



Husky Oil Operations Limited

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June 15, 2015

Mackenzie Valley Environmental Impact Review Board
Box 938, #200 Scotia Centre
5102 - 50 Avenue
Yellowknife, NT
X1A 2N7

Attention: Simon Toogood, Environmental Assessment Officer

Via email: stoogood@reviewboard.ca

Re: List of Commitments Made by Husky Oil Operations Limited During the Preliminary Screening and Environmental Assessment of the Chedabucto Silica Project

Husky Oil Operations Limited (Husky) has received a request from Mackenzie Valley Environmental Impact Review Board (MVEIRB) on June 10, 2015 to prepare a list of commitments made to date by Husky during the Preliminary Screening and Environmental Assessment (EA) of Husky's Chedabucto Silica Project.

As requested, Husky submits the following compilation as a list of commitments. Please note that this list does not include the commitments already made by Husky in the Land Use Permit application.

Public Registry Number	Page Number	Commitment
Prior to Submission of the Land use Permit Application		
N/A	N/A	During the first meeting that Husky had with the Wek'èezhii Land and Water Board (WLWB), we expressed our intent to work with the designated Aboriginal organizations to initiate TK studies and relay our commitment to conduct an archaeological study. Although the WLWB confirmed that it was not a required component of the LUP application process they were encouraged by Husky's initiative. In order to compliment the preliminary TK studies, Husky offered to bring a few Elders from each organization out to the proposed program area during the archaeological field study.
N/A	N/A	Husky committed to removing nine (9) drill locations from the proposed drilling program due to the conflict with sites identified during the archaeological impact assessment.



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Preliminary Screening – Responses to IRs		
PR#10	Page 3 Row 2	Husky is committed to remaining in compliance with the Migratory Birds Convention Act during all phases and in all undertakings related to the project.
PR#10	Page 3 Row 2	Husky commits to reviewing Environment Canada's Incidental Take web page and the fact sheet "Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and Their Nests and Eggs".
PR#10	Page 4 Row 4	Husky commits that no trees will be cut during the additional field mapping and geophysical surveys that are scheduled to be conducted during the late summer-fall time period.
PR#10	Page 7-8 Row 7	<p>Husky is committed to the mitigation measures, suggested by Environment Canada during the Preliminary Screening IRs, and will make all field operations staff, including contractors, aware of them and will provide advice / training on how to implement these measures:</p> <ul style="list-style-type: none">• If Species at Risk are encountered or affected, the primary mitigation measure should be avoidance. The Proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.• Monitoring should be undertaken by the Proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the Proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.• The Government of the Northwest Territories should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize project effects to species under their management responsibility.• Mitigation and monitoring measures must be taken in a way that is consistent with applicable species at risk recovery strategies and action/management plans.• All field operations staff, including contractors, be made aware of the Proponent's commitment to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
PR#10	Page 8 Row 8	Husky submitted a complete set of GIS files to the WLWB along with our LUP application. Husky commits to submitting shape files of the final access routes, staging areas, storage areas, tent camp and cut areas upon project completion.



