on direction or management of the resources. This is tantamount to someone else spending the RP's money without consent or full knowledge. (Noted on page 40)

27 (OPIN) "ONCE THE POLLUTER IS ABLE TO CARRY OUT OPERATIONS, THE CANADIAN COAST GUARD MAY BEGIN TO STAND DOWN THEIR OPERATIONS AND EQUIPMENT."

This statement conflict with the one above on CCG's ability and interest in augmenting the RP's and other jurisdictions response efforts. This action to "stand-down" reflects the essence of the federal plan and polices for marine oil spill response since 1995 when the Canadian oil spill response organization regime was established under *the Canada Shipping Act*. That is to let industry capitalize response equipment and delivery the services, thereby allowing the CCG just to monitor. The standing down of federal resources under the management of CCG conflicts with the messaging conveyed in the JRP and its annexes – rather schizophrenic messaging here. (Noted on page 40)

28 (TECH) "IN THE EVENT THAT THE CCG ASSUMES MANAGEMENT OF THE RESPONSE, THE FMO BECOMES THE ON-SCENE COMMANDER (OSC). WHEN THIS OCCURS, FUNDING FOR THE CONTINUATION OF THE RESPONSE WOULD BE RECOVERED FROM THE SHIP-SOURCE OIL POLLUTION FUND (SOPF), WHICH WOULD SEEK REIMBURSEMENT FROM THE POLLUTER":

In Canada, if the spill is non-persistent oil or a bunker spill (not cargo), the only funds for the response will be from the ship owner's P&I club. There is a likelihood the RP reaching its limits of financial liability (LFL) and become an unwilling/unable polluter well before incident closure – probably when there is still oil on the water.

The maximum amount of funds from the SOPF is \$155,318,424 for all claims from one oil spill, then the money comes from federal General Revenue (aka Taxpayer). To obtain "reimbursement from the polluter" once it has reached its LFL is not possible as the federal *Marine Liability Act* protects the ship owner.

If a spill of bulk persistent oil as cargo (e.g. barge/tanker), the tanker or barge owner has about \$1.5 billion available for response. The unknown legal issue is that - if a the RP becomes unwilling to response (or poor performance) before reaching its LFL - does the Canadian Coast Guard have access to these international funds? This is not an issue for the USCG as they can tap into the US Oil Trust Fund. This question of financial risk for Canada should be investigated.

As an aside, there is a issue pertaining to how much a Responsible Party can "park" funds for future legal costs, fines, and damage compensation. There are no legal requirement to that requires the RP to make their contingency money transparent. As a financial risk mitigation strategy, the money used for actual response is the lowest priority to a spiller. For example, a bulk carrier grounds and releases its bunker fuel - say 6,000 tonnes - the ship owner has maybe \$30 million from its P&I Club insurance. Of this amount, it parks \$10 million for future legal fees, fines, and future damage compensation. This leaves \$20 million for actual spill response, about 15 days of operational activity for a spill that would required months of cleanup. So 15 day's later, the CCG assume incident management funded under the SOPF until it runs out, then into General Revenue. The project group may want investigate this issue for both Canada and the United States (Noted on page 40)

29 (TECH) & (OPIN) “THE ROLE OF THE CCG AS OSC IN A TRANSBOUNDARY SPILL IS FURTHER UNDERSCORED IN SECTION VI OF THE CANUSPAC ANNEX AND SECTION 601 OF THE CANUSDIX ANNEX; IDENTICAL LANGUAGE IN BOTH ANNEXES STATES “IN ALL CASES WHERE THE CANADA-U.S. JCP IS ACTIVATED, THE CCG WILL ASSUME THE OSC IN CANADIAN WATERS.”

The statement *in all cases where the Canada-U.S. JCP is activated, the CCG will assume the OSC in Canadian waters* is contrary to the CCG’s policy on the roles of the FMO and OSC as *per* their national oil spill pollution response plan.

Ironically, this arrangement shows that the CCG is willing to establish Unified Command with the USCG (which includes participation by US states, tribes, and local govt) than with Canadian jurisdictions. This would be negatively viewed in Canada.

Furthermore, the policy direction of the JCP takes precedence over the annexes. That is, it is generally inappropriate to state a higher level of strategic involvement in an annex than the covering plan. (Noted on Page 41)

30 (TECH) REGARDING PROVINCIAL RESPONSIBILITIES:

This section needs review by the BC Ministry of Environment’s Emergency Management Program as there are several errors. Spills the impact or threaten provincial lands and interest are managed by MoE by mandate and law – the lead provincial agency for spills. (Noted on Page 41)

31 (TECH) “FOR SPILLS FROM FEDERAL LANDS, PIPELINE LEAKS, OR SHIP-SOURCE SPILLS THAT AFFECT THE PROVINCE, THE MINISTRY WILL HAVE A LEAD INDIVIDUAL WORKING IN A UNIFIED COMMAND AND/OR IN A SENIOR MANAGEMENT ADVISORY TEAM”:

This statement is correct, except for the abstract option “or in a senior management advisory team”. Never hear of this in ICS nor mentioned the *BC Marine Oil Spill Response Plan*. MOE uses ICS that includes UC and the integration of provincial response personnel/technical specialists into one Incident Management Team. This matter of “management advisory team” should be clarified with MOE’s emergency program – probably MoE/CCG’s way around not having to use the term Unified Command with the CCG. (Noted on page 41)

32 (TECH) “FOR SIGNIFICANT SPILLS, THE PROVINCE MAY CHOOSE TO ENTER UNIFIED COMMAND WITH THE RP OR AUGMENT THEIR RESPONSE EFFORTS TO ENSURE THAT PROVINCIAL ECONOMIC, SOCIAL AND ENVIRONMENTAL INTERESTS ARE PROTECTED”:

The word “or” should be changed to “in order to” as the main purpose of Unified Command is to enable a jurisdiction to augment response efforts by sharing in the effort to achieve the mutually agreed on response objectives, strategies, tactics, and assignments as per the Incident Action Plan. (Noted on page 42)

33 (INFO) “THE PROVINCE ALSO HAS THE OPTION OF ISSUING A LEGAL “ORDER” TO FORCE THE RP TO COMPLY WITH THE PROVINCE’S DIRECTIONS, SO THE PROVINCE DOES NOT NECESSARILY HAVE TO EXERCISE THEIR OPTION TO TAKE OVER THE RESPONSE OR PORTIONS OF IT. THIS DOES NOT RELIEVE THE RESPONSIBLE PARTY FROM THEIR OBLIGATIONS TO RESPOND AND PAY”:

Issuing an Order can be view in two different ways by an RP: 1) favourable in that it makes it clear what the provincial interests are and the performance measures to be met OR 2) a threat or intrusion on what is an RP may deem as a federal matter. (Noted of page 42).

34 (INFO) “ENVIRONMENT CANADA (EC) IS THE LEAD FOR OIL SPILLS ORIGINATING FROM THE LAND UNDER THEIR JURISDICTION (I.E. FIRST NATIONS, FEDERAL PARKS, ETC”:

EC as a potential lead federal agency has never taken a command role in British Columbia, and probably never will. Their comfort zone is managing the REET. (Noted on page 42)

35 (INFO) & (TECH) “ACCORDING TO CANADIAN LAW, THE CO-CHAIRS OF THE REET SIT ON THE ADVISORY STAFF OF THE OSC AND PROVIDE CONSOLIDATED ENVIRONMENTAL ADVICE DURING THE COURSE OF RESPONSE OPERATIONS”:

This “According to Canadian law” should be referenced as REET is never mentioned in any Act nor Regulation such as the *Canada Shipping Act*. The taskforce should verify this statement with the actual reference to legislation. (Noted on page 42)

36 (OPIN) “FIRST NATIONS THEMSELVES, WHICH ARE A RECOGNIZED LEVEL OF GOVERNMENT IN CANADA AND THEREFORE MAY PARTICIPATE IN UNIFIED COMMAND IF THE INCIDENT DIRECTLY AFFECTS RESERVE LANDS. CANADIAN COURTS HAVE DECIDED THAT FIRST NATIONS MUST BE CONSULTED WHEN THEIR LANDS OR TERRITORIES ARE AFFECTED”:

This statement is a very correct and important statement with significant ramifications for CCG in that First Nations being relegated to REET (arms-length to command) may not meet the needs for full consultation as would an UC arrangement. (Noted on page 42)

37 (INFO) “IT SHOULD BE NOTED, HOWEVER, THAT THE CERTIFIED RESPONSE ORGANIZATIONS IN CANADA ARE NOT REQUIRED TO PROVIDE SERVICES FOR A VESSEL CASUALTY ITSELF (SUCH AS SALVAGE, CARGO REMOVAL, ETC.)”

In regard to the roles of Response Organizations in Canada, the taskforce working group may want to also note that ...though it is a legal requirement of major vessels of a specified size to have an arrangement with a Transport Canada certified RO, the ship owner is not legally required to actually employ them if it has a casualty – even if oil is spilled. This would be tantamount to an unwilling or unable RP.

