

Review Comment Table

Board:	WLWB
Review Item:	Husky Oil Operations Ltd. Application for Type A Land Use Permit, Chedabucto Mineral Exploration Program (W2014Q0005)
File(s):	W2014Q0005
Proponent:	Husky Oil Operations Ltd.
Document(s):	Land Use Permit Application (9 MB) Closure and Reclamation Plan - Version 1 (155 KB) Wildlife Management Plan - Version 1 (1 MB) Emergency Procedures and General Field Camp Safety Plan (171 KB) Waste Management Plan - Version 1 (140 KB) Archaeological Impact Assessment Report (404 KB) Engagement Plan and Record of Engagement - Version 1 (8 MB) Spill Contingency Plan - Version 1 (1 MB) Draft Land Use Permit (274 KB)
Item For Review Distributed On:	Dec 31 at 17:18 Distribution List
Reviewer Comments Due By:	Jan 21, 2015
Proponent Responses Due By:	Jan 28, 2015
Item Description:	<p>Husky Oil Operations Limited (Husky) submitted an application for a Type A Land Use Permit to the Wek'èezhìi Land and Water Board (WLWB) on December 22, 2014. The purpose of this land use application is to conduct exploration assessment work on claims and mineral leases held by the company in order to evaluate a high quality silica deposit. The Chedabucto Property is located on the western shore of the north arm of Great Slave Lake, 50 kilometres west of Yellowknife, NT.</p> <p>Over the five year life of the initial permit and possible extension for two years, Husky will conduct reverse circulation drilling (RC) and diamond drilling (DD) with a combined total of approximately 200 holes, along with geophysical investigations to evaluate the silica resource potential of the Chedabucto Property. Husky is proposing to commence a target specific exploration program to run during March and April of 2015. This is the first phase of a proposed 5-year program that will operate seasonally to optimize the type of exploration work being conducted. Husky will implement a phased approach to exploration on the Chedabucto Property, each phase contingent on the successful execution and positive results of the preceding phase.</p> <p>Equipment and personnel for the exploration program will be less than 5 tonnes in weight and will be mobilized to site by float/ski fixed-wing aircraft, helicopter, and/or winter road. The project will be based out of Yellowknife and drum fuel will be flown to site as demand requires and stored at the existing Government of Northwest Territories (GNWT) Department of Transportation (DOT) quarry site using accepted secondary containment practices.</p> <p>A Draft Land Use Permit has been included with this item for review. All standard land use permit conditions have been updated to reflect the current MVLWB Standard Land Use Permit Conditions Template. The WLWB encourages reviewers to ask questions and provide comments</p>

	and recommendations on the content of the Land Use Permit application, associated management plans, and the Draft Land Use Permit conditions.
Contact Information:	Bakhtiyor Mukhammadiev Ryan Fequet 867-765-4589

Comment Summary

ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	General File	Comment (doc) Updated equipment list. Recommendation	
2	General File	Comment (doc) Updated 1:50,000 scale map. Recommendation	
3	General File	Comment (doc) Updated 1:250,000 scale regional map. Recommendation	
4	General File	Comment (doc) Updated Spill Contingency Plan with updated contact information for Environment Canada and AANDC Inspector. Recommendation	
5	General File	Comment (doc) Updated 1:250,000 regional map with PAS boundary. Recommendation	
6	General File	Comment (doc) (Submitted after Due Date) Article 4a and 4b of the September 27, 2013 Order in Council speaks to the existing mineral claims being exempt from the Interim Land Withdrawal (ILW). Husky's mineral claims CHE 1, 2, 10, 11, 12, 13 were issued on December 21, 2011 and therefore are not part of the ILW. The ILW area is now called the Dinàgà Wek'èhodi Candidate National Wildlife Area and Husky's claims are adjacent to, but do not overlap the Area. Recommendation	
7	General File	Comment (doc) Letter to NWT PAS Secretariat Recommendation	
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Activity of Federal Lands	Comment The Land Use Permit application indicates that there may be drilling that occurs on federal lands (Wrigley Point). Any activities that occur on CHE-6 as indicated on page 27 of the Land Use Permit application will need to be inspected by Aboriginal Affairs and Northern Development Canada (AANDC). Recommendation Please contact the AANDC Inspector Tim Morton at (867) 669-2442 prior to any commencement of activities on CHE-6. Add as a contact AANDC Inspector Tim Morton at (867) 669-2442 to the spill contingency plan to address any potential spills that may occur on the federal parcel.	Jan 21: Husky will contact AANDC Inspector Tim Morton prior to the commencement of activities on CHE-6. Husky has added Tim Morton's contact information to the Spill Contingency Plan to address any potential spills that may occur on the federal parcel CHE-06 (see attached for revised page from Husky's SCP with updated information).
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	purpose	Comment Exploration leads to large scale extraction (which	Jan 28: The purpose of Husky's proposed

	e of the project	ruins the area) and further leads to use in fracking. Recommendation Recommend the area be kept pristine for wildlife habitat and recreation/tourism potential. Also that the bigger picture be considered and scope in the larger scale extraction and impact of end use of product (ie. fracking and resultant increase in global warming, contamination of fresh water, etc.)	exploration program is to evaluate the resource so that informed decisions can be made regarding the potential for any future commercial development on the Chedabucto mineral claims.
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	General File	Comment (doc) EC Comments Recommendation	
2	LUP Application, General Comment	Comment The following comments are pursuant to the Migratory Bird Convention Act, Migratory Bird Regulations and Species at Risk Act. Recommendation Implementation of the measures proposed herein may help to reduce or eliminate some effects of the project on migratory birds and Species at Risk, but will not necessarily ensure that the proponent remains in compliance with the Migratory Birds Convention Act, Migratory Birds Regulations, and the Species at Risk Act. The proponent must ensure they remain in compliance during all phases and in all undertakings related to the project.	Jan 28: Acknowledged. Husky is committed to remaining in compliance with the Migratory Birds Convention Act during all phases and in all undertakings related to the project.
3	LUP Application, General Comment	Comment The Canadian Wildlife Service of Environment Canada (EC-CWS) is the sponsoring agency for the Dinàgà Wek'èhodi candidate National Wildlife Area which overlaps a portion of the Chedabucto Property. A working group was formed in December 2010 to guide and inform the establishment of the protected area. The Dinàgà Wek'èhodi candidate National Wildlife Area is currently at Step 5 of the NWT Protected Areas Strategy. For more information see: http://www.nwtpas.ca/area-dinagawekehodi.asp . Recommendation Comment for information.	Jan 28: Husky's Chedabucto mineral claims are adjacent to, but do not overlap the Dinàgà Wek'èhodi candidate National Wildlife Area. The NWT Protected Area Strategy (PAS) Working Group has identified the North Arm of Great Slave Lake as an area to protect, this area is indicated on Map 1 and Map 2 of the LUP application. Of primary concern is the Important Bird Area in Canada (IBA) located along the north-eastern shore of the North Arm. On September 27, 2013 by Order in Council, certain lands located on the North Arm of Great Slave Lake were withdrawn from disposal for a period of two years. These lands form the Dinàgà Wek'èhodi candidate National Wildlife Area. A number of Husky's Chedabucto mineral claims pre-date the land withdrawal and are therefore not part of the candidate National Wildlife Area. Field operations proposed in Husky's LUP application are contained entirely within the Chedabucto mineral claims and are therefore not in the Dinàgà Wek'èhodi candidate National Wildlife Area.
4	LUP Application, Summary	Comment The Proponent is applying to conduct drilling activities in March and April, but states that it may be advantageous to conduct field mapping and geophysical surveys in the late summer-fall time period. The Proponent	Jan 28: Husky's LUP application encompasses the scope of work necessary to evaluate the resource potential of the silica deposit on the Chedabucto mineral claims. The term of the

