PRESENTATION TO TANKER SAFETY EXPERT PANEL

PHASE II, ARCTIC ENVIRONMENTS

WOODWARD GROUP OF COMPANIES

MAY 16 2014

The Woodward Group of Companies is a family owned business headquartered in Happy Valley-Goose Bay, Newfoundland and Labrador. The Group is comprised of a number of operating divisions but for purposes of this presentation two particular businesses are engaged. We operate a tanker company called Coastal Shipping Limited. It owns and operates 5 Canadian flagged ice classed tankers that are principally engaged in Arctic service and in recent years, during the winter season, operations in eastern Canada in the spot charter market. The second company is Woodward’s Oil Limited. That company is in the petroleum products supply and storage business and uses the related company Coastal Shipping Limited to deliver products for customers mainly in the Arctic and sub-Arctic areas of eastern and northern Canada.

Our Group has been operating in the Arctic since the mid 1960’s. We were agents for and managed Imperial Oil Limited assets in Resolute Bay and Iqaluit from the mid 1960’s up to the late 1980’s. In the 1970’s, Coastal Shipping was formed and we directly engaged in the tanker business. Our Arctic marine operations were ramped up commencing around the year 2000 and since that time we have grown to be the largest liquid petroleum product deliverer to the Canadian Arctic. Last year we sourced, supplied and delivered over 300,000,000 liters of refined petroleum products to over 40 communities and sites in the Canadian Arctic. The north has been a focus for growth of the Woodward family and our future plans are focussed on continuing growth as the north opens up to the world.

I will address in the order presented in your Lines of Inquiry document the factors upon which we have experience and can offer meaningful input. On the topics in which we have no experience or input, I will simply not offer any comment in this presentation.

**THE ARCTIC ENVIRONMENT**

1. Q: *The Arctic provides a unique operating environment, both for navigators and regulators. What factors, including future considerations, should be considered while developing spill prevention, preparedness and response requirements for the Arctic?*

A: There are no resources anywhere north of 60 to respond to oil spills except individual mine sites, tank farms in communities and spill response kits on board ships, including CGS ships. In the thousands of square kilometers that is Canada’s high Arctic, there may be 40 or 50 sites where a very limited amount of spill response equipment and supplies are stored, but there are no readily available resources to respond to an incident, save for a particular site with a limited kit or on board a ship that might be involved in an incident. To try and list the factors that are involved in spill preparedness in those circumstances is not simple; anything by way of permanent installments of response facilities is an improvement and the current situation means that ships carrying products better be prepared to respond themselves to any incidents as in all likelihood the only entity with equipment and resources available is the ship. Where does one start to list considerations when the situation is essentially one of “you better bring it with you because you are on your own in any clean up”?

2: Q: *Are there particularities and/or differences between regions of the Canadian Arctic that should be considered?*

A: As noted above there are differences depending upon communities and mine site resources where an incident might occur, but given the vastness of the territory and the very small amount of local response equipment available, it is essentially the same situation throughout the entire Arctic area. The message is product carriers must assume you need to carry the full kit and equipment to respond to an incident should one occur.

3: Q: *Are there sensitive areas where vessel traffic presents particular concerns? Where are they? What makes them sensitive areas?*

A: There are sensitive areas where greater caution needs to be taken; around communities, in difficult traffic passage areas and areas where charts are poorly detailed due to newly created traffic corridors for larger vessels. All require more attention to detail and greater caution when working. All the Arctic is essentially environmentally sensitive so the precautionary approach is required in all locations.

4: Q: *What mechanisms are in place for outreach and engagement of Northern communities in spill preparedness and response?*

A: On engagement and outreach, they are typically driven by environmental review processes for development or related to the Government of Nunavut by contractual requirements engaging in community consultations by shipping companies. The lack of direct resources in the communities to assist in responses limits the assistance to one of consultation and leaves the developer or shipping company to carry the burden of responding to any incident.

**PREVENTION**

 5: Q: *What measures and resources are currently in place to prevent marine spills in the Arctic?*

A: The measures in place are the normal panoply of legislative mechanisms including equipment and training requirements to conduct work, environmental review processes that impose specific requirements and the marine safety enforcement system that ensures compliance with the legislative rules. In our experience, the rules are enforced rigorously and sometimes without regard to the peculiarities and difficulty of working in the north. As we detail in this presentation, there are essentially no infrastructure resources supporting shipping in the communities and the environment in which work is conducted is the most difficult in the world to carry out the work. Applying the same rules to issues encountered in that environment may be counter-productive and it may make more sense to apply scarce resources to building a cooperative approach to prevention and response, as opposed to significant financial consequences for problems that from time to time will be encountered given the current work environment.

