Transport Canada / Transports Canada

Environmental Affairs, Programs
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Your file Votre reference
09-13-01

Our file Notre reference
7075-70-8-26

October 30, 2013

Mr. Darrell Christie
Environmental Impact Screening Coordinator
Environmental Impact Screening Committee
107 Mackenzie Road, Suite 204
PO Box 2120, Inuvik, NT X0E 0T0

RE: Imperial Oil Resources Ventures Limited Beaufort Sea Exploration Joint Venture Drilling Program

Dear Mr. Christie,

Transport Canada (TC) received the Notice of Proceeding for the Imperial Oil Resources Ventures Limited (Proponent) Beaufort Sea Exploration Joint Venture Drilling Program (project) September 16, 2013 and has reviewed the Project Description as submitted by Imperial Oil Resources Ventures Limited.

TC is responsible for federal transportation policies and programs. It promotes an integrated transportation system that is safe, secure, efficient and environmentally responsible. TC provides expert advice and administers regulations, conducts reviews and issues approvals for works that may affect transportation. After reviewing the information provided, TC has identified an interest in several components and activities that would pertain to our mandate and area of expertise. The following comments pertain to TC's understanding of the project description.

PROPOSED FACILITIES AND ACTIVITIES IN NAVIGABLE WATERS:

TC has an interest and potential regulatory responsibility for any works built or placed in, on, over, under, through or across a navigable waterway. TC has identified an interest in the potential dredging of Tuktoyaktuk Harbour and associated dock construction and upgrade activities. The *Navigable Waters Protection Act* (NWPA) application guidelines for approval can be reviewed at the following website:

http://www.tc.gc.ca/eng/marinesafety/oep-nwpp-menu-1978.htm

MARINE BASED ACTIVITIES:

Marine Safety

Transport Canada has a number of comments that are summarized in Table 1 (attached), related to the following project components:

- Marine Support Vessels;
- Shipboard Oil Pollution Emergency Plans;
- Charting, Bathymetric Information and Shipping Routes;
- Over-wintering;
- Fuel Storage and Transfer;
- Vessel Certification;
- Discharges from Ships; and
- Use of dispersants and In situ burning.

Marine Security

TC is responsible for increasing the level of protection of Canada's Marine Transportation Security System against unlawful interference, terrorism attack and terrorist exploitation of it as a conduit to attack our allies. TC also helps to achieve compliance with marine security legislation and regulations through awareness, certification, inspection and enforcement and to help ports, marine facilities and vessels implement the *International Ship and Port Facility* (ISPS) *Code* through the *Marine Transportation Security Regulations* (MTSRS). The TC Marine Security Operations Centre detects, assesses, prevents and responds to a direct or indirect marine security threat.

Marine Security – Legislative and Regulatory Framework

In 1994 Canada's *Marine Transportation Security Act* (MTSA) came into force as the legislative framework for securing the Canadian marine transportation system. The MTSA applies to vessels, ports and facilities in Canada and to Canadian vessels outside of Canada, as well as to marine installations and structures. The MTSA focuses on TC's authority to secure the marine transportation system by preventing unlawful interference and ensuring appropriate action is taken where that interference occurs.

Canada is a signatory to the *International Convention for the Safety of Life at Sea* (SOLAS[1] Convention) which is an international agreement for all vessels (cargo, tanker, passenger, etc.) that sets standards for safety, emergency procedures and other protocols. The SOLAS Convention also sets out special measures for commercial shipping security and is the source for many of the rules and regulations that govern security of the world's marine transportation system.

Should the proponent receive approval to proceed with the Project and decides to build an on-shore supply base, TC will require notification, approximately one year prior to operations. TC requires details regarding facility locations and risk-based information to complete a security assessment. A determination of whether the site would be assessed as an Occasional Use Marine Facility, or require to be fully certified would be conducted prior to drilling operations.

The Proponent will also require a security assessment for a new supply base facility. In the event that an existing facility agrees to complete operator responsibilities, a reassessment of the facility would need to be conducted, to ensure that the existing security plan meets the new activity being undertaken. TC must complete the security assessment of the facility/site(s) and then evaluate the security plan for compliance to the MTSRS before the Proponent can obtain the "Statement of Compliance of a Marine Facility/Port" certificate. Once the security plan is approved the company will receive the certificate which remains valid for a 5 year period. A Marine Facility Security Officer with appropriate certification will also need to be appointed. Vessels interfacing with the facility would be required to submit a Declaration of Security to ensure required security levels between the vessel and the facility are within legislated requirements.