<p>ary of operati on, Phase 1, p.4 and Appen dix III- Wildlife , Archae ologica l & Enviro nment al Aware ness Plan; Wildlif e Interac tion; Risk of inciden tal take of migrat ory birds</p>	<p>also states that additional follow-up activities may be required in subsequent years including Phase 2, but provides few details. The proponent states that Phase 2 is dependent on positive results of Phase I. The proponent also suggests that cut lines may be required but kept to the minimum necessary during Phase 2. However, the Proponent commits to not disturb eggs and nests and report nests to relevant authorities. EC finds it difficult to evaluate potential environmental impacts without understanding the nature, timing and intensity of proposed activities. The summer-fall timing for proposed activities overlaps the sensitive nesting period for migratory birds in the area. As the nature, intensity, and in most cases the timing of activities is unknown (e.g. whether and when land clearing is involved or any other form of habitat loss), EC provides the following information. EC is responsible for implementing the Migratory Birds Convention Act, which provides for the protection of migratory birds through the Migratory Birds Regulations, and to develop and implement policies and regulations to ensure the protection of migratory birds, their eggs, and their nests. Paragraph 6(a) of the Migratory Bird Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities including but not limited to clearing trees and other vegetation, draining or flooding land, or using fishing gear. The inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is known as incidental take. Incidental take, in addition to harming individual birds, nests or eggs, can have long-term consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidents. Currently the regulations do not provide for authorizations or permits for the incidental take of migratory birds or their nests or eggs in the course of industrial or other activities. As such, to minimize the possibility of contravening the law, taking reasonable care, and avoidance are the best approaches to take when contemplating any activity or decision that has the potential to impact migratory birds, nests or eggs. Project proponents are responsible for taking appropriate measures to ensure that they comply with the legislation and regulations. To prevent detrimental effects on migratory birds, nests and eggs and help maintain sustainable populations of migratory birds, Environment Canada recommends that proponents know their legal obligations; avoid engaging in potential destructive or disruptive activities in key sensitive periods and locations; and develop and implement appropriate preventative and mitigation measures to minimize the risk of incidental take. The following nesting periods are provided as general guidance to assist proponents in planning their field activities. It is important to note that</p>	<p>LUP application is for five years. While the drilling program for 2015 is well defined, any follow up exploratory activity will be contingent on the previous results, so a degree of flexibility is necessary. To minimize the environmental impact, proposed drilling activities will take place only in the March - April period commencing in 2015, and may reoccur in the same time period in subsequent years to a maximum of 200 exploratory holes. Access for the proposed drilling program(s) will be by helicopter or fixed wing aircraft. Phase 2 (mini-bulk sampling program) is contingent on the results of the drilling program. If required, Phase 2 will also take place in the "March - April" time period, post-2015. Access for Phase 2 will be via the existing winter access from Highway 3 to the DOT rock quarry and on snow covered trail from the quarry to sample site(s). A rubber tracked snowcap or equivalent vehicle and sloop will be employed, so no winter roads will be constructed. The trail route will be scouted on foot or by snowmobile to avoid large stands of trees, so that slashing can be kept to a minimum. We estimate the trails will be approximately 4 metres wide, snow covered over frozen ground. Given that this will take place during the winter there will be no disturbance to eggs or nests. If required, additional field mapping and geophysical surveys will be conducted during the late summer-fall time period and will typically involve a crew of approximately 4-6 persons transported in one helicopter. It will involve the crew walking on the land carrying their equipment as they record their information and return to Yellowknife at the end of each field day. Duration of this field work is expected to last approximately 4-6 weeks. No trees will be cut during this period of field work, so disturbance to nests and eggs will be minimal. A local community member will be employed as a wildlife monitor, who will assist in the identification nests and nesting areas. If nests containing eggs or young of migratory birds are located or discovered, the crew will be notified and activities in the nesting area will be halted until nesting is completed. Husky will review Environment</p>
---	--	--

		<p>breeding periods may vary from year to year due to climatic conditions and some species may nest outside the dates provided if conditions are favourable. In nesting zone B7, migratory birds may be found nesting from the beginning of May until mid-August (Figure 1; see cover letter attachment). The general nesting period covers most federally protected migratory bird species and may not include the complete nesting period for species under territorial jurisdiction (such as jays, owls, hawks and blackbirds). In addition the general nesting period may not be accurate for species that can breed at any time when conditions are right, such as Red Crossbills and White-winged Crossbills nesting in winter when cone crops are available, and for species that may nest later such as Cedar Waxwing, Bohemian Waxing, Pine Siskin. If nests containing eggs or young of migratory birds are located or discovered, all disruptive activities in the nesting area should be halted until nesting is completed. Any nest found should be protected with a buffer zone appropriate for the species and the surrounding habitat until the young have naturally left the vicinity of the nest. Moreover, if there are migratory bird nests where work is proposed, options like avoiding, adapting, rescheduling or relocating activities that could disturb or destroy the nests should be considered. For further information on how to protect migratory birds and their nests and eggs when planning or carrying out project activities, consult 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" at: www.ec.gc.ca/paom-itmb/</p> <p>Recommendation EC recommends the Land Use Permit only be valid for the March-April 2015 drilling program unless the Proponent can provide further details so that the Board and other reviewers can properly assess environmental impacts of the entire exploration project.</p>	<p>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".</p>
5	<p>Summary of LUP Application, Section 5.0, p.13: Possible contamination of waterbodies used</p>	<p>Comment The Proponent is planning to store a significant amount of various fuels on site.</p> <p>Recommendation EC would like to remind the Proponent that Section 5.1 of the Migratory Birds Convention Act prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.</p>	<p>Jan 28: The fuel will be stored at the existing DOT rock quarry site. Fuel transfer and active use sites will utilize appropriate secondary containment. The quarry site is not located within close proximity to any water source.</p>

	by migratory birds		
6	Summary of LUP Application, Section 3.0, p.3 and Appendix III-Wildlife, Archaeological & Environmental Awareness Plan; Wildlife Interaction; Possible aircraft disturbance to migratory birds Latour, P.B., J. Leger, J.E. Hines, M.L. Mallory, D.L. Mulders, H.G.	<p>Comment The Proponent states that equipment and personnel will be mobilized using various forms of transportation, including fixed-wing aircraft and helicopter. The Proponent commits to avoiding crucial nesting and migratory habitats with low-flying aircrafts in the Wildlife Awareness Plan. Due to the uncertainty in the timing of additional activities beyond March-April 2015 of Phase 1, EC is concerned with potential disturbance to migratory birds. Flight paths will likely require transiting over the North Arm, Great Slave Lake Key Habitat Site #20 (Latour et al. 2008), and possibly during sensitive periods. This site is important to staging, nesting, moulting, and brood-rearing waterfowl. It is also an important nesting area for larid colonies (gulls and terns). High migratory bird usage of this site occurs between mid-May to mid-October (Canadian Wildlife Service 2011).</p> <p>Recommendation EC recommends the following to reduce aircraft disturbance to migratory birds, subject to pilot discretion regarding safety: -Fly at times when few birds are present (e.g., early spring, late fall, winter) and minimize flights during particularly sensitive periods (i.e. during migration, nesting, and moulting). -If flights cannot be scheduled when few birds are present, plan flight paths that minimize flights over habitat known or likely to have birds and maintain a minimum flight altitude of 650 metres (2,100 feet). -Avoid the North Arm, Great Slave Lake Key Habitat Site #20 by a lateral distance of at least 1.5 kilometres when birds are present, and increase to 3 kilometres during fall migration. If avoidance is not possible, maintain a minimum flight altitude of 1,100 metres (3,500 feet) over this area. -Avoid excessive hovering or circling over areas known or likely to have birds. -Inform pilots of these recommendations and of areas known to have birds.</p>	Jan 28: Acknowledged.

	Gilchrist, P.A. Smith, and D.L. Dickson.		
7	Appendix III- Wildlife, Archaeological & Environmental Awareness Plan; Project interactions with species at risk	<p>Comment The Proponent identified a few sensitive wildlife species and suggested buffer distances for those in the Wildlife Awareness Plan. EC notes that several species at risk may potentially interact with project activities, particularly given the unknown timing of certain activities in the application. The following comments are pursuant to the Species at Risk Act (SARA). SARA is directed towards preventing wildlife species from becoming extinct or lost from the wild, helping in the recovery of species that are at risk as a result of human activities, and promoting stewardship. The killing, harming or harassing of listed species; the damage and destruction of their residences; and the destruction of critical habitat is prohibited under SARA. The prohibitions apply to all Threatened, Endangered and Extirpated species listed on Schedule 1 of SARA on federal lands and to Migratory Birds (as defined under the Migratory Birds Convention Act) and aquatic species (as defined under the Fisheries Act) everywhere they are found. Subsection 79 (2) of SARA, states that during an assessment of a project, the adverse effects of the project on listed wildlife species and their critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This subsection applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, EC suggests that similar consideration be given to species under consideration for listing on SARA, including those designated as "at risk" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Table 1 (see cover letter attachment) lists species that may be encountered in the project area that have been designated as at risk by COSEWIC as well as their current listing on Schedule 1 of SARA (and designation if different from that of COSEWIC). This list may not include all species identified as at risk by the Government of the Northwest Territories. It does not include aquatic species, which are under the responsibility of Fisheries and Oceans Canada. Project impacts could include species disturbance, attraction to operations, and destruction of habitat.</p> <p>Recommendation EC recommends: -For any Species at Risk that could be encountered or affected by the project, the Proponent should note any potential adverse effects of the project to the species, its habitat, and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the</p>	<p>Jan 28: Husky is committed to these mitigation measures and will make all field operations staff, including contractors, aware of them and will provide advice / training on how to implement these measures. Husky and contractors will endeavour to record 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 and copies can be obtained directly from them.</p>