6: Q: *What additional navigation support and resources are needed for safe shipping in the Arctic?*

A: Except in a very few communities, there is virtually no shipping infrastructure in the Arctic. Mapping is good in some areas but poor in many others and the CHS is offered only limited resources to improve the situation. There are no wharves to tie up, very few bollards to use, no local assistance to call upon and no support services or facilities that support shipping operations. Not a single technical company that supports shipping exists in the Canadian Arctic of which we are aware. The Coast Guard has been provided limited resources and operates ice breaking vessels that have, in some cases, outlived their useful life. Self-sufficiency and independence are essential to conducting the work. Required improvements in all areas are obvious we suggest.

7. Q: *What preventative practices could be undertaken at HNS and oil handling facilities and/or during HNS and oil transfers?*

A: The current regulatory requirements for petroleum transfers are the best we can devise given the resources we have available when doing our work. They were built from experience in the Arctic and when implemented offer the best method of conducting the work on a consistent basis. Clearly, the ideal situation would be wharves, much shorter floating hose connections and many additional safer ways to secure ships during transfer. The required investments to reach these goals will be significant and from our vantage is not part of the priority investment on anyone’s agenda right now. Given that circumstance, the TP10783 E Arctic Waters Oil Transfer Guidelines are the best available practise methodology, modified as required for the individual delivery and site conditions in question.

8. Q: *What more can shipowners and/or oil handling facility operators do to prevent or reduce potential impacts of incidents?*

A: See answer in 7 above and additionally, operators in our Arctic regions should be experienced in the areas with crews and equipment needed for the work. Caution on allowing inexperienced operators is required in the regulatory framework but so far that has not been a significant issue.

9: Q: *Should the current practice of overwintering fuel in barges in landfast ice be reconsidered? Why or why not?*

A: We do not operate barges and have no insight to offer on overwintering practises.

**EXISTING RESPONSE CAPACITIES**

10. Q: *Are the vessels currently operating in the Arctic capable of responding to a spill of their bunkers or oil/HNS cargos? If not what do they need?*

A: Existing product carriers have the capacity to respond to normal incidents in an efficient manner. The difficult question arises in catastrophic losses involving a product carrier as well as other ship types. There is no response capacity whatsoever in the Arctic to respond to such incidents as of now, should the ship be at peril and unable to respond effectively itself. Any response capacity would have to be transported there to respond. Given the lack of airstrips capable of handling larger aircraft in many areas of the Arctic this poses very great logistical and practical issues for regulators.

11. Q: *What private-sector and public-sector resources are available currently to respond to ship-source spills in the Arctic?*

A: Answered above in various places. Limited to specific sites and of small quantities and no significant cleanup equipment of which we are aware.

12: Q: *Are there facilities in place in the Arctic to treat or dispose of waste from an oil spill or release of HNS? How could these waste products be dealt with in the event of a spill?*

A: None exist; we do not dispose of any waste in the Arctic. All of it would have to be stored on the ship and/or special arrangements made with regulatory authorities to properly dispose of it. Our ships have an **absolutely no discharge** policy in place for all wastes north of 60.

13: Q: *Is there any existing capability in the Arctic to treat wildlife affected by HNS or oil?*

A: We are unsure of local resources but no wildlife treatment facilities set up to deal with such issues exist to our knowledge.

**PREPAREDNESS AND RESPONSE**

14: Q: *What preparedness and response requirements are necessary for the Arctic?*

A: The answer to this is outlined in other responses. All response preparedness is left with the ship and its crew. There are no other options but complete independence as of now. The requirements are regulatory and include, spill response equipment, particular crew training for tankers, equipment including skimmers, booms, work boats and spill recovery supplies are all in place as required by regulations and our own ISM system.

15: Q: *To whom should these requirements apply?*

A: It certainly should apply to tankers carrying cargo petroleum products. The debateable issue, given the lack of local resources, is should commercial ships that are otherwise trading in Arctic areas be required to have spill response kits similar to tankers. We offer no position on this issue. It would likely only be an issue in the case of a grounding or other catastrophic loss for other than petroleum carriers as there are no bunkering facilities and therefore no ship to ship transfers occurring which would be a potential source of a spill that might occur with non-tanker ships.

16: Q: *Should the Arctic be treated differently than the parts of the country south of 60° in terms of response capacity and response time requirements? Why or why not?*

A: The timing and type of response is completely different in the north as we have outlined. If the question is should this change the answer is yes but we don’t believe it will in the foreseeable future? There are other basic investments in shipping infrastructure that must precede it before enhanced response capability is funded and that infrastructure investment is urgently needed.

17: Q: *How should the placement of spill response equipment be determined for the Arctic?*

A: Spill response equipment should follow the traffic patterns for delivery routes and sites. Geographical locations should be coordinated with main shipping routes and delivery points and be dispersed to ensure the best coverage comes from the location choices made.