If the CCG takes over the emergency management, they do not have an arrangement with BCO so will have to pay full cost for the response organization’s services – 50% increase. Ironically, MOE has an arrangement with BCO so would get a discount for its services. Just an interesting aside note. The working group may want to verify this information. (Noted on page 43)

38 (INFO) REGARDING THE CITED 2008 REPORT TITLED: MAJOR MARINE VESSEL CASUALTY RISK AND RESPONSE PREPAREDNESS IN BRITISH COLUMBIA:

The URL for this report is:

http://www.livingoceans.org/files/PDF/energy/LOS_marine_vessels_report.pdf

(Noted on page 43)

39 (TECH) & (OPIN) “IN ADDITION, THE ROLE OF THE PROVINCE OF BRITISH COLUMBIA WOULD NOT BE EQUIVALENT TO THAT OF THE STATES OF WASHINGTON OR ALASKA. BRITISH COLUMBIA WOULD HAVE ACCESS TO THE RESPONSE STRUCTURE PRIMARILY THROUGH THE REGIONAL ENVIRONMENTAL EMERGENCY TEAM, WHEREAS THE STATES WOULD HAVE THEIR OSCS IN UNIFIED COMMAND”:

This statement is not correct. If the CCG had its way, the representation of the province would only be in the REET. The *BC Marine Oil Spill Response Plan* places the role, functions, etc of the Province *via* the Ministry of Environment the same as that of the States of Washington or Alaska in both ICS organization and protocols. MoE’s spill response plans can be found at:

<http://www.env.gov.bc.ca/eemp/resources/response/index.htm>

This statement should be removed.

It would also be worthwhile introducing and referencing MoE’s mission statement and guiding principles, emergency response delivery, and oil spill response strategy as *per* the following three links. One will see that the response approach of inclusiveness and teamwork, and shared responsibility.

1. Mission Statement & Principles: <http://www.env.gov.bc.ca/eemp/overview/principles.htm>

2. Delivery Principles:” <http://www.env.gov.bc.ca/eemp/overview/erd.htm>

3. Oil Spill Response Strategy:

<http://www.env.gov.bc.ca/eemp/resources/strategies/oilstrat.htm>

(Noted on page 44)

40 (OPIN) “WHILE DOCUMENTATION TOOLS {OF THE CCG} MAY HAVE DIFFERENT NAMES, THEY ARE ESSENTIALLY PRODUCING THE SAME INFORMATION, SUCH AS STATUS, MAPS, RESOURCES, ETC. FOR INSTANCE, RMS DOES NOT USE ICS FORMS SUCH AS 201, 204, ETC. THEY DO USE “NEXT OPERATIONAL PERIOD PLANS” AND “MISSION STATEMENT” FORMS WHICH ARE ANALOGOUS. WHAT MAY BE MORE OF AN ISSUE IS THAT THE RMS OPERATIONAL PERIOD AND MEETING SCHEDULES ARE NOT CONSISTENT WITH ICS PLANNING PERIODS WHICH ARE BOTH DOCUMENTED BY AND GENERATE ICS FORMS” {EMPHASIS ADDED}

The inference here about the CCG’s Response Management System (RMS) is that there is no real issue regarding the differences with the ICS used by most other US agencies, industry, province *etc.* However, during the heat of an emergency is not the time to learn and explain a different emergency management system. The RMS has never been exercised with an RO, RP, of Province. (Noted on page 45)

41 (INFO) “THE RMS SYSTEM USES A REGIONAL ENVIRONMENTAL EMERGENCY TEAM (REET), WHICH IS CO-CHAIRIED BY ENVIRONMENT CANADA AND THE PROVINCE OF BRITISH COLUMBIA AS REPRESENTED BY THE MINISTRY OF ENVIRONMENT”:

According to the *BC Marine Oil Spill Response Plan*, the co-chairing of REET by MoE is conditional on the Province having representation on Command as follows (excerpt from plan):

3.11 Federal/Provincial/Industry Interface

During a marine oil spill necessitating a multi-agency or industry response, the provincial Incident Commander will immediately seek to establish a Unified Command (UC) with the lead federal agency and the Responsible Party (RP), and will request integration of provincial response team members into an integrated industry/government response team. Integration with the Responsible Party's response organization (RO) will also be encouraged. The objective is to maximize the use and deployment of limited response equipment and personnel, before out-of-province or out-of-country resources are deployed, and to ensure each jurisdiction and the Responsible Party is strategically situated to meet their mandated and/or legal responsibilities. Local government and First Nations are considered jurisdictions and eligible for participation in unified command.

The provincial Planning Section Chief, or delegated person, will co-chair or liaise with the primary federal representative, responsible for environmental advice, planning or assessment, such as the federal Regional Environmental Emergency Team (REET). This participation is limited to planning functions and under the condition that a unified command with the federal lead agency has been established. The Environmental Unit within this plan provides this inter-agency integration function for the province.

(Noted on page 45)

42 (INFO) & (OPIN) “IN THE CANUSPAC ANNEX, SECTION XI.C, SENSITIVE ENVIRONMENTS PLAN, IT IS NOTED THAT THE REGIONAL ENVIRONMENTAL EMERGENCIES TEAM (REET) WILL PROVIDE ALL ENVIRONMENTAL SENSITIVITY INFORMATION IN CANADA”:

Not quite correct. This maybe the case in Eastern Canada, but in British Columbia it is the province that has done all the coastal resource and oil sensitivity mapping and would be the primary provider of this data...as has been the situation for over a decade of joint exercises with Burrard Clean Operations. Furthermore, the information would primarily be provided through the Environmental Unit...which maybe integrated with the REET (essentially the same people and mission). The task force may want to clarify this with MoE's Emergency program. (Note on page 46)

43 (OPIN) “ANOTHER MODEL WORTH CONSIDERATION IS THE JOINT ENVIRONMENTAL SECTION DESCRIBED IN APPENDIX K OF THE CANUSLANT ANNEX. APPENDIX K STATES THAT “DUE TO THE CHALLENGES OF COORDINATING SCIENTIFIC, ENVIRONMENTAL AND REGULATORY FUNCTIONS DURING AN INTERNATIONAL SPILL, A SEPARATE ICS/RMS SECTION (CALLED THE JOINT ENVIRONMENTAL SECTION”

Basically, if the organization is not exercised, it will not work. Not worth considering the mixing the REET, with EU, with UC, with RMS. This is a model of Eastern Canada where the REET is quite strong, it will not work in B.C. (Noted on page 46)

44 (TECH) & (INFO) “ISSUE RESOLUTION AS A TOPIC IS NOT ADDRESSED IN EITHER THE CANUSPAC OR CANUSDIX ANNEXES. HOWEVER, THE ROLE OF LIAISON OFFICERS IS ADDRESSED IN ALL THREE DOCUMENTS”.

An issue that cannot be resolved by UC is generally elevated to the “Policy Group/Agency Executive or otherwise called the Crisis Management Team that comprise of the “executives” of each jurisdiction (CEO, Deputy Ministers). This is standard practice in emergency management and not addressed in the report. It is not the role of a Liaison Officer to resolve the issue, but to “package” and “communicate” the issue to these executive levels. UC needs to frame the issue and options. (Noted on page 47)

45 (OPIN) “AS A CONSEQUENCE OF THE INDEPENDENT NATURE OF THE MANAGEMENT OF A CROSS BORDER SPILL WHEN TWO COMMAND POSTS ARE ESTABLISHED, THE SINGLE RP/POLLUTER WOULD BE IN THE POSITION OF HAVING TO SATISFY MULTIPLE AGENCIES ON EACH SIDE OF THE BORDER. IDEALLY THE RP WOULD HAVE CONSISTENT AND UNIFORM DEMANDS PLACED ON THEM REGARDING THE APPROPRIATE LEVEL OF RESPONSE NEEDED. HOWEVER, DIFFERENCES IN THE AMOUNT OF SPILLED OIL ON THE RESPECTIVE SIDES OF THE BORDER, ITS MOVEMENT, SHORELINE TYPES AND NATURAL RESOURCES AT RISK WILL ALMOST GUARANTEE THAT THE RESPONSES WILL NOT BE IDENTICAL. THE LIAISON OFFICERS PLACED IN THE RESPECTIVE COMMAND POSTS WOULD BE IN THE IDEAL POSITIONS TO PROVIDE GOOD INTER-COMMAND POST COMMUNICATION IN THIS REGARD. SUCH COMMUNICATION WILL HELP ENSURE THAT THE RP UNDERSTANDS AND CAN BEST MEET THE EXPECTATIONS OF EACH COAST GUARD.”

Exchanging Liaison officers generally do not work very well. It is better to have technical representations (specialists) in the EU and at least jurisdictional representative in UC at a primary Incident Command Post, the Area Command or both. As mentioned, yet not discussed, is the role of Emergency Operations Centres to take some of the pressure of the RP. (Noted on page 47).

46 (OPIN) REGARDING THE THREE TYPES OF RESPONSE ACTIONS WHICH WOULD NEED TO BE COORDINATED BETWEEN THE U.S. AND CANADIAN OSCS AS PER THE CANUSPAC AND CANUSDIX ANNEXES.

The three response actions listed need to be prefaced and connected with what the Responsible Party is undertaking in concert with other jurisdictions who are augmenting the response (e.g. that are included in the IAP and its assignments). The itemized lists infer that the respective Coast Guards are actually undertaking the tactics. (Noted on page 47)

47 (OPIN) REGARDING ESTABLISHING ONE OR MORE COMMAND POSTS, WHICH MAY INCLUDE A JOINT ONE SHARED BY BOTH US AND CANADA.