		<p>Species at Risk registry at www.sararegistry.gc.ca for information on specific species as well as the booklet "Species at Risk in the Northwest Territories" (2014 Edition) available at www.nwtspeciesatrisk.com/en/Documents. As new species may have been assessed by COSEWIC or added to Schedule 1 of SARA since the booklet was last published, Proponents should always check the Species at Risk registry to obtain the most current information. -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.</p>	
8	<p>Appendix III- Wildlife, Archaeological & Environmental Awareness Plan; Wildlife Interaction;</p>	<p>Comment Project activities will overlap with the Northwest Territories Range (NT1) of the boreal woodland caribou range identified in the "Recovery Strategy for the Woodland Caribou (Rangifer tarandus caribou), Boreal Population, in Canada" posted on the Species at Risk Public Registry on 5 October 2012 found at: http://www.sararegistry.gc.ca/virtual_sara/files/plans/rs_caribou_boreal_caribou_0912_e1.pdf The recovery strategy identifies the amount of habitat disturbance within a boreal caribou range as a key factor determining whether a local population is likely to be self-sustaining over time. As a matter of best practice and whenever possible, proponents should use as much existing disturbed area as possible to minimize the amount of new disturbance added to the landscape. Proponents should work together wherever possible when projects can be combined to minimize overall new disturbance in the range.</p>	<p>Jan 28: Husky will provide updated shapefiles of the final access routes, staging areas, storage areas, camps and cut areas upon project completion. Husky suggests that we keep a single point of contact for this information and will provide this information to the Wek'eezhii Land and Water Board so that it can be posted on the registry and accessed by all organizations.</p>

	Woodl and Caribou (Boreal Population)	Recommendation EC recommends that the Proponent provide updated shapefiles of the final access routes, staging areas, storage areas, camps and cut areas upon project completion to aboriginal, territorial and federal agencies responsible for the management of boreal caribou and their habitat in the Northwest Territories in order to keep track of habitat disturbance within the NT1 boreal woodland caribou range.	
9	Appendix III- Wildlife, Archaeological & Environmental Awareness Plan, Wildlife Interaction; Species at Risk and general wildlife monitoring	<p>Comment In the Proponent's Wildlife Awareness Plan, all employees and contractors are asked to log wildlife observations. EC is interested in observations of birds, especially observations of birds identified as Species at Risk (e.g. Yellow Rail, Olive-sided Flycatcher, Short-eared Owl, etc.) or of species occurring outside their known ranges. Since 1995 EC has been collecting observations on northern birds through its Northwest Territories and Nunavut Bird Survey Checklist program. This program relied on the assistance of hundreds of volunteers to submit their bird observations throughout the territories. Over the past 2 decades EC has collected >100,000 observations of over 20 million individuals birds. The checklist program is the first to provide wide-scale information on northern bird populations. In 2012, EC integrated the Northwest Territories and Nunavut Bird Checklist Survey program into eBird and we plan to use eBird as the main database for northern bird observations going forward. Given that there are few observations for remote locations in the Northwest Territories and Nunavut, especially in the eBird database, it would be invaluable for project location data to be included. To submit data to eBird, an account must be created. Visit www.eBird.org and register as a new user. If you have any questions about the program or uploading your data to eBird, contact the NWT/Nunavut Bird Checklist program at NWTchecklist@ec.gc.ca</p> <p>Recommendation EC recommends the Proponent amend the Wildlife Awareness Plan to ensure that all field operations staff, including contractors, are recording observations of birds identified as Species at Risk and that this information is submitted to eBird.</p>	Jan 28: Given the short duration and small scope of this early phase exploration program, Husky feels this is not warranted at this time. The bulk of the work will take place in the winter and the geophysical field work is transitory - crew will not be located in any one location for any length of time. Husky's field staff and subcontractors onsite are not trained to accurately identify birds nor are they qualified to accurately and objectively record observations of birds. However, Husky and its contractors will endeavour to record 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 and copies can be obtained directly from them.
10	Appendix III- Wildlife, Archaeological & Environmental Awareness	<p>Comment EC notes a commitment by the Proponent to prevent wildlife attraction to operations by proper handling and storing food and waste.</p> <p>Recommendation EC recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.</p>	Jan 28: Acknowledged.

	Plan, Wildlife Interaction; Attraction of predators to operations		
11	Requirements of the Fisheries Act	<p>Comment Subsection 36(3) of the Fisheries Act specifies that, unless authorized by federal regulation, no person shall 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.Â</p> <p>Recommendation Comment for Proponents information</p>	Jan 28: Acknowledged.
12	Requirements of the Fisheries Act	<p>Comment Meeting the requirements of the Fisheries Act is mandatory, irrespective of any other regulatory or permitting system. The legal definition of deleterious substance provided in section 34(1) of the Fisheries Act, in conjunction with court rulings, provides a very broad interpretation of "deleterious" and includes any substance with a potentially harmful chemical, physical or biological effect on fish or fish habitat.</p> <p>Recommendation Comment for Proponents information</p>	Jan 28: Acknowledged.
13	Spill Contingency Plan	<p>Comment EC encourages Proponents to prepare Emergency Response Plans and Spill Contingency Plans that reflect a consideration of potential accidents and malfunctions and that take into account site-specific conditions and sensitivities. The Canadian Standards Assoc. publication, Emergency Preparedness and Response, CAN/CSA-Z731-03, is a useful reference for this.</p> <p>Recommendation Comment for Proponents information</p>	Jan 28: For this initial early phase exploration program, Husky feels that appropriate Emergency Response Plans and Spill Contingency Plans were submitted with our original application.
14	Spill Contingency Plan - Fuel Storage	<p>Comment The Proponent indicates that a fuel spill may occur due to poor seals, mishandling of containers, accidental puncture of fuel lines and wildlife interactions.</p> <p>Recommendation EC recommends proponents assume that worst-case accident and malfunction scenarios are not only possible, but rather are likely to occur during the lifespan of the project, and that contingency plans and response capabilities be developed accordingly. Secondary containment should be of adequate size and volume to contain and hold fluids for the purpose of preventing spills (the worst-case scenario) 110%. EC recommends that a berm be created around the fuel storage area to contain the worst case scenario spill.</p>	Jan 28: As outlined in the application, controls will be put in place to deal with any possible accidents or malfunctions anticipated for the program. Unopened sealed drums in the caches would be stored on their sides with the bungs at 3 and 9. The cache(s) are inspected regularly for leaks. Opened drums that are in use will be stored upright with drum caps; drums that have been opened but will be stored longer term, would be stored on their sides with bungs are 3 and 9 at an appropriately bermed location within the quarry.
15	Spill	Comment The Proponent indicates in the table titled	Jan 28: Opened barrels and fuel transfer sites

	Contin gency Plan Sectio n - Fuel Storag e	<p>"Hazardous Material, Potential Discharge Events/Volumes and Direction" that there may be possible ground infiltration into the drainage network in the event of a spill.</p> <p>Recommendation EC Recommends that an impermeable liner be used under all drums, should they be used, to avoid infiltration into the drainage network.</p>	will utilize secondary containment with an impermeable barrier to contain possible fuel spill. Fuel barrels will be laid in the berm and bungs will be set at 9 and 3.
16	Spill Contin gency Plan - Fuel Transf er	<p>Comment The Proponent indicates that spills may result during the transfer of contaminants.</p> <p>Recommendation EC recommends that transfer operations should be attended by trained personnel at all times. A dedicated area should be used for refueling equipment with measures taken to ensure capture and containment of drips and potential spills. Secondary containment or a surface liner (drip pans, etc.) should be used when refueling any equipment on site and should also be used at all fuel drum locations.</p>	<p>Jan 28: Husky confirms 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.</p>
17	Spill Contin gency plan - Contac t Teleph one numbe rs for Enviro nment Canad a	<p>Comment The current contact numbers listed for Environment Canada are Phone Number 867 669 4710. This number is incorrect.</p> <p>Recommendation For information relating to environmental enforcement and reporting requirements under Canadian Environmental Protection Act (CEPA) 1999 and the Fisheries Act please contact the EC Environmental Enforcement 24 hour Duty Officer at 780-499-2432. For the Proponent's information Environment Canada also has an National Environmental Emergencies Centre. The primary role of Environment Canada's National Environmental Emergencies Centre (NEEC) is to provide the Department's unique technical and scientific environmental advice and assistance to the lead agency in the event of an environmental emergency. A lead agency is generally described as the governmental authority that regulates or has authority over the activity from which the emergency originated. Environment Canada helps to identify the environmental protection priorities and provide advice on ways to reduce the pollution's impact on the environment. This advice can include weather forecasts, location of wildlife and sensitive ecosystems, and expertise on spill countermeasure and remediation options. NEEC can be</p>	<p>Jan 28: Acknowledged. Husky has revised the Spill Contingency Plan with the correct phone number for Environment Canada.</p>