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PR#10	Page 9 Row 9	Husky commits to recording general wildlife sightings using the "Wildlife Observation" form provided by GNWT-ENR. Husky will submit completed forms to ENR at the end of each field operating season.
PR#10	Page 10 Row 11	Husky will not deposit or permit the deposit of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water
PR#10	Page 11 Row 16	Husky commits that fuel transfer operations will be attended by trained personnel. Small berms or drip trays will be used during transfer fuel operations at each drill site or water pump setup. Opened fuel barrels will be stored in secondary containment. The fuel cache will be located at the existing DOT rock quarry, which more than a kilometre away from the nearest water body. Mitigation of spills will be handled using small refueling berm kits and with absorbent pads at each transfer location with absorbent pads that will be available at each fuel transfer site. Spill kits will be located at the fuel cache and at each of the drilling rigs. Note that the quarry is located in limestone bedrock and therefore spills will remain at the surface and be easily cleaned up using absorbent pads.
PR#10	Page 19 Row 6	Husky commits to submitting the spatial data for previously unrecorded archaeological sites recorded during the 2014 AIA to the PWNHC at least 30 days in advance of exploration activities.
PR#10	Page 20 Row 7	Husky commits to conducting AIA's on the remaining holes prior to drilling.
PR#10	Page 20 Row 10	Husky commits to ongoing engagement with the designated Aboriginal organizations to consult on the details of any proposed post-2015 activity well in advance of conducting field operations. Meaningful discussion and engagement will be a critical part of the planning process for any post-2015 field operations.
PR#10	Page 10 Row 11	Husky commits to obtaining approval from GNWT Department of Transportation Highways Division (DoT) prior to beginning operations in order to receive authorization to access the highway.
PR#10	Page 22 Row 13	Husky commits that the winter field work will be completed by April 30 th .
PR#10	Page 24 Row 15	Husky commits to using proper food handling as well as garbage collection, transfer, storage and disposal procedures that minimize the attraction of wildlife to the camp or drilling areas.
PR#10	Page 24 Row 16	Husky commits that all waste, recyclables and debris will be stored in animal proof metal containers and will be removed from site and backhauled on flights for proper disposal in Yellowknife.



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PR#10	Page 24 Row 17	Husky commits that the animal proof metal containers will be cleaned once emptied.
PR#10	Page 24 Row 18	Husky commits that all non-combustible and recyclable garbage and debris will be removed from the land use area and disposed of at an approved waste disposal facility, as described in the approved 'Waste Manage Plan'.
PR#10	Page 24 Row 19	Husky commits that all grease and oils will be stored in sealed plastic pails and be removed daily.
PR#10	Page 24 Row 20	Husky commits that all scrap metal, discarded machinery parts, tires, and drums will be removed and removed disposed of at an approved waste disposal facility.
PR#10	Page 28 Row 1	Husky commits to conducting a summer site inspection of the exploration program following the winter field season. This will include the emergency tent camp/fuel cache, and core storage area (all at the existing quarry site), the access trails, and the mini-bulk test pit sites.
PR#10	Page 31 Row 2	Husky commits to prohibiting Husky employees and contractors working on the exploration program from hunting, fishing and trapping.
PR#10	Page 32 Row 6	Husky and its contractors commit to working closely with the Land Use Inspector particularly at the end of the winter operating season to ensure the ground surface is not disturbed.
PR#10	Page 33 Row 3	Husky commits to not conducting any drilling activities or quarry operations within 100 metres of the ordinary high water mark of any watercourse in any of Chedabucto mineral leases.
EA – Responses to MVEIRB IRs		
PR#18	Pages 3-4	<p>Husky is committed to limiting the effect of the establishment of the winter access trail associated with this exploration program and will employ the following mitigation measures:</p> <ul style="list-style-type: none"> • Frozen ground conditions will mitigate potential damage to ground vegetation, surface soils and permafrost; • During the site orientation all workers will receive awareness training which will include discussions on: not feeding the wildlife; no hunting; and no harassment of wildlife; • Restricting vehicular traffic in the area to the defined exploration program area; • All vehicle operators associated with the exploration program activities will be instructed to adhere to speed restrictions; • All vehicle operators associated with the exploration program will be instructed, should they encounter wildlife, to stop and allow the wildlife to access and/or cross the vehicle's path without harassment; • During refuelling, drip trays and absorbent pads will be utilized; • Food and waste management throughout program operations; • Husky employees and contractors working on the exploration