Whether to have one joint Command Post, two Command Posts across each border, and/or an Area Command is a very strategic and important decision. As noted the report, both regional annexes and post-exercise evaluations have examined this issue, but yet to provide any guidance.

It is the Responsible Party (ship owner), where the vessel casualty occurs, and extent of the spill impact that will largely determine the locations and numbers of Incident Command Posts. There should be some guiding principles provided to potential RP’s and their oil spill response organizations such as:

- The initial primary ICP should be located in the jurisdiction in which the vessel casualty occurred as the legal, funding and response arrangement and regime will be applied according to that Country’s laws (rules);

- A second ICP should be established across the border whenever there is a threat or direct impact across the international boundary.
- Locations of both ICP should be based on meeting incident management of field operations and equipment logistics (e.g. span-of-control)
- An single Area Command (AC) and Joint Information Centers (JIC), Liaison Office(s) should be located within or in proximity to the primary ICP.
- The ICPs, AC and JIC should establish a Unified Command table with appropriate conference phone system dedicate for command to facilitate communications between these facilities.
- Divisions/Groups to manage operational span-of-control need to reflect US and Canadian jurisdictions (e.g. DIV US 1-A means Casualty site in U.S. waters. DIV CAN 2-1 means on-water response area in Canadian waters)

(Noted on page 48)

48 (OPIN) “POTENTIAL RPS SHOULD ANTICIPATE THE NEED TO HAVE A REPRESENTATIVE IN BOTH THE U.S. AND CANADIAN COMMAND POSTS DURING A TRANSBOUNDARY RESPONSE, AND SHOULD BE FAMILIAR WITH THE DIFFERENCES IN THEIR ROLES ON EITHER SIDE OF THE BORDER, I.E., AS THE ON-SCENE COMMAND IN CANADA AND AS THE RP’S ON-SCENE COORDINATE AS PART OF A UNIFIED COMMAND IN THE UNITED STATES.”

This last recommendation on the topic of *Coordination of Canadian/U.S. Response Structures and Command Posts* is the crux of the issue, that the “potential RP’s” need to be prepared for a transboundary oil spill. As there can be many potential RP’s, the task of international preparedness should go to their respective oil spill response organizations.

The flaw of the JRP and its regional annexes is how these documents infer that the Coast Guards are going to coordinate a transboundary oil spill, but in reality it is the private-sector shipping industry functioning under nationally mandated and sanction regimes for spill response that will be invoked. The outcome will be ICPs staffed and run by the an RP and its response organization according to their spill response plans. While in isolation, the CCG and USCG will be totally engaged trying to coordinate themselves. The prudent state, province, and First Nation (Tribal) incident management team members will know better to saddle-up with the RP under Unified Command. The latter reflects the importance of not shifting response paradigms for differ incident scales and scope. That is what the JRP and its annexes do at the cost of confusion. (Note on page 50).

TOPIC: TRANSBOUNDARY COORDINATION DURING A DECISION TO TAKE OVER SPILL MANAGEMENT FROM A RESPONSIBLE PARTY

(Pages 52 to 54)

49 (INFO) & (OPIN) “IF THE RP IS NOT MANAGING THE RESPONSE TO THE SATISFACTION OF THE USCG FOSC, OR IF THE RP DECIDES TO DISCONTINUE MANAGING THE RESPONSE (WHICH MAY OCCUR IF THEY REACH THEIR LIMIT OF LIABILITY), THE USCG MAY TAKE OVER THE MANAGEMENT OF THE RESPONSE. ALL MEMBERS OF THE UNIFIED COMMAND PROVIDE INPUT INTO THE DETERMINATION AS TO WHETHER THE RP IS CONDUCTING A PROPER RESPONSE”

In Canada, the CCG does not adopt Unified Command and retains the position of a Federal Monitoring Officer at arms-length to the RP. However, other jurisdictions such as the Province, local government, and First Nations may have established UC with the RP. A unilateral decision by the CCG’s FMO on taking over response due to poor response performance will be awkward as the response is integrated with these other jurisdictions. (Noted on page 52)

50 (OPIN) “THERE ARE NO PRECISE OR EXACTING CRITERIA REGARDING WHEN AN RP IS OR IS NOT PROPERLY MANAGING THE RESPONSE; THE DECISION TO TAKE OVER THE RESPONSE IS LEFT TO THE JUDGMENT OF THE RESPECTIVE CG OFFICIAL IN CHARGE.”

“THE CANADIAN COAST GUARD WILL MONITOR THE RESPONSIBLE PARTY AND WILL REGULARLY ASK THE RP TO ADDRESS CERTAIN ISSUES. ONLY IF THE RP REFUSES TO COMPLY WITH THESE REQUESTS WOULD THE CCG CONSIDER TAKING OVER”.

The two items noted above leaves open legal challenges from the Responsible Party. The CCG doesn't have spill response performance guidelines. For example, the BC Ministry of Environment's Emergency Management Program provides some rationale to taking over a spill incident as follows:

1.7 Taking over the Management of an Incident from a Responsible Party

- a) If an EERO or Incident Commander of an IMT intends to take over the management of a spill incident, valid reasons for assuming spill management include:
 - i) inadequate experience or training by the Responsible Party - including their hired or contracted personnel - to respond safely or to meet public safety/environmental protection objectives;
 - ii) the Responsible Party is not working according to any defined response strategy or an incident action plan;
 - iii) insufficient equipment to respond effectively or safely;
 - iv) delay in addressing an imminent threat or an escalating spill incident;
 - v) disregard of public safety and environmental protection;
 - vi) unwillingness or inability to finance the response efforts;
 - vii) or combinations of the above.
- b) Explicit reasons for assuming incident management must be communicated to the Responsible Party and documented.
- c) The deficiencies and reasons for assuming spill management from a Responsible Party or another agency (federal or local) must be documented and a copy provided to the regional Environmental Protection Manager

Note that the provincial rationale is not about the RP meeting all the requests put forward. Unresolved conflicts are generally elevated to the executive levels first for resolution so that the on-going response efforts can continue on cooperatively. The most important evaluation and assumption that need to be made before taking over a spill incident is that whoever takes it over can to at least the same or better job. The following quote from the project's report reflects the intent and meaning of Unified Command:

While it is true the FOSC has 51% of the vote, the system is designed to maximize collaboration and resource sharing, and also to avoid dictatorial practices and conflict that could possibly occur during a response. This system is also designed to eliminate, as much as possible, the taking over of an incident response by the FOSC, or in some instances by the State On-Scene Coordinator (SOSC). If the RP is not managing the response to the satisfaction of the USCG FOSC, or if the RP decides to discontinue managing the response (which may occur if they reach their limit of liability), the USCG may take over the management of the response. The SOSC and TOSC(s), as part of the Unified Command, provide input into the determination as to whether the RP is conducting a proper response. (Note: SOSC = State On-scene Commander; TOSC = Tribal On-scene Commander that are part of Unified Command in the United States)

This intent and understanding is not shared by the Canadian Coast Guard and most other federal agencies. It is not readily understood by First Nations, but important to ensure the appropriate level of consultation. (Noted on page 52)

51 (OPIN) REGARDING THE DRAFT RECOMMENDATION THAT “CANUSDIX AND CANUSPAC TRANSBOUNDARY EXERCISES PLANNERS SHOULD CONSIDER INCLUDING A SCENARIO INVOLVING THE ASSUMPTION OF COMMAND FROM A RESPONSIBLE PARTY BY EITHER COAST GUARD.”

The recommendation should be:

1. To draft some performance criteria for an RP such as noted above by the Provincial emergency management program for spills.
2. To prepare a guideline on assisting executive levels to address issues that could not be resolved by Unified Command.
3. To write a guidance document for UC members on issue presentation and resolution, code-of-conduct, performance etc. The latter can be a boiled-down version of the *Operational Guideline on Unified Command* prepared by EnviroEmerg Consulting. Available from EnviroEmerg.ca ftp site at: <https://public.me.com/enviroemerg> (Located in folder titled: Operational Guidelines for Emergency Management)
(Noted on page 54)

TOPIC: TRANSBOUNDARY COORDINATION FOR AN ORPHAN SPILL
(Pages 55 to 57)

52 (INFO) & (OPIN) “BRITISH COLUMBIA LAW DIRECTS THE MINISTRY OF ENVIRONMENT TO ACT AS THE LEAD PROVINCIAL AGENCY FOR ALL SPILLS AFFECTING THE PROVINCE AND TAKE ALL ACTIONS NECESSARY TO RESPOND TO AND CLEAN-UP SPILLS. THE MINISTRY WILL PROVIDE THE SAME SERVICES AND FUNCTIONS THAT ARE PROVIDED TO A RESPONSIBLE PARTY, TO THE LEAD FEDERAL AGENCY FOR A UNIFIED (JOINT) GOVERNMENT-LEAD RESPONSE, WHEN THE RESPONSIBLE PARTY IS UNKNOWN.”

This expected arrangement is correct as stated in the *BC Marine Oil Spill Response Plan*. To meet the provision of “joint” service, the Ministry of Environment will expect to be represented in UC with the CCG, signs off the Incident Action Plan and the Provincial IMT is integrated with the CCG’s response members. This expectation conflicts with the CCG position of not endorsing UC. The representation of other jurisdictions is only within the federal *Regional Environmental Emergency Response Team (REET)*. The REET is not integrated with the CCG’s response team members. Yet the CCG as an OSC is tasked “to ensure an appropriate response”. This will be challenging given the divergent response paradigms. (Noted on page 56) Added links to MoE marine oil spill response strategy and plan on page 57.