		contacted at 819-997-2800.	
18	Spill Contingency Plan - Spill on Land	<p>Comment The Proponent indicates that in the event of a spill on land that an impermeable material would be placed below the leak to minimize seepage. However no such material is listed as being on site.</p> <p>Recommendation EC recommends that the Proponent include a detailed list of response equipment and a map to indicate the location of storage.</p>	<p>Jan 28: There will be a spill kit located at the main fuel storage area in the existing bedrock quarry. Additional spill kits will be mobile with each drill rig and one with the snow cat. The list of material available in the spill kits is provided on Page 8 of the Spill Contingency Plan. Please refer to the updated 1:50,000 program map for the location of the main fuel storage area at the quarry. The updated Spill Contingency Plan and 1:50,000 program map have been uploaded to the WLWB registry.</p>
19	Spill Contingency Plan - Spill on Water	<p>Comment The Proponent indicates that chemical response methods may also be available consisting of dispersants.</p> <p>Recommendation EC recommends that the proponent complete a net benefit analysis prior to using dispersants. Dispersants are designed to be used in a marine environment and on unrefined petroleum products. This project will occur around fresh water and the potential spill products are refined petroleum products.</p>	<p>Jan 28: Approval from the relevant and qualified inspector/regulator will be achieved before implementation of any response alternatives including the use of dispersants.</p>
20	Spill Contingency Plan - Spill on Water	<p>Comment The Proponent indicates that a floating boom would be used to contain a spill on water if available.</p> <p>Recommendation There is no map or terrain diagram supplied to evaluate the risk of a spill entering waters frequented by fish. If the Proponent anticipates that a spill may enter waters frequented by fish then they should have a boom available on site that can be deployed in a timely manner to contain the spill so that the product can be recovered.</p>	<p>Jan 28: The main fuel storage will be located in a lined and bermed area at the existing bedrock quarry site which is more than 1 kilometre from any major waterbody. Small booms are a component of the spill kits as listed in the Spill Contingency Plan.</p>
21	Spill Contingency Plan	<p>Comment The Proponent does not indicate how fuel will be transported to and from the site.</p> <p>Recommendation Environment Canada recommends the Proponent provide more information on how the it plans to transport fuel to and from the site.</p>	<p>Jan 28: Fuel may be transported in three ways; i) via twin otter to an ice covered lake for closer access to drill sites, ii) snowcat or equivalent track vehicle moving fuel from Hwy 3 to the quarry site, and iii) via helicopter. These are the only viable ways to move fuel during these first couple of drill phases.</p>
22	Spill Contingency Plan	<p>Comment The Proponent indicates that in the event of a spill on land a trench would be dug or a berm created to contain the spill.</p> <p>Recommendation EC recommends that the Proponent demonstrate, in their spill contingency plan which actions they will undertake and what equipment they will deploy to respond to spills. EC would like to see a detailed plan indicating how this mitigation measure will be put into place and the equipment on site that will be used.</p>	<p>Jan 28: Equipment and procedures on how specific types of spills will be addressed are outlined in the Spill Contingency Plan.</p>
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Sectio	Comment The proponent states: " Equipment and personnel	Jan 28: Husky has revised the regional map

	n 5a) Summary of Operations - Winter Roads and Ice Bridges	<p>for the exploration program will be less than 5 tonnes in weight and will be mobilized to site by float/ski fixed-wing aircraft, helicopter, and/or winter road". The construction of winter roads and ice-bridges typically requires the withdrawal of clean water from nearby waterbodies, however the exact waterbodies that will be used for water withdrawal have not been identified by Husky Oil Operations Ltd in the Type 'A' land use permit applications or in the supporting documents.</p> <p>Recommendation DFO requests clarification on the winter road route and which waterbodies will be used for winter water withdrawal.</p>	<p>and uploaded it to the registry to show the entire location of the existing winter access trail from Highway 3 across the lake to the existing DOT rock quarry. The establishment of a "winter access trail" will not require the withdrawal of water, but will rather utilize a rubber-tracked snow cat or equivalent vehicle to traverse snow covered trails and ice crossing (see also Husky's response to Clint Ambrose, GNWT-Lands regarding equipment). The equipment that Husky is proposing to use is light enough to cross the ice, while following proper ice thickness testing procedures (ice profiling with GPR), without the requirement for flooding the ice. Common road vehicles will not be able to utilize the 'winter access trail'. Water requirements for this exploration program is very minimal. Maximum daily water use is 45 cubic metres per day during diamond drilling operations. Husky will utilize an ice auger to confirm the presence of water in waterbodies nearest the drill locations. If the waterbody is frozen to bottom then we will relocate to the next closest waterbody. We have selected 12 waterbodies that will be assessed for potential winter water withdrawal and these have been identified them on the updated 1:50,000 program map that has been uploaded to the WLWB registry. The RC drill does not use water. No water will be required during the geophysical field work scheduled for the summer/early fall time period.</p>
2	Winter Roads and Ice bridges - General	<p>Comment 1. The removal of water under ice covered water bodies can impact fish through oxygen depletion, loss of overwintering habitat and/or reductions in littoral habitat.</p> <p>Recommendation DFO requests clarification on what mitigation measures will be implemented during the winter road/ice bridge construction, including mitigation measure to prevent serious harm to fish and fish habitat within waterbodies designated for winter water withdrawals.</p>	<p>Jan 28: Husky confirms that no water is required on the lake crossing because Husky is not "building" an ice bridge. We are simply driving the rubber-tracked snow cat along the existing winter access trail from Highway 3 to the existing quarry. The trail will not be traversible by any wheeled vehicle. Water intakes will be screened as per the current Department of Fisheries and Oceans Canada (DFO) Protocol to prevent entrainment of fish.</p>
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Climate consequences	<p>Comment Review Comment RE: W2014Q0005 Climate scientists are agreed that 70 – 80% of known reserves of fossil fuels must remain uncombusted, and in the ground, if we are to have at least a 50% chance of avoiding dangerous levels of</p>	<p>Jan 28: The purpose of Husky's proposed exploration program is to evaluate the resource so that informed decisions can be made regarding the potential for any future</p>

unacceptable	<p>climate change. Globally, governments have agreed that dangerous levels of climate change will occur at anything over a 2 degree Celsius increase in the average global temperature from a reference point. Our current rate of increase is taking us to a 4-6 degree C increase, under which human civilization, certainly as we know it, becomes questionable. On 8 January, 2015 a scientific publication in the prestigious Journal Nature (see below for the reference and an abstract of the paper, and below that, the transcript of a CBC Yellowknife interview of one of the scientists on 19 January, 2015) described what and where on the globe fossil fuels can safely be exploited if humankind is to achieve even the risky 50% chance of avoiding dangerous climate change through limiting the global increase to 2 degree Celsius. In this publication, the researchers make clear that the already KNOWN quantity of unconventional fuels cannot be exploited if we are to have any hope. This land use application is to access silicates to be used in unconventional fossil fuel exploitation. Based on the considerable, consistent, and increasingly refined scientific knowledge we now have, both my and your families – and the ecosystems we depend on – are being unnecessarily, and gravely, threatened with exploitation activity such as that being proposed for initiation in this permit application. On this basis, I request that the WLWB confirm the science referred to in this comment, conduct the necessary research to develop confidence in it, and if it is true, to use common sense to reject this application. For greater clarity, science also indicates that IF we do go beyond 2 degrees warming, global weather will become so unpredictable that food supplies will be seriously disrupted and the global economy will collapse. A collapsed global economy will not need much fossil fuel - so in either case, there will be no demand for expensive oil and gas, here or elsewhere. Nature Letter</p> <p>The geographical distribution of fossil fuels unused when limiting global warming to 2 °C</p> <p>Christophe McGlade & Paul Ekins Nature 517, 187–190 (08 January 2015) doi:10.1038/nature14016 Policy makers have generally agreed that the average global temperature rise caused by greenhouse gas emissions should not exceed 2 °C above the average global temperature of pre-industrial times¹. It has been estimated that to have at least a 50 per cent chance of keeping warming below 2 °C throughout the twenty-first century, the cumulative carbon emissions between 2011 and 2050 need to be limited to around 1,100 gigatonnes of carbon dioxide (Gt CO₂)^{2, 3}. However, the greenhouse gas emissions contained in present estimates of global fossil fuel reserves are around three times higher than this^{2, 4}, and so the</p>	commercial development on the Chedabucto mineral claims.
--------------	---	--

unabated use of all current fossil fuel reserves is incompatible with a warming limit of 2 °C. Here we use a single integrated assessment model that contains estimates of the quantities, locations and nature of the world's oil, gas and coal reserves and resources, and which is shown to be consistent with a wide variety of modelling approaches with different assumptions⁵, to explore the implications of this emissions limit for fossil fuel production in different regions. Our results suggest that, globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2 °C. We show that development of resources in the Arctic and any increase in unconventional oil production are incommensurate with efforts to limit average global warming to 2 °C. Our results show that policy makers' instincts to exploit rapidly and completely their territorial fossil fuels are, in aggregate, inconsistent with their commitments to this temperature limit. Implementation of this policy commitment would also render unnecessary continued substantial expenditure on fossil fuel exploration, because any new discoveries could not lead to increased aggregate production.