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		<p>program will be prohibited from utilizing the winter access trail for recreational activities and they will also be prohibited from hunting and fishing in the program area;</p> <ul style="list-style-type: none">• Unnecessary over-flights of fixed-wing aircraft and helicopters will be avoided;• Wildlife sightings on the winter access trail will be communicated to program personnel and will be reported to the wildlife monitor;• Wildlife/environmental monitor will be used throughout the exploration program operations; and,• The wildlife/environmental monitor will be expected to observe and document wildlife and impacts thereon and to ensure implementation of environmental protection measures. The monitor will be expected to keep a wildlife log and will be instructed to collect data on observations such as: species type, date, time, location, and animal activity.
		<p>Husky commits to engage further with the Tłı̨chʔ Research and Training Institute and concerned parties to better understand sensitivities in these areas and to determine if additional mitigation or modification to the exploration program might be required before finalizing plans.</p>
EA – Responses to Proposed Scoping Document and First Round of IRs		
PR#61	Page 5 Row 3	<p>Husky commits to the following reclamation best practices:</p> <ul style="list-style-type: none">• To minimize environmental impact of the exploration program, a staging area with temporary facilities consisting of a first aid tent, core logging tent, fuel storage and equipment/consumable storage, will be set up within the existing DoT Quarry.• Equipment and materials will be removed from the program area at the end of the field season.• For the drilling phase, drill pads will be on snow-covered frozen ground.• If tree covered, the drill site will be cleared and wood will be bucked-up to 1 metre lengths and stacked in an orderly fashion at the margin of the site.• For the mini bulk sampling phase, after the sample is taken, the resulting test pits will be recontoured and any vegetative cover will be replaced to blend in with the surrounding topography.• Garbage will be removed from all sites.• Whole rock core recovered from the diamond drilling program will be logged and sampled then placed in core boxes,



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		<p>labelled and stacked in a repository adjacent to the DoT Quarry.</p> <ul style="list-style-type: none">• Drip pans will be placed under idle equipment.• Spills will be cleaned up immediately and any contaminated materials removed from site and disposed of at Yellowknife (KBL) waste handling facility.
	Page 11 Row 2	<p>Husky commits to reviewing the performance of the completed field season and communicate on what was done back to the affected land owners and stakeholders. Husky plans to conduct summer inspections of program area to determine the impact of the winter field operations and effectiveness of the mitigation plans. Incorporation of learnings and further engagement will be part of the planning process for Year-two and subsequent field programs. The Phase I drilling program is helicopter supported; in the event that Caribou or other wildlife are seen at a proposed drilling location, we will skip over to the next drill site then come back when the area is clear.</p>
	Page 14 Row 1	<p>Husky commits to providing written notification to Aboriginal organizations and regulators prior to commencement of field operations in order to avoid potential conflicts of land use in the area.</p>
	Page 19 Row 5	<p>Husky commits to minimizing potential impacts on all wildlife species throughout the project area by employing the following mitigation measures:</p> <ul style="list-style-type: none">• Local environmental/wildlife monitors will be employed throughout the duration of the field program. The monitors will be expected to work with the Project Field Supervisor to identify potential denning locations and nesting habitats, and to make the Field Crew aware of any areas of concern, so that potential wildlife conflicts can be avoided;• During the site orientation all workers will receive awareness training which will include discussions on: not feeding the wildlife; no hunting/fishing; and no harassment of wildlife. All work crews will be encouraged to support the work that the wildlife monitors do;• Restricting vehicle/equipment to the defined exploration program area (no off-roading);• All vehicle/equipment operators associated with the program will be instructed, should they encounter wildlife, to stop and allow the wildlife to access and/or cross the vehicle's path without harassment;• Food and waste management throughout program operations;• All grease and oils from the exploration activities will be stored in sealed plastic pails and removed daily to reduce the release of odours and prevents wildlife from accessing the attractants;• Husky employees and contractors working on the exploration program will be prohibited from hunting, fishing, and trapping;