Inspections of ports, marine facilities, and vessels take place on the vessel or site by TC inspectors; Security Assessments are also conducted in person by the Inspector at the particular site or on board the SOLAS/Non-SOLAS vessels.

SOLAS and Non-SOLAS vessels require an International Ship Security Certificate or a Canadian Vessel Security Certificate (CVSC) from TC prior to interfacing with a marine facility. These certificates are validated as part of the inspection process for compliance with the regulations.

In addition, the Proponent will need to provide TC with a schedule of vessel traffic to their facilities, to enable TC inspections to be conducted as required to ensure regulatory compliance.

TC appreciates the opportunity to comment on the Imperial Oil Resources Ventures Limited Beaufort Sea Exploration Joint Venture Drilling Program and looks forward to continued participation in the review of this proposed project. Should you have any questions regarding TC's comments concerning this project, please contact me via email at Kelly.hunnie@tc.gc.ca or by telephone at (204) 984-4515.

Regards,

for Kelly Hunnie
Environmental Affairs, Programs
Prairie and Northern Region

TABLE 1 TRANSPORT CANADA COMMENTS ON THE IMPERIAL OIL RESOURCES VENTURES LIMITED BEAUFORT SEA EXPLORATION JOINT VENTURE DRILLING PROGRAM IN RELATION TO MARINE SAFETY			
TOPIC	RELEVANT SECTION	PROJECT DESCRIPTION CONTENT	TRANSPORT CANADA'S COMMENT
Marine Support Vessels	Section 6.5.3	The Proponent has identified that the following vessels could be utilized to support the drilling program and will be designed in accordance with Canadian regulations and international standards, including the International Association of Classification Societies Ltd. IACS Unified Requirements for Polar Ships: • Ice-strengthened supply vessels • Icebreaking support vessels • Ice-strengthened fuel tankers • An ice- strengthened wareship	All vessels transiting through and operating in Canadian Arctic waters are required to comply with the *Arctic Waters Pollution Prevention Act* (AWPPA), the *Canada Shipping Act 2001* (CSA 2001), the *Marine Liability Act* (MLA) and their associated regulations including requirements for vessel construction and operations. While the provisions of the CSA 2001 apply in all Canadian waters, vessels in Arctic waters North of 60° and out to the 200 nautical mile limit of Canada's Exclusive Economic Zone, are also subject to the provisions of the AWPPA. The AWPPA prohibits discharges of oil, chemicals, garbage and other waste generated onboard vessels. The MLA sets out a regime that requires vessels operating in Canadian jurisdiction, including Arctic waters, to carry insurance to pay for damages from oil spills. Two vessel control systems are established under the *Arctic Shipping Pollution Prevention Regulations* – the Zone/Date System and the Arctic Ice Regime Shipping System which provide for operational safety by taking into account the vessel's capability to operate safely by virtue of ice strengthening, and the ice conditions it will encounter. Please note that Canadian Vessels will require Transport Canada certification if not delegated to Class.
Shipboard Oil Pollution Emergency Plan	Section 7.1, Table 7-5	The Proponent has identified that all support vessels will comply with International Maritime Organization (IMO) protocols, have a Shipboard Oil Pollution Emergency Plan (SOPEP) and have the necessary equipment on board for Tier I spill.	TC expects that SOPEP and Voyage planning in the Arctic take into consideration remoteness and reality of operations, particularly in regard to responding to a spill and seeking outside assistance. Please note there are no recognized organization's in the Arctic. TC will require details related to the proponents plan for seeking external response resources given the reality of Arctic operations, risks