Journal Nature Report Calls for Fossil Fuels to be Left in the Ground CBC Special Report, Monday, January 19, 2015, 7:15 a.m. PETER SHELDON, CBC: The North has tremendous oil and gas reserves. It's a line we've heard before from many, gas in the Beaufort Delta Region, the Deh Cho, shale oil in the Sahtu, offshore oil beneath the Beaufort Sea. A new scientific study says much of those reserves should be left right where they are. That's if we're to avoid a temperature rise of more than two degrees Celsius, it's something world leaders have agreed on. The study predicts that if those resources are extracted and burned the global temperature will rise more than the limit of two degrees Celsius. That could have devastating environmental impacts. Dr. Christophe McGlade is a research associate at University College London, a co-author of the report that was published in the Journal Nature. You might have heard about it in the news. He joins me on the phone from London. Good morning. MCGLADE: Good morning. CBC: Thank you and thanks for joining us. MCGLADE: You're welcome. CBC: So maybe take us back to the start here. What did your study set out to find initially? MCGLADE: So as you just mentioned, all policy makers around the world have agreed that the global warming, climate change, should stay below two degrees and at the same time we've all been well aware that the fossil fuel reserve that we have has an amount of carbon in them that vastly exceeds the amount that would give us a good chance of staying below two degrees. What previous studies have shown is that a third of each of oil, gas and coal reserves have to stay in the ground. So what we've done now is distinguish between those reserves, we've said how much oil has to stay in the

ground, how much gas, how much coal should stay in the ground and also distinguish between different regions and said which regions have to sacrifice the most if we have a good chance of keeping climate change below this two degrees threshold. CBC: Okay, and I'm reading here that you've concluded now that a third of the world's oil has to stay, half of the world's gas and more than three quarters of the coal. Is that right? MCGLADE: Yes, those are the numbers that we estimate in an optimal way what should stay in the ground, yes. CBC: Okay. So you're also talking about how you're making regional conclusions right, like certain oil in certain areas has to stay where maybe others, it can still come out. So I guess I'm wondering, talk me through how it is you came to determine what resources have to stay and which can still come out? MCGLADE: So the approach we used, we have a model here of the global energy systems and this looks out in the long-term about what energy demands will be in the future, how much will people require to heat their homes and how far will people drive and how many tonnes of steel will be produced. Then the model has within it different ways of using those energy demands and, for example, it has all of the fossil fuels are available to it, it has low carbon sources, such as nuclear energy, or renewable energy, or bio energy and also a number of different technologies are available, which can be used to meet that service demand. So the model optimizes, it finds the cheapest way of making sure that all of those energy service demands are met while also ensuring that there's a good chance of staying below the two-degree temperature rise. CBC: Okay, finding the cheapest way, that's the common variable there. Am I hearing that right? MCGLADE: Yes. So we cost how much it's likely to cost to extract oil from the United States or Canada or from the Middle East, how much coal would cost in a similar way and also how much it would cost to erect lots of wind turbines or solar pvs. All of these costs and different technology costs appeared within the model and the model finds the cheapest way of heating service demands and ensuring that climate change doesn't reach this two degrees level. CBC: You're report, as I mentioned, its concluded that some parts of the world can still access, for instance, oil and gas, but it also notes that sort of ours in the North doesn't make this cut, that there would be no oil and gas taken from the Arctic from the models that your research is putting forward. So I guess I'm wondering why is it that sort of our offshore oil would have to stay where it is? MCGLADE: Well there's two reasons for that. One, you mentioned the Arctic, and the Arctic is likely to be a very, very expensive region in comparison to the other sources of oil that are available. So it's much more expensive to extract oil from the Arctic than it is to extract it from the Middle East. So, therefore, if you're aiming towards a two degrees future, the amount of oil that we're likely to

require is a lot lower than it might be otherwise. People are going to use alternative modes of transport rather than continuing with internal combustion engines, which we do currently. If you have a lower demand for oil, and that means that some of those expensive sources, such as Arctic, such as oil in the Arctic, such as the oil in the oil sands just stays in the ground. CBC: Okay. People may be wondering, you know, like what if we diversify, like what if, I'll use the territory, like our regions, as the microcosm here, like if we invest in alternative resources, things like the wind power that you mentioned, and then try to sort of develop our Arctic resource more carefully or more slowly. Like do your report, your model, does it allow for room for scenarios like that even with say the Arctic resources? MCGLADE: Within this two-degree scenario that we run, there will be a huge amount of low carbon sources such as wind, such as solar, such as bioenergy. Those things are going to have to come through. The first thing that really happens, the key thing that happens in the short-term is a very rapid reduction in coal consumption. Then you get these low carbon sources and energy efficiency coming through. However, at the same time you still are reducing your oil consumption. That's a slightly harder thing to do because it's more expensive to be decarbonize a transport system than it is simply...(inaudible)...system, but because oil production and consumption is lower, the resources in the Arctic are just always above what's the level, which is required for oil consumption in a two-degree future. So this is not to say that if you develop all of the oil in the Arctic that we will definitely exceed two degrees. What it means is that if you do that, other sources of oil and gas across the world are going to have to stay in the ground and with the climate change negotiations coming up towards the end of this year this will have to be explained to countries such as the Middle East, which are already having to leave a huge amount of oil in the ground that well of course develop our stocks, but we're telling you to leave a lot of your reserves in the ground and the negotiations are going to get even more difficult. CBC: Yeah, and that will be the politics of that will certainly be something to follow. Maybe if we go beyond two degrees Celsius, give us a sense, what then, what happens then? MCGLADE: Well things get worse and worse as we head towards higher temperatures. So on our current trajectories we're probably heading towards around four or five degrees temperature rise and what the climate science has suggested is as you increase your temperature more and more the risks of what they call extreme weather events and the severity of those extreme weather events becomes worse and worse and this doesn't happen in a gradual manner, this happens if you go from two degrees to three degrees the risk increases. If you go from three degrees to four degrees the risk increases

		<p>by an awful lot more. Also, as you're having more of these extreme, more likelihood of having these extreme weather events and these events coming even more severe, you're likely to hit some tipping points, you're more likely to hit what they call these positive feedback loops. That means that if we reach a certain temperature something might happen within the climate, which means that we actually get runaway climate change. They often talk about a lot of leaf...(inaudible)...contained in polar regions will reach a certain temperature level, all of that...(inaudible)...could be released and we'd certainly find ourselves at even higher temperature level and what if all this stuff comes through is that it will have severe impacts, it's likely to have impacts on food systems, we would expect that if there's more extreme weather that food would be affected, similarly a lot of ecosystems would be lost and species would die out. As well as having an increased likelihood of floods and heat waves, which are the more direct effects that we might see. CBC: Okay, Dr. McGlade, we'll leave it there for this morning, but thanks so much for making some time. MCGLADE: You're welcome. Thank you. CBC: Okay, bye bye. MCGLADE: Bye. CBC: Dr. Christophe McGlade is a research associate at London College University. He's co-author of a new report published in the Journal Nature that calls for fossil fuels to be left in the ground to avoid a dangerous rise in global temperature.</p> <p>Recommendation I request that the WLWB confirm the science referred to in this comment, conduct the necessary research to develop confidence in it, and if it is true, to use common sense to reject this application.</p>	
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	White beach Point	<p>Comment I would like to submit my comments for the proposal from husky oil to begin drilling projects in the whitebeach point area. This is a pristine area and home to many species of wildlife that exist relatively isolated from activity of any kind. Even the most modest type of activity will have effects on this area and the wildlife for years and years to come. Most of which will be irreversible.</p> <p>Recommendation This is an extremely sensitive area and I am totally against this application.</p>	<p>Jan 28: Husky is committed to conducting the exploration program in the manner that minimizes the environmental impact.</p>
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Operating Conditions	<p>Comment (doc) The attached list of recommended operating conditions should mitigate the potential for environmental concerns to arise during this land use operation.</p> <p>Recommendation The provided list of conditions must form part of the issued land use permit.</p>	<p>Jan 28: (doc) Acknowledged.</p>
2	Winter Road Map	<p>Comment (doc) The Applicant has indicated that the property may be accessed by a winter road but a map of the route was not provided.</p>	<p>Jan 28: (doc) Husky has revised the regional map (Map 1) and uploaded it to the WLWB registry to show the entire location of the</p>