TOPIC: INTEGRATING STATE, PROVINCIAL, LOCAL GOVERNMENT, LANDOWNER, AND TRIBAL INTERESTS INTO U.S. AND CANADIAN COMMAND POSTS
(Pages 58 to 60)

53 (TECH) “IN THE CANADIAN RESPONSE MANAGEMENT SYSTEM, THE LIAISON OFFICER IS PART OF THE ADVISORY STAFF, WHETHER TO THE ON-SCENE COMMANDER OR TO THE FEDERAL MONITORING OFFICER.”

This statement should reference that it is the “Canadian Coast Guard’s” RMS the Liaison Officer has an advisory role (called advisors), BUT the province and other Canadian industries and agencies use the same Liaison Officer role under ICS as in the United States. (Noted on page 58).

54 (INFO) & (OPIN) FISHERIES AND OCEANS CANADA'S *ENVIRONMENTAL RESPONSE NATIONAL PLAN* NOTES THAT "THERE ARE VARIOUS LEGISLATION, AGREEMENTS, CUSTOMS AND PRECEDENTS THAT ESTABLISH OPERATIONAL LIAISONS BETWEEN THE CANADIAN COAST GUARD AND VARIOUS AGENCIES IN RESPONSE TO POLLUTION INCIDENTS"(SECTION 2). THE "VARIOUS AGENCIES" LISTED IN THIS SECTION INCLUDE ABORIGINAL GROUPS; SEVERAL OFFSHORE PETROLEUM BOARDS; ENVIRONMENT CANADA; FISHERIES AND OCEANS; INDIAN AFFAIRS AND NORTHERN DEVELOPMENT; LOCAL GOVERNMENTS, AGENCIES, OR BOARDS; NATIONAL DEFENSE, NATURAL RESOURCES CANADA; PROVINCIAL AND TERRITORIAL GOVERNMENTS; RESPONSE ORGANIZATIONS; TRANSPORT CANADA, MARINE SAFETY; AND VOLUNTEERS AND VOLUNTEER ORGANIZATIONS. VARIOUS MEANS OF COORDINATION WITH THESE GROUPS ARE OUTLINED IN THIS SECTION; THE REGIONAL ENVIRONMENTAL EMERGENCY TEAM (REET) IS THE PRIMARY FORUM FOR COORDINATION WITH MOST GROUPS AND AGENCIES.

In Western Canada the REET is poor in managing such a wide-range and divergent types of people and their agency's mandates. The REET acts like a committee (chairperson and agendas) and does not meet the timelines of Operational Period deliverables under the ICS. Furthermore, the REET mixes both "jurisdictional" needs (Province, First Nations, Local Govt) with "technical specialist" requirements (species at risk, oil spill trajectory, SCAT, etc). It does all this at "arms-length" to command and situational information coming into the Command Post. As such, the Province and RO tend to populate and employ the EU as a priority.

The REET had its day in the early 1970's but is now a bit of a dinosaur since the ICS has come to force. Note that the REET is Environment Canada's primary "identity" in a major oil spill, and is reluctant not to invoke it, but is somewhat willing to integrate with the EU in so far as some REET presence in recognized in this arrangement.

In the US the NOAA's Scientific Coordinator has a similar technical and advisory function as the REET in Canada, but the Scientific Coordinators in the US generally realize that they get the best performance by working with and within the Environmental Unit under the ICS.

55 (INFO) REGARDING THE READINESS OF INTERESTED PARTIES TO ESTABLISH A LIAISON CAPABILITY.

The BC Ministry of Environment has on operational guideline on how to establish a Liaison Office. As well, it has an OP Guide on establishing a Joint Information Centre (JIC) that further explores the dynamics of Information Officer and Liaison Officer roles that can cross paths. Both guidelines are based on the work done by the US National Strike Team. (Noted on page 59)

56: (OPIN) REGARDING RECOMMENDATIONS

The recommendation should be directed to the shipping industry and its ROs. In addition, there should be some recognition that transboundary information exchange will be at three levels (from the highest to lowest):

- Direct integration of Incident Management Team members across the border, which could include a UC arrangement and members working within the EU
- Liaison Officer representation. This may include the establishment of a Liaison Office given the numbers and complexity of this role.
- Establishing Emergency Operations Centres (EOC) by participating agencies and jurisdictions.

A critical tool not addressed is the development of internet-based situation reporting. The process of development of this tool helps drive information exchanges and accuracy. The Province nor the federal government has not yet embraced nor are prepared for internet-based situation reporting. A template is however provided by EnviroEmerg.ca at: http://web.mac.com/enviroemerg/demo_sitrep/Introduction.html The files can be downloaded and modified from the ftp site: <https://public.me.com/enviroemerg>

The complex topic of using social media tool (web-sites, facebook, blogs, twitter, etc) needs to be incorporated in both incident situational reporting and public media.
(Noted on page 59)

**TOPIC: MEDIA COORDINATION BETWEEN COMMAND POSTS
(Pages 61 to 62)**

57 (INFO) “FOR AN OIL SPILL IN CANADA, REPRESENTATIVES OF THE PROVINCE OF BRITISH COLUMBIA, OTHER FEDERAL AGENCIES SUCH AS ENVIRONMENT CANADA, AND THE RESPONSIBLE PARTY WILL COORDINATE WITH A COMMUNICATIONS OFFICER FROM THE CANADIAN COAST GUARD.”

This statement appears to an assumption made by the CCG. The working group may want to contact the BC Ministry of Environment to verify this statement. The MOE leans to a JIC as *per* its Operational Guideline on this topic. As for the RP, it will coordinate its communications via UC. If communications is vetted by the higher Public Affair Bureaus of governments unilaterally without their understanding of UC, there will be a problem. (Noted on page 61)

58 (OPIN) “FOR THE PURPOSES OF A RESPONSE TO A POLLUTION INCIDENT, SPOKESPERSONS MAY BE THE CANADIAN COAST GUARD FEDERAL MONITORING OFFICER, ON-SCENE COMMANDER OR THE COMMUNICATIONS OFFICER(S) APPOINTED TO THE INCIDENT COMMAND TEAM”

The province prefers that the RP is the spokesperson speaking on behalf of the collective efforts of the UC and agreed on response objectives. Whereas, each member of the UC can speak on their own behalf.. hopefully in a supportive manner.

If the CCG’s is a FMO and not participating in UC, any unilateral media statement on the performance of the RP/UC would be frowned on - especially if criticizing

59 (INFO) REGARDING THE ORGANIZATION OF A JIC

As stated, MOE has a comprehensive operational guideline on both the role and organization of a JIC and Liaison Office (two separate guidelines). They are modeled after the work done by the US National Strike Team as reference in the document. The OP Guide provides:

- General information on the structures and processes of the JIC. This section provides background and a general understanding of how the JIC is operated and how it fits within the different response structures.
- The position description and responsibilities of the Information Officer (IO). The Information Officer has the initial responsibility to organize and activate the JIC based on direction provided by the incident commander and the key ministry’s agency executive.
- The position description and responsibilities of the Joint Information Center Manager. The Joint Information Center Manager provides for the overall day-to-day management of the JIC during the activation.

- A description of the positions and responsibilities within the internal branch. The internal branch includes functional positions and responsibilities associated with information gathering, production of products and services, photo and video support, and other support.
- A description of the positions and responsibilities within the external branch. The external branch is responsible for supporting the dissemination of information from the JIC, scheduling with external stakeholders (including the incident command), supporting community relations, and other activities associated with JIC interface with external players (e.g. public, response entities, VIPs, other officials).
- Acronyms and abbreviations and defines terms common to environmental emergency response operations. (Noted on page 63)

TOPIC: NATURAL RESOURCE DAMAGE ASSESSMENTS

(Pages 70 to 73)

60 (INFO) “THE CANUSPAC AND CANUSDIX ANNEXES TO THE CANADA-U.S. JOINT MARINE CONTINGENCY PLAN (2001) DO NOT DISCUSS NRDA, AND A JOINT TRANSBOUNDARY NRDA EFFORT IS NOT ENVISIONED. NEVERTHELESS, U.S. TRUSTEE AGENCIES WOULD WORK CLOSELY WITH ENVIRONMENT CANADA AND THE BRITISH COLUMBIA MINISTRY OF ENVIRONMENT AS THE CO-CHAIRS OF THE REGIONAL ENVIRONMENTAL EMERGENCY TEAM (REET).”

This statement reflects the Canadian situation that neither the federal nor provincial government has a policy or process for Natural Resource Damage Assessment (NRDA). Nevertheless, both Environment Canada and the Ministry of Environment have “bank” accounts to receive damage funds. The CCG is not supportive of NRDA. The international funds for oil spills from tankers and barges, and Canada’s domestic Ship-source Oil Pollution Fund do not endorse NRDA principles, such as those of the US. This will certainly cause the ire of Canadians when the US trustees are compensated, but not them. If a Canadian-side incident, the US trustees will not be compensated under a NRDA arrangement. The REET is not going to solve this problem. (Noted on page 70)

61 (INFO) & (OPIN) REGARDING NRDA RECOMMENDATIONS.