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		<ul style="list-style-type: none">• Unnecessary over-flights of fixed-wing aircraft and helicopters will be avoided;• Helicopters will not land in any area where wildlife are present, except in documented emergency situations;• Wildlife sightings will be recorded by all field program personnel using the GNWT Wildlife Observation forms to collect data on observations such as: species type, date, time, location, and animal activity;• All activities will cease when caribou are present and may only resume once they have moved on;• Small berms or drip trays will be used during transfer fuel operations at each drill site or water pump setup. Opened fuel barrels will be stored in secondary containment. Spills that may occur will be handled using small refueling berm kits and with absorbent pads at each transfer location with absorbent pads that will be available at each fuel transfer site. Spill kits will be located at the fuel cache and at each of the drilling rigs. <p>By keeping the field programs (winter drilling, summer/fall geophysics, and winter mini-bulk sampling) all to a short duration Husky anticipates keeping impact to the practice of rights and access by Tlicho harvesters throughout the project area to a minimum.</p>
	Page 23 Row 7	<p>Husky commits to minimizing potential impacts on all wildlife habitat throughout the project area by employing the following mitigation measures:</p> <ul style="list-style-type: none">• Drilling activity will be localized to the proposed hole locations;• Due to the fact that the drilling rigs are heliportable, the drilling rig footprint can be kept to a minimum (approximately 6 m x 6 m for the RC pads and 8 m x 8 m for the DD pads).• There will be no permanent camp; and the temporary emergency shelter/first aid tent and core shack will be located in the existing cleared DOT Quarry;• Wherever possible, existing clearings will be utilized for heli-pads to limit new clearing;• Frozen ground conditions will mitigate potential damage to ground vegetation, surface soils and permafrost. Care will be taken in ensuring that impacts to the ground are minimized• The active program area will be monitored ruts/gouges and repairs will be made as required using snow fills;• Husky and its contractors will work closely with the Land Use Inspector particularly at the end of the winter operating season to ensure the ground surface is not disturbed;• Should over land access be required for a mini-bulk sample, a



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		<p>rubber tracked snow cat or equivalent vehicle with a sloop or sled will be employed to access program area along the existing winter access to the DOT rock quarry and on snow covered trail from the quarry to the sampling site. Trails will be scouted on foot or snowmobile to select a route around forested areas so that slashing can be kept to a minimum and large stands of trees will be avoided.</p>
	Page 32 Row 12	<p>Husky commits to revising the Wildlife, Archeological, and Environmental Awareness Plans to strengthen the wildlife aspects and incorporate information from the DRAFT GNWT Wildlife & Wildlife Habitat Protection Plan and Wildlife Effects Monitoring Program Guidelines, while keeping it scaled to the actual scope of the project which is temporary and short duration and will submit it to ENR prior to the start of operations. Husky has responded to several IRs regarding wildlife and habitat and has identified a number of SOPs and mitigation measures that we have since committed to and recognize that these would be incorporated into our revised Plan.</p> <p>In addition, Husky will include details on the role of the monitor. In general, these experienced monitors would be responsible for identifying potential denning locations and notifying the Project Field Supervisor of any potential wildlife conflicts. They will be expected to record their wildlife sightings using the GNWT Wildlife Observation forms to collect data on observations such as: species type, date, time, location, and animal activity.</p> <p>The monitor will be expected to observe and document wildlife and impacts thereon and to ensure implementation of environmental protection measures. All work crews will be encouraged to support the work that the wildlife monitors do. Project crew will be instructed to also record their wildlife sightings and communicate the observations to the wildlife monitor. The monitor's chain of reporting will be directly to the Project Field Supervisor however, the monitor will be encouraged to report their findings to GNWT Land Use Inspector as well as their own organization.</p> <p>If a monitor observed an action during the field program that was in contradiction with the outline mitigation measures then it would be their responsibility to notify the Project Field Supervisor. Again, they would be encouraged to also report their findings to GNWT Land Use Inspector.</p>
EA – Responses to Scoping Document and Second Round of IRs		
PR#60	Page 2	<p>Husky commits to reviewing the Wildlife, Archeological, and Environmental Awareness Plan and, where appropriate, incorporate information from the DRAFT GNWT Wildlife & Wildlife Habitat Protection Plan and Wildlife Effects Monitoring Program Guidelines, while keeping it scaled to the actual scope of the project which is</p>



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		temporary and short duration. The revised Plan will allow Husky to consolidate our Standard Operating Procedures (SOPs) and mitigation measures into one document and it will be submitted to ENR prior to the start of operations.

I trust the compilation of commitments provided is sufficient for your requirements. Should you have any further requests for information, please contact the undersigned by telephone at (403) 523-2313 or by email at jenica.vonkuster@huskyenergy.com.

Sincerely,
HUSKY OIL OPERATIONS LIMITED

Jenica von Kuster
Environmental & Regulatory Coordinator - NWT