		Recommendation Attached is a map of the already existing winter road route from Highway #3 (Km 298) to Whitebeach Point. It is respectfully requested that the Applicant confirm that this route or one from the North Arm may be used for this land use operation.	existing winter access trail from Highway 3 to the existing DOT quarry.
3	Equipment List	Comment The equipment list doesn't include typical equipment that is used for the construction and maintenance of winter roads, or the hauling of granular material for the proposed trenching. Recommendation The equipment list provided with the application must be updated by the Applicant.	Jan 28: Husky has added a rubber tracked snow cat to the equipment list and uploaded the revised document to the WLWB registry. The item is a Pisten Bully 200 tracked snow cat (or equivalent). The snow cat will be equipped with an attached sled or sloop to transport the mini bulk samples.
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	General File	Comment (doc) Cover letter_GNWT Recommendation	
2	General File	Comment (doc) bear occurrence manual Recommendation	
3	General File	Comment (doc) low flying aircraft brochure Recommendation	
4	General File	Comment (doc) camp waste and wildlife attraction manual Recommendation	
5	General File	Comment (doc) wildlife sighting log Recommendation	
6	Archaeology - Data Requirements	Comment An archaeological impact assessment (AIA) has been completed for 100 potential drill holes associated with the Chedabucto Lake Project. A summary report of the AIA is included in the land use permit application, and indicates that approximately 15 previously unrecorded archaeological sites were recorded during the assessment. Nine drill holes have been removed from the 2015 project to avoid impacts to these sites. The summary report also notes that there are 12 proposed drill locations that are within 20-50 m of landforms that have potential for buried archaeological deposits. These landforms must also be avoided by exploration activities. The Prince of Wales Northern Heritage Centre (PWNHC) requires spatial data for the previously unrecorded archaeological sites and high potential landforms to fully evaluate the risk of impacts to archaeological sites from the proposed exploration activities. These data are due to the PWNHC by March 31, 2015 (with the submission of the the final permit report for the AIA), but earlier submission of the spatial data is needed to complete our review in advance of the exploration project. Recommendation We recommend that the proponent submit the required spatial data for the previously unrecorded archaeological sites and high potential landforms recorded during the 2014 AIA to the PWNHC at least 30 days in advance of exploration activities. The PWNHC will provide site-specific management recommendations based on these data.	Jan 28: Husky will submit the required spatial data for the previously unrecorded archaeological sites recorded during the 2014 AIA to the PWNHC at least 30 days in advance of exploration activities.

7	Archaeological Impact Assessment	<p>Comment The scope of the archaeological impact assessment (AIA) completed in 2014 covered 100 potential drill holes. The land use permit application indicates that up to 200 holes could be drilled over the life of the permit. A mini bulk sampling program, which may also require new winter roads, is also included in the scope of the permit. The PWNHC recognizes that these areas will not be defined until the initial exploration is completed. Given the results of the 2014 AIA, which indicate that there are likely to be numerous archaeological sites in the project area, pre-disturbance AIAs must be completed for new areas of ground disturbance over the life of the permit (i.e. any areas of proposed ground disturbance not assessed in the 2014 AIA).</p> <p>Recommendation The PWNHC recommends that the Board require AIAs of any areas of the project footprint that will extend beyond the areas assessed in the 2014 AIA.</p>	<p>Jan 28: Acknowledged. Husky recognized that no more than 100 holes could realistically be drilled in the March-April timeline and therefore conducted an AIA of those first 100 holes. Upon the results of this winter's drilling, Husky will determine if additional holes, up to a total of 200, are required and will conduct AIA's prior to drilling.</p>
8	Draft Permit Conditions - Archaeological Buffer	<p>Comment Condition 43 of the Draft Land Use Permit specifies a 150 m buffer for archaeological sites. Two of the previously recorded archaeological sites in the project area are within 150 m of the existing winter road that links the west shore of the North Arm to the existing quarry. These sites will be avoided by use of the road as long as the road route is not changed, but Condition 43 will require an exception for archaeological sites KcPj-6 (ca. 35 m from the road) and KcPj-7 (ca. 15 m from the road). Additional exceptions to the 150 m buffer may be required based on the forthcoming information on the previously unrecorded archaeological sites recorded during the 2014 AIA.</p> <p>Recommendation The PWNHC recommends that the Board list archaeological sites KcPj-6 and KcPj-7 as exceptions to Condition 43 of the Draft Land Use Permit.</p>	<p>Jan 28: Acknowledged.</p>
9	APPENDIX V, Waste Management Plan, and APPENDIX I, Spill Contingency Plan.	<p>Comment The waste generated during the site operation is scheduled to be disposed of at the Yellowknife solid waste site. The potential contaminated soil/ material that may occur is proposed to be handled in accordance with Territorial Government legislation. Please clarify if any contaminated soil would need off-site remediation and where it is expected to be shipped.</p> <p>Recommendation GNWT notes that the City of Yellowknife's, Director, PW&S, noted "We can accept wastes generated from the site provided they are not contaminated. They will also be charged the non-resident tipping fees as the site is outside the City of Yellowknife." It is GNWT's understanding that the City would subcontract the remediation work of all contaminated materials.</p>	<p>Jan 28: Acknowledged.</p>
10	General comment - Land	<p>Comment The Wek'azh'i Management Area does not have an approved land use plan. As such, there is no requirement for land use permit applications to be checked for conformity with a land use plan. As general information, the Board and proponent should be aware that GNWT Lands</p>	<p>Jan 28: Agreed. Husky will continue to engage with the designated Aboriginal organizations to consult on the details of any proposed post-2015 activity well in advance of conducting field operations. Meaningful</p>

	use permit application - No land use plan in place & Draft Land Use Permit - 26(1)(k) Objects and places of recreational, scenic, and ecological value	has initiated a land use plan scoping study for the Wek'èzhì Management Area. Should the decision be made for the territorial government and the Tlicho Government to move forward with a land use planning exercise in the Wek'èzhì Management Area, third party interests (e.g. leases) would be grandfathered. Recommendation In the absence of an approved land use plan, GNWT encourages the proponent to continue engaging with Aboriginal organizations and other land use stakeholders on important values within the study area. This will ensure that traditional and local knowledge with regard to land use and places of recreational, economic, scenic, cultural, historical, and ecological values are incorporated into operational plans for the site.	discussion and engagement will be a critical part of the planning process for any post-2015 field operations.
11	DOT Quarry	Comment Approximately 14 years ago, the Department of Transportation used the "White Beach Quarry" to gather sand and for crushing purposed to replenish granular stockpiles. Access to the site was gained by a winter road off Highway 3. This site is no longer in use by DOT. Recommendation Permission will be required from Department of Transportation, GNWT, to utilize Quarry Reserve 085J06001 for a camp. The proponent is to contact the Department of Transportation Highways Division prior to beginning operations in order to receive authorization to access the highway. DOT will issue a highway access permit once this condition has been satisfied. For more information please contact Del Miller, Regional Manager, Highway Operations, North Slave at 867-920-3432 or del_miller@gov.nt.ca; or Darin Murphy, Regional Manager, Highway Operations, South Slave at 867-874-5008 or darin_murphy@gov.nt.ca.	Jan 28: Acknowledged.
12	Conservation Planning Section	Comment Comment(s): As denoted on Map 1 of the LUP application, the existing Chedabucto project mineral claims overlap with both the proposed candidate protected area and the existing interim land withdrawal (in place until September 2015) established through the Territorial Lands Act to allow	Jan 28: Husky's Chedabucto mineral claims are adjacent to, but do not overlap the Dinàgà Wek'èhodì candidate National Wildlife Area. The NWT Protected Area Strategy (PAS) Working Group has identified

<p>n, ENR: Topics 1 and 2 Topic 1: Status of Protected Area Planning in the North Arm, Great Slave Lake</p>	<p>for the assessment and review of the Dinàgà Wek'èhodi (formerly known as Kwets'ootlaa), candidate protected area. As the claims were established prior, the associated mineral exploration rights are not impacted by the interim land withdrawal put in place for conservation planning purposes. In December 2010, the Tlicho Government and Mā̃tis communities along with other stakeholders combined their efforts to advance Dinàgà Wek'èhodi the north arm of Great Slave Lake, through the Protected Areas Strategy (PAS) conservation planning process. The Dinàgà Wek'èhodi Working Group (DWWG) was formed to assess the ecological, cultural, and economic values of the Dinàgà Wek'èhodi area and to make recommendations on its establishment, completing Step 5 of the PAS. The DWWG was formed according to guidelines of the PAS and consists of the Tlicho Government, Wek'Ā̃ezhĀ̃-i Renewable Resources Board, Community of Behchoko Government, Yellowknives Dene First Nation, Northwest Territory Mā̃tis Nation, North Slave Mā̃tis Alliance, the federal and territorial governments, and some commercial outfitters operating in the area. As an indication of support for Dinàgà Wek'èhodi candidate protected area, the Tlicho Government extended protection to roughly 280 km² of adjacent Tlicho private lands by creating a Habitat Management Zone, DĀ̃'k'easiĀ̃-?edaĀ̃ wĀ̃'hoodia, through the Tlicho Land Use Plan. This Habitat Management Zone buffers a portion of Dinàgà Wek'èhodi, and the goal of this Zone is to protect areas of permanent or seasonal wildlife and bird habitat by restricting land use activities to: 1) camps or cabins, 2) non-exploitive scientific research, 3) transportation corridors, and 4) eco / cultural tourism. The assessment and review components of the PAS conservation planning process has generated a significant amount of information on the ecological, cultural, social and economic values of Dinàgà Wek'èhodi. The Dinàgà Wek'èhodi Working Group (DWWG) has met 15 times since 2010. DWWG discussions have focused on finding a boundary that would ensure culturally and ecologically important areas would be protected while also ensuring opportunities for economic potential. The two most significant changes to the boundary the working group discussed were to include Waite Island and the central lake area, and to exclude all active mineral claims.</p> <p>Recommendation Comment only, no recommendation.</p>	<p>the North Arm of Great Slave Lake as an area to protect, this area is indicated on Map 1 and Map 2 of the LUP application. Of primary concern is the Important Bird Area in Canada (IBA) located along the north-eastern shore of the North Arm. On September 27, 2013 by Order in Council, certain lands located on the North Arm of Great Slave Lake were withdrawn from disposal for a period of two years. These lands form the Dinàgà Wek'èhodi candidate National Wildlife Area. A number of Husky's Chedabucto mineral claims pre-date the land withdrawal and are therefore not part of the candidate National Wildlife Area. Field operations proposed in Husky's LUP application are contained entirely within the Chedabucto mineral claims and are therefore not in the Dinàgà Wek'èhodi candidate National Wildlife Area.</p>
<p>13 Topic 2: Ecological Considerations for</p>	<p>Comment Comment(s): The Ecological Assessment (December 2011) offers the following conclusions about the significance of the Dinàgà Wek'èhodi area: . Eight Species at Risk listed under the federal Species at Risk Act occur there, including Boreal Woodland Caribou, Wood Bison and Rusty Blackbird. . The North Arm Important Bird Area (NT086) (IBA Canada, 2010) overlaps with Dinàgà Wek'èhodi. . Dinàgà</p>	<p>Jan 28: Husky confirms that the winter field work will be completed by April 30th.</p>