The provincial government (MOE) and the federal government (Environment Canada) have not even begun to discuss the issue of natural resource damage assessment policy, process and harmonization, let alone deal with the international challenges. The CCG won’t even discuss it as it aligns itself to the IMO conventions for compensation. (Noted on page 72)

TOPIC: STATUS OF GEOGRAPHIC RESPONSE PLANS AND STRATEGIES FOR TRANSBOUNDARY AREAS

(Pages 83 to 85)

62 (INFO) (TECH) REGARDING GEOGRAPHIC RESPONSE PLANNING IN BRITISH COLUMBIA.

The statements that *“In British Columbia there is a high reliance on the use of its Coastal Resource Inventory and Oil Sensitivity mapping system in lieu of GRPs. However, the province is currently exploring funding opportunities to allow for the development and implementation of GRPs. The BC Ministry of Environment is working on pilot GRPs for Kitimat and the Stewart-Hyder area of Portland Canal.”* is correct, except the pilot work has stalled due to staffing cut-backs. The project team may want to enquire about the status of this pilot work.

There are also some fundamental differences between GRP in the State of Washington and how BC uses its oil sensitivity mapping. Washington GRPS are boom-deployment driven and what is being protected. Whereas the Province is shore/area oil sensitivity driven with all tactical activities linked to shore unit numbers. This makes the preparation of the ICS 232 form “Resources at Risk” quite different between the two jurisdictions. (Noted on page 84).

**TOPIC: RESPONSE CAPABILITIES IN TRANSBOUNDARY AREAS
(EQUIPMENT, PERSONNEL, AND PLANS)
(Pages 86-90)**

63 (INFO) & (OPIN) “THE CANADIAN COAST GUARD (CCG) HAS A SIGNIFICANT AMOUNT OF EQUIPMENT; THEY HAVE AN 8000-TON RESPONSE CAPACITY IN THE SOUTHERN REGION OF BRITISH COLUMBIA, INCLUDING A LARGE HOVER-CRAFT. THEY DO NOT HAVE ANY COMMON INVENTORY SYSTEM IN PLACE AND THEY DO NOT CURRENTLY HAVE A LOGISTIC POSITION TO SUPPORT SUCH AN INITIATIVE.”

The CCG may have the level of response capacity of 8000 tonnes based on the “specifications” of the equipment they have such as skimmer oil recover rates, boom capacity, etc. Whether they are in a state to be used is unlikely. This is considered validated by the recent *Report of the Commissioner of the Environment and Sustainable Development* to the *House of Commons*, on oil spills from ships, that can be found at: http://www.oag-bvg.gc.ca/internet/docs/parl_cesd_201012_01_e.pdf The Commissioner findings on equipment readiness states:

1.52 To manage the life cycle of its oil spill response equipment, the Canadian Coast Guard relies on a system called the Integrated Response Capacity Management System. However, this system is not consistently used from region to region, and it has not been updated since the late 1990s. As a result, the Coast Guard’s life-cycle management of its equipment is not consistent, making current and reliable information on its equipment difficult to obtain. The Coast Guard recognizes that it needs to improve the management of its equipment. It has committed to implementing a nationally consistent life-cycle management approach, assessing its current inventory of equipment to determine if assets are appropriate, and developing an integrated investment plan.

1.53 The Coast Guard has expressed concern that the age and condition of its oil spill response equipment is putting its preparedness and response capability at risk. For example, some equipment may no longer be fully functional and may not incorporate newer and potentially more effective cleanup technology.

1.54 During our interviews and document reviews, Coast Guard staff raised a number of concerns about the investment in the Canadian Coast Guard’s equipment. For example, investment in equipment has been on an ad hoc regional basis and has been driven by the availability of funds rather than by a coordinated risk-based investment strategy.

The morale and dedication to spill preparedness by the CCG has significantly eroded since the establishment of Canada’s private-sector Response Regime in the mid-1995. This decline can be owed to CCG HQs (Ottawa) equipment funding and policy directions that have precipitated the depletion of response equipment capability, as well as CCG’s strategic ability for the equipment to be deployed when the CCG is in only a monitoring role as the Federal Monitoring Officer (FMO). (Noted on page 89)

64 (INFO) REGARDING DEDICATED AIR CRAFT FOR OIL SPILL TRAJECTORY AND LOGISTICS

The BC Ministry of Forest's Fire Protection has several aircraft and dedicated to aerial surveillance. They are available for oil spill response, subject to competing demands during a fire season. Fire Protection has also ICS team members that can run an "Air Operations" Branch". (Noted on page 89)

65 (OPIN) "THE MINISTRY CAN ALSO ACCESS OTHER STAFF AND EQUIPMENT RESOURCES FROM ACROSS THE PROVINCIAL GOVERNMENT AS REQUIRED (EXAMPLES: FOREST SERVICE MOBILE FIELD CAMPS, COMMUNICATIONS EQUIPMENT AND OPERATORS, ETC.)."

The "provincial resources" that could be applied to a major oil spill should be put in context to the nature of a transboundary incident. The focus of the JCP, its annexes and the Coast Guard's equipment and exercises are mainly on on-water spill response. In reality, the most equipment intense and response duration will be on shoreline cleanup and managing a large oil spill workforce. Neither the CCG nor Burrard Clean Operations have the equipment nor staffing to orchestrate a large shoreline cleanup. Provincial resources currently available for forest fires and floods will be essential to augment the response. The Project working group could be more focussed on the "critical" resources and deployment capability. (Noted on page 90)

66 (INFO) & (OPIN) ENVIRONMENT CANADA HAS AN ENVIRONMENTAL RESPONSE NATIONAL RESPONSE PLAN, AND ENVIRONMENT CANADA IS CITED IN THE CANADA-UNITED STATES JOINT MARINE POLLUTION CONTINGENCY PLAN AS WELL AS THE CANUSPAC AND CANUSDIX ANNEXES.

Environment Canada's National Response Plan can be found at: <http://www.ec.gc.ca/ee-ue/default.asp?lang=en&n=22F58D1B> It was written in 1999. As with the CCG's Response Management System, Environment Canada's response organization is a mixture of committee structure and some very loose elements of the Incident Command System. See Section 5 of the plan. A non-functional document as its dated, infers a command role the EC on the West Coast will never assume, and an incident management organization nobody understands or has been trained on. (Noted on page 90)

**TOPIC: WILDLIFE RESPONSE PLANS, PROTOCOLS, AND CAPABILITIES
IN TRANSBOUNDARY AREAS
(Pages 93 to 100)**

67 (OPIN) REGARDING THE WILDLIFE RESPONSE GUIDELINES THAT SUPPORTS THE CANUSDIX ANNEX.

These guidelines are a good start in oiled wildlife planning and preparedness, but they lack organizational details. The focus of the document is more on policy, permits and notifications, not on oiled wildlife response delivery. (Noted on page 93)

68 (INFO) & (OPIN) THE CAPACITY FOR OILED WILDLIFE RESPONSE IS NOT CURRENTLY MANDATED UNDER TRANSPORT CANADA'S RESPONSE ORGANIZATION REGULATIONS.

The current and newly revised Response Organization planning and preparedness standards by Transport Canada will not meet the expectations or interests of the public, environmental NGOs, Provincial Government, First Nations or even the shipping and oil handling industries. A review of the new Environmental Response Standards shows no evidence of any substantive change from when they were

established in 1995. They do not reflect lessons learned from spill events. There are deficiencies in the federal RO standards related to are not only related to wildlife rescue and rehabilitation but also:

- Managing a large oil spill workforce;
- Final oily waste disposal;
- Alternative response methods such as in-situ oil burning and dispersant use.
- Response to petroleum products not currently defined as “oil”

The existing *Canada Shipping Act* regulation will be repealed and replaced by new environmental response regulation and standard to bring the requirements under CSA 2001. The changes are more administrative than substantive whereby:

- The [*Response Organizations & Oil Handling Facilities Regulations*](#) and the [*Environmental Response Arrangements Regulations*](#) will be consolidated into one Environmental Response Regulation;
- The [*TP 12401, Response Organizations Standard*](#); and [*TP 12402, Oil Handling Facilities Standards*](#) will be consolidated into one Environmental Response Standard.

(Noted on page 96)

69 (INFO) & (OPIN) REGULATORS HAVE BEEN WORKING JOINTLY TO ADDRESS THE GAPS IN OILED WILDLIFE RESPONSE FOR BRITISH COLUMBIA. THE GROUP HAS BEEN REVIEWING THE BCMOE’S DRAFT OILED WILDLIFE POLICY NOTED ABOVE, AND USED IT AS THE BASIS TO DRAFT AN OILED WILDLIFE FIELD OPERATIONS GUIDE (FOG). THE GROUP IS STILL ACTIVELY WORKING TOWARDS FINALIZATION OF THE FOG, REACH AGREEMENT ON OILED WILDLIFE DECISION MAKING PROTOCOLS, ROLES AND RESPONSIBILITIES OF THE VARIOUS STAKEHOLDERS AND AGENCIES, AND HOW THE OILED WILDLIFE COMPONENT FITS WITHIN THE ICS STRUCTURE. PARTICIPANTS INCLUDE BCMOE, CANADIAN WILDLIFE SERVICE, DEPARTMENT OF FISHERIES AND OCEANS, CANADIAN COAST GUARD, ENVIRONMENT CANADA, TRANSPORT CANADA’S REGIONAL MARINE ADVISORY COMMITTEE, BURRARD CLEAN, BC CHAMBER OF SHIPPING, THE OILED WILDLIFE TRUST OF BC (AN UMBRELLA ORGANIZATION COMPRISING 6 WILDLIFE RELATED NGOS), FOCUS WILDLIFE, AND A NUMBER OF OTHERS.