18: Q: *What spill response techniques are appropriate and effective for oil spills and HNS incidents in Arctic waters?*

A: This is a difficult question to answer in a brief manner so I will offer only the “main focus” in this response. In the case of refined petroleum products, the main focus is they need to be contained quickly before they spread on the water surface. While we have never had to deal with a heavy fuel oil spill into Arctic waters, we believe what would happen would be similar to the near north conditions where minor spills have occurred (water temperatures and wind conditions in Labrador and northern coastal Newfoundland are similar to the Arctic). Heavy fuels would be sinking and the main focus would require attention paid to limiting their dispersal and immediate recovery steps taken if possible. In both types of fuel, prevention is still the best approach but once a spill occurs, swift action to stem the source and contain is the best first response.

19: Q: *Should the use of dispersants, in-situ burning and other response techniques be permitted in the Arctic if they yield a net environmental benefit?*

A: Use of dispersants is controversial and can cause more problems than they cure if not properly managed. This topic and the topic of in-situ burning are more scientific and best left to others for detailed input. However, and given the wide spread domestic use of mild household detergents, it has in the past seemed to us that the scientific literature and position of enforcement agencies on detergent use was somewhat overheated and not very practical. It is our unscientific assessment that the rhetoric and stance of enforcement agencies has perhaps been a little over the top given millions of gallons of dishwater washes into the oceans every day in every part of the world. A more careful and reasoned assessment of proper and appropriate use would be welcomed, especially given you can apparently legally use detergents to wash dishes and clothes but use of the same material to finish a cleanup job in the beach or littoral area after a spill will result in dire consequences if discovered by enforcement agencies..

20: Q: *Are the availability, the frequency and the quality of training and exercises in the Arctic adequate? Who should participate in training and exercises?*

A: We train in the south and only occasionally in the north for project specific issues. It is difficult to plan to execute training exercises in the limited work window that exists for commercial operations in the Arctic. There are no local resources to engage except at very few sites so essentially it is a ship based training regime, and they are carried out frequently now under our ISM system and as required by regulations, but mostly in the south when time and resources to conduct can be marshalled effectively.

**ROLES, RESPONSIBILITIES AND LEGAL FRAMEWORK**

21: Q: *Should the regime(s) for Arctic oil spill and HNS incident preparedness and response be structured the same way as the Ship-source Oil Spill Preparedness and Response Regime in place south of 60°?*

A: The Arctic is a difficult place for the same system as exists south of 60° to implement, at least for now. Having the contracted resources of a spill response organization in all required areas of the high Arctic and for all year round is difficult to imagine and even more problematic to understand how to fund given the high cost of working in the north now and the apparent lack of will to offer resources by government entities. As work in the north increases, it may be feasible to see a similar regime being implemented; it is not feasible to think the current low volume of shipping could be expected to carry the burden of funding the same regime in the north as in the south for a great number of reasons, not the least of which is cost to cover the entire Arctic area effectively.

22: Q: *What should be the role of private stakeholders (e.g., potential polluters, response contractors) in terms of ship-source oil spill or HNS incident preparedness and response in the Arctic?*

A: Currently, operators are fully and solely responsible for spill response and we do not see that changing soon. We might be lucky enough to encounter an issue in the vicinity of a CGS vessel and they might be able to respond, but given the limited ship resources they have deployed in a very large area, it would be good fortune only for them to be able to offer prompt assistance. Later in my general comments I will make some suggestions for a completely different approach to spill response and enforcement for consideration.

23: Q: *What should be the role of the Canadian Coast Guard (CCG) in ship-source oil spills or HNS incidents in the Arctic?*

A: Currently for budgetary and reasons of limited ship availability, it seems unlikely that unless something changes the role of the CCG will be limited to immediate assistance if nearby the incident or monitoring of response by carriers if an incident occurs. Given the resources the CGG has available, I don’t think anything more can be expected of them unless funding to their work is increased to match the expectations.

24: Q: *To what extent and how should local communities participate in spill preparedness and response?*

A: Local communities, with the exception of Iqaluit and perhaps Rankin Inlet, could only offer very limited assistance as they do not have the people, the training or skill set to offer help other than a limited role in response. They should, however, be consulted about the planning for responses and for local environmental knowledge, especially in larger resource development projects, as those projects bring direct risks to their lives and it is the Inuit of the north who should have meaningful input into projects proposed for their home territory.

25: Q: *Are there roles for other local parties to play in the response to an oil spill or HNS incident in the Arctic?*

A: There may be a limited role for locals to play in oil spill responses and especially in local environmental conditions as well as wildlife protection and related issues. The training required for locals to have a role in the actual response would have to be managed before a more involved role could be envisaged. Petroleum product clean up requires skills and an understanding of the risks involved that the local Inuit would not ordinarily possess, any more than local people in southern regions would. So unless coordinated training for such responses is implemented, a limited role only could occur.