	Land Use Activities	<p>Wek'èhodì includes part of the CWS North Arm Key Migratory Bird Terrestrial Habitat Site; it supports over 1% of the national populations of a number of migratory bird populations (Latour et al., 2008). . Waterfowl and other waterbirds, raptors and songbirds use the area as a migratory stopover and for breeding and brood rearing. . 223 bird, 33 mammal, 29 fish, and one amphibian species inhabit Dinàgà Wek'èhodì and surrounding area. . 15 land cover classifications have been identified, with coniferous forest covering about half the land within the area. . 539 species and 72 families of vascular plants occur in the area. The Ecological Assessment and Renewable Resource Assessment (March 2011) for Dinàgà Wek'èhodì also offer the following observations of relevance to this LUP application: . Whitebeach Point is an area with high concentrations of the Lesser and Greater scaup (<i>Aythya marila</i> and <i>Aythya affinis</i>), referencing research conducted by the Canada Wildlife Service (Fournier and Hines 2005). . The northern shore of the Dinàgà Wek'èhodì area is of international significance and is designated as an Important Bird Area (IBA) for migrating and breeding birds. This region is particularly important in late spring when open water is limited. IBA designation does not offer any regulatory control, but is a recognition of the area's ecological importance. . The northern shore is also designated as a Key Migratory Bird Terrestrial Habitat Site due to its importance to migrating Tundra Swans, Canada and Cackling geese, and breeding Caspian Terns. This area also supports a high abundance of other waterbirds that use the area during migration and large local breeding populations, confirmed by 2010 surveys. While the proposed exploration activities are to take place on the southern shore of Dinàgà Wek'èhodì candidate protected area, it will be important for the proponent to understand the that the northern shore is important habitat for migratory birds, and disturbance of these areas should be avoided as much as possible. . Dinàgà Wek'èhodì candidate protected area is also of significance for subsistence hunting of moose for Behchoko residents, and for fall waterfowl hunts for Yellowknife residents.</p> <p>Recommendation Recommendations(s): 1.) Timing of exploration activity "targeted time for the phase 1 exploration activity is March to April 2015. Specifications could be made to ensure activity does not extend into May to avoid interference with staging waterfowl or calving moose. The coastal area of Whitebeach Point should be avoided if exploration work is to take place when open water exists.</p>	
14	None	<p>Comment None</p> <p>Recommendation 2.) Extent of exploration activity "It would be advantageous to have more detail on the extent and timing of phase 2 activities such as required new cut lines, referenced on page 12 of the application, in order to</p>	<p>Jan 28: The results of the 2015 winter drilling program will be used to determine if mini-bulk samples are needed. Should over land access be required for Phase 2 (mini-bulk sampling), a rubber tracked vehicle with a</p>

		<p>assess potential impacts and ensure minimal disturbance to wildlife, waterfowl and associated habitat.</p>	<p>sloop or sled will be employed to access program area from Highway 3 along the existing winter access trail to the existing DOT quarry and on snow covered trails from the quarry to the sampling sites. Post-2015, Phase 2 would take place in the "March-April" time period and would involve the minimal clearing of trails approximately 4 metres wide. Trails will be scouted on foot or snowmobile to minimize forested areas so that slashing can be kept to a minimum and large stands of trees will be avoided. No water will be required for building the winter access. The lake crossing will not require any flooding. Given that this work would take place during the winter, there will be no disturbance to waterfowl and minimal impact on wildlife and habitat. By using a tracked snow cat vehicle, the trails will not be traversible by any wheeled vehicle.</p>
15	<p>North Slave Region Comments, ENR: Topics 3 to Topic 7 Topic 3: Storage, Handling and Disposal of Refuse or Sewage</p>	<p>Comment Comment(s): A Waste Management Plan should provide additional details for the methods that will be used for procedures implemented onsite in regards to segregation, storage, treatment, transfer and disposal of wastes, amount of waste generated, contingencies measures, and staff training. Husky Oil Operation Ltd. has submitted a Waste Management Plan. The following recommendations for terms and conditions are suggested to help ensure the protection of project staff or clients and also to protect wildlife within their natural habitat by reducing or preventing human/bear conflicts that could lead to the destruction of nuisance bears.</p> <p>Recommendation Recommendation(s): 1) The Permittee shall use food handling as well as garbage collection, transfer, storage and disposal procedures that minimize the attraction of wildlife to the camp or drilling areas.</p>	<p>Jan 28: Confirmed.</p>
16	None	<p>Comment None</p> <p>Recommendation 2) The Permittee shall keep all waste, recyclables and debris in a central area within sealed animal proof metal containers until final disposal. (Proposed change to WLWB's DRAFT LUP #40)</p>	<p>Jan 28: Husky confirms that all waste, recyclables and debris will be stored in animal proof metal containers and will be removed site and backhauled on flights for proper disposal in Yellowknife.</p>
17	None	<p>Comment None</p> <p>Recommendation 3) The Permittee shall ensure that the sealed animal proof metal containers are cleaned once emptied.</p>	<p>Jan 28: Confirmed.</p>

18	None	<p>Comment None</p> <p>Recommendation 4) The Permittee shall remove all non-combustible and recyclable garbage and debris, from the land use area, to an approved waste disposal site as described in the approved Waste Management Plan. (Proposed change to WLWB's DRAFT LUP #41)</p>	Jan 28: Confirmed.
19	None	<p>Comment None</p> <p>Recommendation 5) The Permittee shall ensure that all grease and oils from the exploration activities are stored in a manner that reduces the release of odours and prevents wildlife from accessing the attractants.</p>	Jan 28: Husky confirms that these will be stored in sealed plastic pails and removed daily.
20	None	<p>Comment None</p> <p>Recommendation 6) The Permittee shall remove scrap metal, discarded machinery parts, tires, drums to an approved waste disposal facility.</p>	Jan 28: Confirmed.
21	Topic 4: Protection of Wildlife Habitat and Fish Habitat	<p>Comment Comment(s): There has been a growing concern over the protection of wildlife and wildlife habitat on project footprint. Husky Oil Operations Ltd. has attached a Wildlife, Archeological & Environmental Awareness Plan that addresses aspects of Wildlife protection on the Chedabucto Property. A Wildlife & Wildlife Habitat Protection Plan (WWHPP) will outline in more detail the procedures deemed necessary to protect on site personnel, wildlife and wildlife habitat within the Project Development Area (PDA), also commonly described as a project's direct "footprint", including the use of road/trail access and wildlife monitoring.</p> <p>Recommendation Recommendation(s): 1) The Permittee shall submit a Wildlife & Wildlife Habitat Protection Plan (WWHPP) annually to regulatory agencies for review to ensure that negative effects to wildlife and wildlife habitat, within the project footprint including use of new and existing access roads/trails, are minimized.</p>	Jan 28: Given the short duration and small scope of this early phase exploration program, Husky feels that a WWHPP is not warranted at this time. Husky and contractors will endeavour to record 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 and copies can be obtained directly from them.
22	Topic 5: Protection of Boreal Caribou	<p>Comment Comment(s): Boreal caribou are listed as a threatened species under the federal Species at Risk Act, and a recovery strategy is a legal requirement of this listing. The national Recovery Strategy for the Woodland Caribou, Boreal Population, in Canada (the Recovery Strategy) was posted to the federal Species at Risk Registry on October 5, 2012. The Recovery Strategy identifies critical habitat for boreal caribou as a minimum of 65 percent of undisturbed habitat range in the NWT. Disturbance includes anthropogenic features and fire disturbance less than 40 years old. While the NWT boreal caribou population has been assessed as self-sustaining in the recovery strategy, maintaining this status means not exceeding the 35% disturbance threshold set out in the Strategy. To do this, the GNWT will need to keep track of the disturbance footprint within the NWT boreal caribou range to inform the development of range management plans for this species. As of 2014, there is roughly 67% undisturbed habitat in the boreal caribou range in the NWT. The NWT Species at</p>	Jan 28: Husky did submit our complete set of GIS files to the WLWB along with our application. We have committed to submitting our shapefiles of the final access routes, staging areas, storage areas, tent camp and cut areas upon project completion. Husky suggested in our response to Environment Canada that we keep a single point of contact for this information and will provide this information to the Wek'eezhii Land and Water Board so that it can be posted on the registry and accessed by all organizations.