Because oil wildlife response is not required under federal legislation and oil spill response standards, there is essentially no oiled wildlife response capability nor capacity in B.C. other than some equipment to haze birds. Burrard Clean Operations will provide in some basic equipment in trailers to begin the construction of a temporary wildlife care centre and give a list of NGO and private wildlife rescue/rehab providers.

The Oil Wildlife Trust (OWT) has released a position paper on the topic as they are the primary source of expertise and workforce for oiled wildlife response. Fundamentally, they want some assurances that their values and missions as wildlife rescue/rehab organizations and individuals are respected. They do not like the concept that some there could be species-specific criteria (triage) where only the threatened or endangered wildlife are rescued, assessed and treated. The NGOs hold community-like values of wanting to make the environment whole again. The issue is balancing these values with that of the responsible party that seeks “reasonable cost” and government that ensures “regulatory” compliance. Meanwhile the work to develop the organizational capability for managing oiled wildlife response is essentially sidelined until this trust/understanding/confidence has been built. (Noted on page 96)

70 (OPIN) REGARDING THE CANADIAN WILDLIFE SERVICES POLICY ON OILED WILDLIFE RESPONSE AND THE THAT POLICY STATEMENT: “IN COMPARING THE SERIOUSNESS OF DAMAGE...CWS USES THE CRITERION OF ‘TIME TO RECOVERY’

The CWS has not provided any interpretation and rationalization of the term “Time to Recovery”. Yet ecological weighting is a the crux of the issue between NGO values and those of the RP as it means species-specific determinations (triage) for rescued oiled wildlife. MoE took the initiative by drafting an *Operational Guideline on Oiled Wildlife* response to put some framework around decisions that reflect ecological criteria. The concepts were somewhat modeled after the well established Shoreline Cleanup Assessment Technique (SCAT) process. Species-specific determination doesn’t preclude an RP from treating all oiled wildlife, but assists in decisions where there are bottle necks in the wildlife treatments leading to inhumane situations (birds left in boxes because of lack of vehicle transportation). The NGO’s feel that the “time to recovery” or species specific determinations will be the primary driver for the wildlife plan, which is against their values. (Noted on page 97)

71 (INFO) REGARDING THE STATE OF WASHINGTON’S WILDLIFE RESPONSE PLAN THAT OUTLINES THE RESPONSIBILITIES OF THE WILDLIFE BRANCH WITHIN A UNIFIED COMMAND STRUCTURE DURING AN OIL SPILL.

The Washington’s Wildlife Plan and its content and purpose is the same as the draft *Operational Guideline on Oiled Wildlife Response* prepared by the B.C. Ministry of Environment. (Noted on page 97)

TOPIC: WASTE MANAGEMENT FOR TRANSBOUNDARY AREAS

(Pages 100 to 105)

72 (INFO) & (TECH) AGENCIES MUST BE COGNIZANT OF THE REALITY THAT A POORLY-EXECUTED WASTE MANAGEMENT PLAN CAN EASILY CAUSE THE ENTIRE RESPONSE OPERATION TO GROUND TO A HALT AS FRONTLINE OPERATIONS WILL HAVE NOWHERE TO TRANSFER THE WASTES AND THUS BE PREVENTED FROM RESUMING RECOVERY OPERATIONS.

A major topic often missed in oily waste management is identifying and training on means to minimize the generation of oily wastes in the first place such as:

- Using dispersants and in-situ oil burning for on-water response;
- Applying the Shoreline Cleanup Assessment Process that selects reasonable end-points to minimize oily wastes from beaches,
- Using natural cleaning opportunities, and recommending shoreline treatments that do not create oily wastes such as sediment (surf) relocations
- Managing the shoreline workforce to prevent contamination of clean areas
- Reducing the use of sorbents, etc

The Project Report recognizes this need later in the discussion. Waste Management will probably be the most difficult technical and institutional challenge of any large marine oil spill, let alone a transboundary one. However, the likelihood of seeing the Response Organization or Provincial Agency working on this challenge is very low. (Noted on page 101)

73 (INFO) WHILE IT IS ULTIMATELY THE RESPONSIBLE PARTY'S (RP) OBLIGATION TO DISPOSE OF ALL ASSOCIATED WASTES, AUTHORIZING PLANS FOR DISPOSAL ARE GENERALLY THE RESPONSIBILITY OF THE PROVINCE AND STATES. CURRENTLY, THERE IS NO EXISTING APPROVED STATE, PROVINCIAL, NATIONAL OR INTERNATIONAL POLICY REGARDING HANDLING OF OILY WASTES IN AN EMERGENCY SPILL SITUATION ALONG THE RELEVANT INTERNATIONAL BORDER ZONES.

The Response Organization Standard requires a Response Organization to have custody of any oily waste for a 24 hour period or less. After that period, it is up to the Responsible Party and government - mainly the Province - to come up with both additional temporary storage capability and final disposal solutions.

There is no existing plans for anywhere in British Columbia, yet along along the borders. The last work done by the Ministry of Environment to examine opportunities for the final disposal of oily wastes was in 1993. In 1993, the BC Ministry of Environment wrote an oily waste management manual to guide the process of managing oily waste streams – fresh oil, oiled shoreline debris, contaminated equipment, *etc.* In the same year, there was an effort to inventory potential sites for final disposal/storage of oily waste. A strategic plan for the collection and disposal of oily wastes from a marine oil spill was also written (1993 *Inventory of Potential Sites for Disposal/storage of Oily Waste*, and 1993 *A Strategic Plan for the Collection and Disposal of Oily Wastes from a Marine Oil Spill*)

The study examined the constraints and capabilities in British Columbia regarding storage and disposal of oily wastes in landfills, land farms, incinerators, pulp mills, dry-land log sorts, cement plants, and asphalt plants. The findings revealed two types of impediments: either *technical* or *institutional*. Technical impediments are when a facility could not take the oily wastes for final disposal because it would disrupt or jeopardize their operations or cause environmental risk. Institutional impediments are those when facilities could technically handle the oily wastes, but provincial regulations or local bylaws would not allow them to receive them. For example, most landfills are not permitted to take large amounts of liquid oily waste (an institutional impediment), whereas pulp mills can burn waste oil, but do not want to risk contaminating their boilers (a technical impediment). The conclusion of the study was that there are very few options for handling large amounts of oily waste in an emergency.

The expense of final disposal of oily waste from a major vessel casualty can be very high - up to a third of the overall response cost. This cost also competes with the expense of removal of a ship wreck and other pollutants - such as the ship's cargo. (Noted on page 101)

TOPIC: DISPERSANT AND IN-SITU BURN DECISION-MAKING
(Pages 106 to 109)

74 (INFO) & (OPIN) “REGARDING CANADIAN DISPERSANT USE POLICY AND THE STATEMENTS “ENVIRONMENT CANADA IS REVISING DISPERSANT “GUIDELINES” FOR USE. NO REGION IN CANADA CURRENTLY HAS PRE-APPROVAL AUTHORIZATION FOR THE USE OF DISPERSANTS, AND THERE ARE NO AGREED-UPON CRITERIA FOR THE USE OF DISPERSANTS. APPROVAL FOR THE USE OF DISPERSANTS IS CURRENTLY MADE ON A CASE-BY-CASE BASIS AND MUST BE EVALUATED BY THE REET.”

The issue of dispersants have been on Environment Canada’s lap for over 25 years now. Don’t expect any decisive decision by REET as Fisheries and Oceans will always cite impacts to fish, forgetting that oil on shores are also fisheries habitats with populations that can not escape the pollution.

The two most important reasons for using dispersants (and in situ burning) are 1) to minimize the exposures of hydrocarbons to workforce personnel and 2) to minimize oily wastes.

There is no question that dispersants and in-situ burning for the right product - in the right areas - and the right conditions can achieve a net environmental benefit.

Canada’s Response Organizations will not capitalize on either dispersants nor in-situ burning technologies because they don’t have to under regulation/planning standards, and because government is not showing any leadership in these areas. (Noted on page 107)

75 (INFO) REGARDING CANADA’S IN-SITU BURNING POLICY

The BC Ministry of Environment has developed in 1995 and widely distributed a *BC/Canada Decision Guideline on In-Situ Burning*. This document should be noted as it is *defacto* the only one in Canada. The document has been vetted through Environment Canada Spill Technology group (Merv Fingas) (Noted on page 108)

TOPIC: ROLE OF FIRST NATIONS AND FEDERALLY-RECOGNIZED TRIBES IN
TRANSBOUNDARY OIL SPILL PLANNING AND RESPONSE
(Pages 110 to 116)

74 (INFO) “PRESIDENTIAL EXECUTIVE ORDERS ADDRESS THE UNITED STATES GOVERNMENT-TO-GOVERNMENT RELATIONSHIP WITH INDIAN TRIBES TO ENSURE THAT FEDERAL AGENCIES AND DEPARTMENTS CONSULT WITH TRIBES AS REGULATIONS AND POLICIES ARE DEVELOPED ON ISSUES THAT IMPACT TRIBAL COMMUNITIES. IT IS ALSO THE POLICY OF THE STATES OF ALASKA AND WASHINGTON TO WORK ON A GOVERNMENT-TO-GOVERNMENT BASIS WITH FEDERALLY-RECOGNIZED TRIBES.”