26: Q: *Do the Arctic Waters Pollution Prevention Act, Canada Shipping Act 2001, and Marine Liability Act provide an effective basis for a ship-source preparedness and response regime in the Arctic? Are there changes required to create a coherent spill preparedness and response regime?*

A: The legislation referenced provides for the only spill response regime currently possible in the north. It is operator and ship based and has detailed requirements for response training, kit and equipment. The issue is should other steps be taken to add resources beyond what ship owners can provide to respond? In the case of a catastrophic vessel loss rendering the ship incapable of responding, the answer is clearly a northern based response resource would be helpful. Does the will exist to fund that in the future and is the money better invested in basic marine infrastructure first to avoid catastrophic potential ship losses?

27. Q: *How could a spill preparedness and response regime for the Arctic be funded?*

A: Funding for incident response has fallen to ship owners to date. The economics of the business means this gets eventually passed on to the consumer in shipping rates. In the north this eventually translates to governments as they are subsidizing most of those costs through various means. If a new regime is required, it makes most sense that government control the decisions and the costs as they are the ones who will pay for it in the foreseeable future. If industry is expected to bear the burden in an already highly competitive and challenging marketplace, rates will increase to pass on the cost to the consumer of the service in any event.

28: Q: *How could a regulatory preparedness and response regime for the Arctic be overseen and enforced?*

A: This is a government policy regime issue and beyond our knowledge to respond. If industry input is required in formulating the “on the water” elements of a plan, we will participate if requested in those elements where our input can offer some value through our direct experience.

29: Q: *What opportunities exist for bilateral, multilateral, or circumpolar cooperation in the Arctic (e.g., Denmark, Alaska, and Arctic Council)? How should this influence Canada’s regime?*

A: This is beyond our sphere of direct knowledge and therefor left to others with meaningful input.

30: Q: *Are there international best practices (ship-source or other) that should be considered when creating a regime in the Arctic?*

A: It is our belief that the Canadian Arctic is at the forefront of regulation and oversight of Arctic areas best practises, but our belief is based on our Canadian experience only. This issue as well is best left to those with a broader experience than ours.

**RESEARCH AND DEVLOPMENT**

31*. Are there gaps in knowledge on the behaviour, fate and effects of oils and HNS in icy waters?*

32*. Are there gaps in knowledge on response techniques to address these spills in icy waters?*

33*. Who should be responsible for funding and conducting this research?*

Questions 31-33 are beyond our sphere of knowledge and left to others better suited to respond.

**GENERAL COMMENTS ON ENFORCEMENT APPROACH**

 We have experience in the enforcement approach of a variety of regulators who are responsible for incident response investigation and prosecution. The system places all responsibility for incident avoidance on the carrier and it appears a policy of zero tolerance with respect to spill avoidance is the approach. In southern areas where there are advanced navigations systems, excellent infrastructure and relatively predictable climatic and environmental factors at play, this makes sense. It fairly places responsibility for incidents on the perpetrator who does not take all possible care to avoid the incident.

In the Arctic, there are places where in order to do our delivery work we stretch out close to a mile of floating rubber hose to reach community tanks. That may be through waters that have highly turbulent currents, where winds are highly unpredictable and volatile and we are forced through a lack of existing marine infrastructure to tie up to rocks and heavy equipment to secure our tanker. One might say, if the risks are so great, don’t do the work. That means communities go dark and cold, an unacceptable result obviously. While the description in these comments is the worst case scenario, it is a yearly scenario for our working men and women aboard our ships. Additionally, the navigation infrastructure, including charts, is much less developed and reliable and little improvement has occurred despite much talk about it.

While we do not want to appear to be trying to avoid our environmental responsibilities, we do want offer a suggestion that may improve the working environment for all parties.

We suggest that a more cooperative regulatory approach be taken, where the limited resources available are applied in improving infrastructure and not in building enhanced enforcement rules and regulations. As well, a more flexible approach to investigation and enforcement is called for, one that accounts for the real life situation of those working in these difficult circumstances. To some extent that is the current situation, but not across the board. A policy framework where improvements in operations and a record of safe work would also play a role in decision making on enforcement would be helpful. The current situation is one where extremely punishing fines are in place for potentially very minor incidents, and those fines double for a subsequent incident, without discretion and regardless of the previous good record of an operator. If things continue, no one will work in the north for fear of losing the assets of the company as a result.

What such a system would ultimately entail in detail is not a topic for this paper, but a different approach than one of blame and punish for all offences should be considered, especially given the punishing minimum fines now in place for offences.