			present, availability and timeliness of assistance.
Charting, Bathymetric Information and Shipping Routes	Sections 6.5.3.2, 6.6.2.3, 6.7.1 and 10.5.2	The Proponent has indicated that ice-strengthened supply vessels would be designed to enter and operate out of Tuktoyaktuk Harbour and dredging might be required at some locations inside the harbour. Bathymetric mapping in the Beaufort Sea at the regional scale is acceptable for navigation and planning purposes. A deep-draft shipping channel has been charted through the Beaufort Sea at mid –shelf depth by the Canadian Hydrographic Services. The Proponent has also identified that depending on the location of the drilling unit and support vessels, entry into the Beaufort Sea could also be from a port on the east coast of Canada via the Northwest Passage.	Due to draft limitations at Tuktoyatuk Harbour and limited charting in the Arctic, TC highly recommends that bathymetric surveys be conducted to establish a safe navigation corridor. The proponent should work with Canadian Hydrographic Services and provide bathymetric information and specific ships routing to accommodate planned vessels.
Over-wintering	Section 7.1, Table 7-3 and section 6.7.1	The Proponent has identified that no fuel will be stored in barges over the winter. If a decision is made to over-winter vessels in the Canadian sector of the Beaufort Sea in the fall, there would be a contingency plan to use one or more sites in the region that have been used in the past, such as McKinley Bay, Summers Harbour or Wise Bay.	Vessels that overwinter are subjected to requirements of the CSA 2001, AWPPA and their associated regulations. The proponent will be required to provide specific details about the vessel, over-wintering project and a detailed contingency plan if fuel storage and transfer operations will be carried out by that vessel. These details will need to include vessel particulars, intended purpose and be in compliance with CSA 2001 and AWPPA.
Fuel Storage and Transfer	Section *6.5.3.3, 6.6.2 and 14.3.2*	The Proponent has identified that a single large tanker could be utilized to carry fuel for the drilling unit and all support vessels for the entire drilling season. The support vessel and supply vessels would offload fuel from the single large tanker for their own needs. There	TC is the lead federal regulatory agency responsible for the National Marine Oil Spill Preparedness and Response Regime. Part 8 of the CSA 2001 and its associated regulations and standards govern the regime, which is built upon the polluter-pay principle. Part 8 and its regulations require oil handling facilities (OHFs) to have emergency plans and prevention plans. Please note that there are specific

		is also reference to the transfer of fuel between ship to ship, shore to ship and fuel barge to ship. The Proponent has identified that an offshore drilling program could require the support of a shore-based facility which would most likely be located in Tuktoyaktuk. The shore based facility would be leased from one or more of the existing commercial locations.	guidelines for the transfer of fuel in the Arctic. The Proponent must ensure that the requirements of the CSA 2001 Part 8 and the *relevant* regulations and standards outlined below can be met prior to commencing and throughout the proposed project: • Response Organization and Oil Handling Facility Regulations, • Vessel Pollution and Dangerous Chemicals Regulations, • Environmental Response Arrangement Regulations, • Oil Handling Facilities Standards (TP 12402), • Release and Environmental Emergency Notification Regulations, • Response Organization Standards (TP 12401), and • Guidelines for Reporting Incidents Involving Dangerous Goods and Harmful Substances and/or Marine Pollutants. The *Vessel Pollution and Dangerous Chemicals Regulations* have specific requirements for transfer operations. TC notes that if leased shore based facilities include fuel tank farms which are operated by Imperial Oil for storage and transfer of fuel, TC will require oil handling facilities (OHFs) to have an Oil Pollution Emergency Plan (OPEP). An OPEP is a regulatory requirement and must be reviewed by TC prior to commencement of the project.
Vessel Certification	Section 4.1.2.5, Table 4-1, Section 7.1, and Table 7-3	The Proponent has identified that they would seek a number of permits and approvals from TC including • an Arctic Pollution Prevention Certificate, • Canadian maritime documents addressing personnel competency, maritime safety, and maritime pollution prevention, and • A Coasting Trade Licence for foreign	The Proponent has identified TC and the National Energy Board (NEB) as the responsible parties for the issuance of Certificate of Fitness and has indicated that an Ice Management Plan (IMP) will be included in the submission filed with the NEB. The Plan will be reviewed by TC and implemented during drilling. TC would like to advise that an Arctic Pollution Prevention Certificate can now be issued by certain classification societies for Canadian waters. TC does not issue Certificate of Fitness or review Ice Management Plans. Vessels are required to meet the AWPPA and their associated regulations.

		vessels or non-duty paid vessels.	
Discharges from Ships	Section 14.2.4	The Proponent has indicated that routine discharges from maritime operations could include domestic waste water (grey water), sewage (black water), bilge water and any other collected drainage water will be processed through oil-water separators on each ship and will be monitored for oil concentrates before release.	TC notes that the AWPPA prohibits the discharge of oil, chemicals, garbage and other wastes generated onboard vessels.
Use of dispersants and In situ burning	Section 14.3.2	The proponent has identified Arctic P-50 diesel fuel might accidentally be released • During bulk fuel transfer operations (ship-to-ship, shore-to-ship, fuel barge-to-ship) • During offshore or shore-based fuelling operations • From a storage tank on land or from a vessel as a result of an accident All diesel fuel spills would be responded to immediately using various surveillance or racking methods, and containment and recovery equipment and techniques. Removal of diesel fuel spills in ice conditions might also involve controlled in-situ burning or chemical dispersant application with agitation of the water from a ship's propeller or both.	TC advises the Proponent to carry out necessary consultation with regulatory bodies before considering use of dispersant and in-situ burning.