Canada has the same federal-level requirement under constitution, law and policy to consult with First Nations (Tribes) that effect their lands and interests...this also applies to emergency management objectives, strategies and priorities. A similar statement should be included for Canada’s requirement to consult with First Nations with supporting citations.

The Ministry of Environment as the lead provincial agency for spills view First Nations as a jurisdiction and therefore eligible to be part of Unified Command. (Addressed correctly on page 113). Integration of

First Nations is generally within the Environmental Unit, as well they may provide operational field support such as vessel operations. (Noted on page 110)

76 (OPIN) REGARDING THE TWO FOLLOWING STATEMENTS:

- “WHEN THE CCG MANAGES AN INCIDENT, FIRST NATIONS CAN PROVIDE INPUT VIA THE REGIONAL ENVIRONMENTAL EMERGENCY TEAM (REET). SINCE THE REET ONLY ADDRESSES ENVIRONMENTAL ISSUES AND NOT FOOD SAFETY, PUBLIC SAFETY, ETC., IT MAY NOT BE A COMPREHENSIVE VENUE FOR ADDRESSING ALL FIRST NATIONS’ ISSUES RELATED TO A SPILL.”
- “THE CCG HAS NOT INCLUDED FIRST NATIONS IN SPILL PLANNING OR POLICY AND DOCUMENT DEVELOPMENT.”

The issue that has not been addressed in is the appropriate place for First Nations to be represented. With understanding of the Incident Command System and the Unified Command protocol therein, First Nations will probably seek representation as a jurisdiction at the command level to enable decisions to be made on where and how further participation (integration) will unfold. For example, First Nations may want representation in the Environmental Unit rather than REET. So for the CCG has just told First Nations where they will be placed, as they have for the province and local governments. (Noted on page 110)

77 (INFO) “THE MINISTRY OF ENVIRONMENT HAS NOT, HOWEVER, INCLUDED FIRST NATIONS IN PLAN OR POLICY DEVELOPMENT.”

Not quite correct, the Ministry of Environment has sponsored workshops with senior First Nations personnel to seek their inputs to work with the province on emergency preparedness. The work group may want to verify this with the MoE Emergency Program (Noted on page 111)

78 (OPIN) REGARDING THE POSITION AND EFFORTS OF THE PROVINCE TO ENGAGE FIRST NATIONS AS A JURISDICTION AND AS TECHNICAL SPECIALISTS IN PLANNING TO ASSIST IN DEVELOPING RESPONSE PRIORITIES

The discussion and information provided in this section is correct and shows a pro-active effort on the part of the BC Ministry of Environment to ensure First Nations are at the right place, at the right time, doing the right things.

**TOPIC: PLACES OF REFUGE DECISION-MAKING IN A TRANSBOUNDARY RESPONSE
(Page 117 to 125)**

79 (INFO) & (OPIN) “THE BRITISH COLUMBIA MINISTRY OF ENVIRONMENT PROVIDED COMMENT ON TRANSPORT CANADA’S DRAFT NATIONAL PLACES OF REFUGE CONTINGENCY PLAN, AND IDENTIFIED RECOMMENDATIONS SPECIFIC TO BC. THERE IS A NEED TO DO PLACE OF REFUGE PLANNING AND ORIENTATION WITH COASTAL COMMUNITIES AND FIRST NATIONS REGARDING THE NATIONAL PLAN.”

“THE MINISTRY HAS ALSO DEVELOPED AN OPERATIONAL GUIDELINE ON PLACE OF REFUGE DECISION MAKING THAT MODELS THE GUIDANCE FROM TRANSPORT CANADA, IMO, AND THE PACIFIC STATES/BRITISH COLUMBIA OIL SPILL TASK FORCE.”

There are several significant regional solutions required to make POR decision effective and equitable. There is potential that the Transport Canada will make unilateral decision solely based on its authority

without recognition of other jurisdictional interests. The working groups should enquire if Transport Canada replied to the Ministry of Environment's technical review of the national POR contingency plan and have shown to be receptive to the solutions put forward. (Noted on page 119)

TOPIC: VOLUNTEER MANAGEMENT PLANS FOR TRANSBOUNDARY AREAS
(Page 126 to 130)

80 (INFO) & (OPIN) REGARDING WORKFORCE DEVELOPMENT IN BRITISH COLUMBIA AND THE STATEMENT:

“BRITISH COLUMBIA’S POLICY IS CONTAINED IN THE BRITISH COLUMBIA MARINE OIL SPILL RESPONSE PLAN AND STATES: “FOR LIABILITY REASONS, ALL NON-GOVERNMENT RESPONSE PERSONNEL WILL BE HIRED BY AND SUPERVISED UNDER THE DIRECTION OF THE PROVINCIAL INCIDENT MANAGEMENT TEAM OR THAT OF UNIFIED COMMAND AS AN OIL SPILL WORKFORCE.” A FOOTNOTE ADDS “FOR OIL SPILLS, VOLUNTEERS ARE NOT USED, BUT A TRAINED AND HIRED WORKFORCE COMPRISED OF COMMUNITY AND GOVERNMENT PERSONNEL WHO HAVE REGISTERED FOR THEIR SERVICES, BEEN TRAINED, EQUIPPED AND HIRED BY THE RESPONSIBLE PARTY OR A LEAD GOVERNMENT AGENCY.”

The project report should reference that oil spill workforce initiative and products produced by the BC Ministry of Environment's Emergency Program between 1993 to 1995 which included a courses and video on basic oil spill safety and shoreline cleanup training, as well as workforce policies and code-of-conduct, and a registration database. These materials were used to train over 1600 coastal community people and designed for convergent volunteers. The basic oil spill safety materials was adopted by the CCG as the national course material. The material is needs updating and put in digital format (currently hard copy only).

The current and proposed Response Organization standard only call for 1/2 kilometer of shoreline to be cleaned a day. This level of intensity does not require a large shoreline cleanup workforce. As such, there has been little work on what is required to scale up to 1000 plus workforce personnel.

In October 2009, EnviroEmerg Consulting provided a proposal to MoE, BCO and CCG to revised and structure a workforce program based on the above mid-1990's materials and include recent lessons-learned from spills such as the Cosco Busan. There was no reply to the proposal.

A database for registering all levels of incident management and response personnel from the Command Post to field operations is available from EnviroEmerg's ftp site (Called RegEmerg). It is a runtime program so doesn't need the FileMaker application to use. URL is: <https://public.me.com/enviroemerg>

In November 2010, the MoE's Incident Management Team undertook a one-day, table top exercise that just focussed on shoreline management and cleanup. It was designed and facilitated by EnviroEmerg Consulting. The exercise began with SCAT data and involved issues around workforce safety and management. This was the first exercise of this type in British Columbia, as most exercises begin at the onset of a spill and revolve around on-water response - that is the first week or two of operations. Exercises rarely get into the challenges of managing shoreline cleanup operations that can take months. (Noted on page 129)

TOPIC: RESPONDER IMMUNITY AND WORKER LIABILITY ISSUES
(Pages 151 to 152)

81 (OPIN) REGARDING RESPONDER IMMUNITY AND THE STATEMENT:

“CURRENTLY THE CANADA SHIPPING ACT (CSA) 2001 PROTECTS RESPONDERS DIRECTED BY THE CANADIAN COAST GUARD (CCG); THOSE APPROVED BY TRANSPORT CANADA (TC); AND CERTIFIED RESPONSE ORGANIZATIONS. THOSE WHO ARE DIRECTED BY THE CCG ARE SUBJECT TO A “REASONABLENESS” TEST, WHILE APPROVED RESPONDERS AND CERTIFIED RESPONSE ORGANIZATIONS ARE IMMUNE FROM LIABILITY EXCEPT FOR PERSONAL ACTS OR OMISSIONS COMMITTED WITH INTENT OR RECKLESSLY AND WITH KNOWLEDGE.”

Important reasons for a jurisdiction being represented in Unified Command is to enable it to use legislation to: 1) remove a regulatory burden off the Responsible Party and 2) to facilitate operations such as providing responder immunity.

There is a legal question.... that if the CCG is function as a Federal Monitoring Officer (FMO) can it apply federal authorities under the Canada Shipping Act?

How does one obtain “approval” under Transport Canada for immunity and liability protection?
(Noted on page 151)

TOPIC: STANDARDS FOR RESPONSE PERSONNEL TRAINING AND PPE
(Page 153 to 156)

82 INFO REGARDING OIL SPILL RESPONDER TRAINING COMPARED TO U.S. REQUIREMENTS AND THE STATEMENT:

U.S. RESPONSE ORGANIZATIONS ARE REQUIRED TO HAVE PERSONNEL TRAINED TO THE HIGHEST LEVEL OF SKILL, RESPONSIBILITY, AND EXPOSURE TO WHICH THEY WILL BE ASSIGNED. *HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE* (HAZWOPER) TRAINING REQUIREMENTS RANGE FROM A SPILL SITE BRIEFING FOR SUPPORT PERSONNEL TO 40 HOURS OF TRAINING AND THREE DAYS OF SUPERVISED FIELD EXPERIENCE FOR POST-EMERGENCY RESPONDERS.

The previous mentioned oil spill workforce training materials initially developed by the BC Ministry of Environment’s Emergency Program in 1993-95 is designed for a 1/2 day basic oil spill safety training, followed by an afternoon training on shoreline cleanup by manual tools (rakes, shovels, etc). The basic oils spill training is for anyone going into the exclusion (hot) zone, such as SCAT members, shoreline workers, etc. It is modeled after the *US Occupational Safety and Health Administration* (OSHA) requirements. The second part of the training is strictly focussed on convergent volunteers that have been registered and assigned as a workforce member. As commented on already, this course material needs some up-dating.

Canada doesn’t use the term HAZWOPER *per se*, as it is for all types of chemical exposures and working environments. Generally, agencies and contractors with full time staff in spill response generally train to *National Fire Protection Agency 472* (NAFTA) hazardous material training standards such as Hazmat awareness, Hazmat Operations, and Hazmat Technician levels. (Noted on page 154)

TOPIC: COORDINATION OF OPERATIONS DOCUMENTATION
(Pages 157 to 158)

83 INFO & (TECH) “THE U.S./CANADIAN TRANSBOUNDARY PLANNING DOCUMENTS (THE NORTHWEST AREA CONTINGENCY PLAN, THE SE ALASKA SUBAREA PLAN, THE CANADIAN COAST GUARD MARINE SPILLS CONTINGENCY PLAN, AND THE CANADA-UNITED STATES JOINT MARINE POLLUTION CONTINGENCY PLAN WITH ITS CANUSPAC AND CANUSDIX ANNEXES) ALL PROVIDE FOR A COORDINATED AND DOCUMENTED RESPONSE EFFORTS. THEY DO NOT, HOWEVER, PROVIDE SPECIFIC GUIDANCE REGARDING COORDINATION OF RESPONSE DOCUMENTATION.”

“THEY ALSO PROVIDE FOR THE USE OF THE CANADIAN COAST GUARD’S RESPONSE MANAGEMENT SYSTEM (RMS) AND THE U.S. COAST GUARD’S INCIDENT COMMAND SYSTEM (ICS). BOTH RMS AND ICS REQUIRE A CLEAR AND ACCURATE UNDERSTANDING OF THE SITUATION BASED ON DOCUMENTATION DEVELOPED DURING THE INCIDENT.”

The Project Report should note that the CCG’s Response Management System (RMS) does not use the same emergency documentation process and forms as used in the Incident Command System (ICS) used in the United States and in Canada by Burrard Clean Operations, Province of BC, and spill contractors.

EnviroEmerg has available for response agencies a revised ICS electronic forms database that was developed by the US NOAA and still widely used by US agencies in filling in forms, documentation and compiling an Incident Action Plan. It is called ICSEMERG and available on EnviroEmerg.ca ftp site at: <https://public.me.com/enviroemerg>

ICSEMERG is true to the ICS. It has been made more robust to allow it to be used for all threats as well as a much larger Unified Command and IMT organization. It was used to prepare the IAP for the 2009 CANUSDIX exercise in Prince Rupert pertaining to the *Brigadier General M.G. Zalinski* SALVAGE Exercise. Essentially, it is the only application capable of handling the documentation complexity of a transboundary oil spill.

An effective means of ensuring consistent situational information is to share in the joint internet based situation reporting. A model and template is available from the noted ftp site as well as can be viewed at: http://web.mac.com/enviroemerg/demo_sitrep/Introduction.html (Noted on page 157)

TOPIC: RESPONSE SOFTWARE
(Page 166 to 171)

84 (INFO) REGARDING RESPONSE SOFTWARE

A good overview of the issues and scope of software and applications for emergency response. As noted, there are three free to use applications offered by EnviroEmerg Consulting on its ftp site at: <https://public.me.com/enviroemerg>. They are:

- **RegEmerg** - is an emergency personnel database that provides a structured approach to pre-registering response personnel within an agency, company, or non-government organization such as those that have Incident Management Team, OR to register responders as they arrive to participate at an incident (or exercise). *RegEmerg* is designed according to the international Incident Command System. The objective of using *RegEmerg* is to ensure the right person is doing the right job, under correct supervision, and safely. The database can be used to register

personnel from a company or agency, contractors, consultants, volunteers, and cooperating/ assisting agencies. The database is designed for registering personnel at the incident management (Incident Command Post) to the tactical (field) operations levels. It is applicable to all hazards such as spills, seismic threats, floods, forest and structural fires, medical and animal health incidents. The US FEMA job descriptions and resource typing is use to a large extent in the database directories for field assignment.

- **ICSEmerg** - is an Incident Command System (ICS) forms database that enables a user to type in incident information and print out hard copies. There are forty-four forms to choose from. It is a modification of the US NOAA ICS electronic database forms, which is fully acknowledged in the application. As a database, there are utilities such as ensuring a common event naming, defining operational periods, merging data and more. *ICSEmerg* also keeps a permanent record of all events that can be retrieved during or after an event. *ICSEmerg* provides a means to build *Incident Action Plans* (IAPs) that are essential for emergency management of long, complex events.
- **WebEmerg** - a useful utility for a facility (pipeline, railway, airport, facility etc) or organization (fire department, government agency) to prepare a contingency (response) plan pertaining to emergency contacts, web-based information sources, and Geographic Area Wide logistics/ sensitivity plans using Google Earth. *WebEmerg* dovetails the flexibility of databases with the power of the internet search and mapping tools such as Google and Google Earth. *WebEmerg* is designed to create a database of emergency contact people and businesses and find them on internet maps within the *WebEmerg* application itself, and to manage KML files created by Google Earth. These KML files can include icons and images of information and locations.

Probably the simplest and yet the most important tool and capability is for all responders having the ability to save, print and compile their out-puts in to pdf. (Noted on page 167)

TOPIC: REMOTE LOCATION ISSUES
(Pages 172 to 176)

85 (INFO) REGARDING COMMUNICATIONS AND WORKFORCE ACCOMMODATION IN REMOTE LOCATIONS IN BRITISH COLUMBIA

The BC Ministry of Forests (now called Ministry of Natural Resources Operation) Fire Protection Services has state-of-the-art communications systems for remote locations, as well as access to thousands of hand-held radios and many repeater stations. It also has remote camp capability to feed and house over 400 personnel *per* camp. The resources of the BC Forest Fire Protection can be found in its annual "Resources" document. (Noted on page 173)

**TOPIC: RESPONSE FUNDING REGIMES &
TOPIC: LIMITS OF LIABILITY AND COFR REQUIREMENTS
(Pages 186 to 193)**

86 (OPIN) REGARDING CANADA’S AND THE UNITED STATES’ FUNDING REGIMES FOR OIL SPILLS

This is a well researched section. A few matters should however be noted. First, it should be made clear to the reader that it is generally the location of the vessel casualty within a country that determines both the response funding and response organization regimes. There could be a few blurred situations here. For example, if the vessel casualty was a collision in Canadian waters, but the vessel grounded and then release oil in US waters.... what defines the casualty site...the collision or grounding location? There are also grey zones on where the US/Canada marine border lies at the entrance to the Juan de Fuca and also next to Dixon entrance.

There also two other matters that are not discussed when it comes to vessel casualty response funding. First, there is no federal policies requiring the RP to make its allocation of funds transparent. The RP may park funds for legal costs, penalties, and future damage compensation, with the remainder used for both vessel casualty response (e.g. salvage, towing, lightering) and spill response operations. Second, there have been no scenario-based studies to determine what level of environmental mitigation can be achieved for what cost. For example, a 70,000 DWT and larger bulk carrier has only about \$30 million (Can) for response, though it can carry 3,000 tonnes of bunker fuel. The vessel and its cargo may also incur the costs to salvage. If the RP parks \$10 million for fines, legal costs, & compensation, the remaining \$20 million would not be enough to even complete the on-water spill operations; it may not even be enough for vessel salvage. The amount will probably spent in a week. The ship owner is the an unable and unwilling RP and there is a transfer of Command. In Canada, the next level of funds is from the Ship-source oil pollution fund which the maximum liability of the Fund is \$155,318,424 for all claims from one oil spill.

There should be some discussion around the issues noted above. (Noted on page 186)

**TOPIC: CLAIMS, COST RECOVERY, FINANCIAL RECIPROCITY, FINANCE SECTION COORDINATION
(Pages 194 to 202)**

87 (INFO) & (OPIN) REGARDING THIS TOPIC AND THE FOLLOWING STATEMENT:

“A DAILY WORK ORDER IS PRESENTED TO THE POLLUTER/RP IDENTIFYING THE OPERATIONAL PLAN (OR INCIDENT ACTION PLAN (IAP)) FOR THE FOLLOWING DAY, TOGETHER WITH THE EXPECTED RESOURCES AND COST ESTIMATES; THIS SIGNED WORK ORDER OR IAP ESTABLISHES THAT THE COSTS HAVE BEEN ACCEPTED AND THERE SHOULD BE NO ISSUES WHEN INVOICES ARE SUBMITTED.”

Again, a well researched and comprehensive examination of a complex topic. As stated the response for political and emotional reasons are not considered “reasonable cost”. If the Canadian Coast Guard is still responding after the RP has firmly established incident management and operations, it would be for political reasons. As a FMO, the CCG is not part of the Unified Command prepared Incident Action Plan. As per earlier comments, the RP may insist that the CCG stand-down if they are not part of the assignments. (Noted on page 194)