		<p>Risk Committee (SARC), established under the territorial Species at Risk Act, assessed boreal caribou as a Threatened species in December 2012. Boreal caribou were added to the NWT List of Species at Risk in February 2014. Section 76 and 77 of the Species at Risk Act (NWT) requires the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a land use permit or water licence application, respecting the potential impacts of the proposed development, permit or licence application on a pre-listed or listed species or its habitat. Potential impacts to boreal caribou include habitat loss, sensory disturbance, mortality from vehicle collisions, and facilitated access for harvesters. While the activities proposed in the present application fall largely within an area of natural disturbance, information on the footprint of the project is critical for characterizing levels of human disturbance within boreal caribou range.</p> <p>Recommendation Recommendation(s): 1) The Permittee shall provide the WLWB with shape files of their proposed project footprint, and that the shape files be shared and annually updated with responsible co-management authorities for boreal caribou in order to keep track of habitat disturbance within the NWT boreal woodland caribou range.</p>	
23	Topic 6: Species at Risk	<p>Comment Comment(s): The application does not discuss how potential impacts will be mitigated and monitored for species at risk. The Species at Risk Act (SARA) states that adverse effects on listed species must be identified and assessed, and regardless of significance, mitigated and monitored (s79). Any impact to habitat that is important to species at risk, including their 'critical habitat' and 'residences' specified under SARA, must be considered during an environmental impact assessment. If the habitat is known to be used by a species of wildlife at risk, and its importance is unclear, a precautionary approach requires treating that habitat as important unless the balance of evidence suggests otherwise.</p> <p>Recommendation Recommendation(s): 1) The Permittee shall ensure the protection of species and key habitat listed under Species at Risk Act (SARA), assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or assessed by the NWT Species at Risk Committee (SARC). Table 1 – “Terrestrial species at risk potentially occurring in the project area: Species SARA Schedule 1 COSEWIC SARC (NWT) Boreal Caribou Threatened Threatened Threatened Little Brown Myotis Endangered Endangered Not Assessed Wolverine (western pop.) Under consideration Special Concern Not At Risk Wood Bison Threatened Special Concern Not Assessed Bank Swallow Under Consideration Threatened Not Assessed Barn Swallow Under Consideration Threatened Not Assessed Common Nighthawk Threatened Threatened</p>	<p>Jan 28: Husky is committed to conducting the exploration program in the manner that minimizes impact on wildlife and habitat. Husky and contractors will endeavour to record 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 and copies can be obtained directly from them.</p>

		Not Assessed Horned Grebe Under Consideration Special Concern Not Assessed Olive-sided Flycatcher Threatened Threatened Not Assessed Rusty Blackbird Special Concern Special Concern Not Assessed Short-eared Owl Special Concern Special Concern Not Assessed Yellow Rail Special Concern Special Concern Not Assessed	
24	Topic 7: Establishment of Petroleum Fuel Storage Facilities	<p>Comment Comment(s): Ensure provisions are in place for appropriate storage of fuel and disposal fuel contaminated materials. Ensure mitigation measures are in place in the event of spills of any hazardous materials and reduce the release of contaminated materials into the receiving environment.</p> <p>Recommendation Recommendation(s): 1) The Permittee shall enact measures that minimize the release of contaminants and mitigate potential spills, including the establishment of all designated fuel storage and refueling areas that are: At a distance greater than 30 meters from any local high water marks. Stored within a secondary containment (i.e. berm, double walled tank, etc.) Not located in a drainage channel. Subject to daily visual inspections. Spill kits located at all fuel storage, refueling and transfer locations.</p>	Jan 28: These commitments are already outlined in our Spill Contingency Plan.
25	None	<p>Comment None</p> <p>Recommendation 2) The Permittee shall ensure any waste oils, including used filters, oily rags, used drums and contaminated soils are removed from site and disposed of at an approved waste disposal facility.</p>	Jan 28: These commitments are already outlined in our Spill Contingency Plan.
26	General comment re. Land Use Permit application	<p>Comment There is a GNWT Fuel Cache Reserve 085J05001 north of B3-1-02, Chedabucto Lake.</p> <p>Recommendation None</p>	Jan 28: Acknowledged.
27	General comment re. Land Use Permit application	<p>Comment One Hunting and Fishing Cabin lease 085J06019 located on Chedabucto Lake, approximately one kilometre south of CHE 19-DDH13.</p> <p>Recommendation Information only. One kilometre away; no impact likely.</p>	Jan 28: Acknowledged.
28	Silica exploration	<p>Comment In and of itself, this exploration project for silica does not pose a public health concern.</p> <p>Recommendation Comment only, no recommendations.</p>	Jan 28: Acknowledged.
ID	Topic	Reviewer Comment/Recommendation	Proponent Response

1	Closure and Reclamation Plan - Trenching	<p>Comment From "Map 2 Detailed Program Map -2015 Potential Drill Locations" it is evident that high level of drilling activities will take place inside the proposed Dinàgà Wek'èhodi protected area. As a representative body of Metis people in the area north of Great Slave Lake, the NSMA has been actively participating in the process to set up Dinàgà Wek'èhodi protected area. Recognizing that the Proponent has the pre-established claim to the area, the NSMA emphasizes that, should the permit be granted, the Proponent leaves the area as close to the original state as possible. In light of this, the description provided under "Trenching" in the Proponent's Closure and Reclamation Plan is excessively vague to assure any comfort to NSMA members that the area will be returned in an aesthetically, ecologically, and culturally acceptable state.</p> <p>Recommendation Please provide a more precise description of the Proponent's Closure and Reclamation standard and objectives.</p>	<p>Jan 28: Husky's Chedabucto mineral claims are adjacent to, but not part of the Dinàgà Wek'èhodi candidate National Wildlife Area. The NWT Protected Area Strategy (PAS) Working Group has identified the North Arm of Great Slave Lake as an area to protect, this area is indicated on Map 1 and Map 2 of the LUP application. On September 27, 2013 by Order in Council, certain lands located on the North Arm of Great Slave Lake were withdrawn from disposal for a period of two years. These lands form the Dinàgà Wek'èhodi candidate National Wildlife Area. Field operations proposed in Husky's LUP application are contained entirely within the Chedabucto mineral claims and are therefore not in the Dinàgà Wek'èhodi candidate National Wildlife Area. The Phase 2 mini-bulk is contingent on the results of the drilling program. If required, the mini-bulk sampling procedure is expected to involve stripping any existing overburden and removal of 5 to 10 cubic metres (approximately 10 tons) of unconsolidated sand per sample. The sides of the small pit created by the excavation will be allowed to collapse, then be smoothed and we will replace the overburden, resulting in a small depression with very little evidence of disturbance. A summer site inspection will be conducted.</p>
2	Closure and Reclamation Plan - Roads/Trails	<p>Comment From "Map 2 Detailed Program Map -2015 Potential Drill Locations" it is evident that high level of drilling activities will take place inside the proposed Dinàgà Wek'èhodi protected area. As a representative body of Metis people in the area north of Great Slave Lake, the NSMA has been actively participating in the process to set up Dinàgà Wek'èhodi protected area. Recognizing that the Proponent has the pre-established claim to the area, the NSMA emphasizes that, should the permit be granted, the Proponent leaves the area as close to the original state as possible. In light of this, the description provided under "Roads/Trails" in the Proponent's Closure and Reclamation Plan is excessively vague to assure any comfort to NSMA members that the area will be returned in an aesthetically, ecologically, and culturally acceptable state.</p> <p>Recommendation Please provide a more precise description of the Proponent's Closure and Reclamation standard and objectives.</p>	<p>Jan 28: The proposed drilling program will utilize heli-portable drilling rigs so no overland access will be required. The decision to proceed with Phase 2 mini-bulk sampling is contingent on the results of the drilling program. Access to the program area for Phase 2 will be during the winter, utilizing a rubber-tracked snow cat or equivalent vehicle and sled via the existing winter access from Highway 3 to the DOT rock quarry (see revised Map1). The snow cat will travel to the sampling sites on snow covered trail(s). The trail route will be scouted on foot or by snowmobile to avoid large stands of trees so that slashing will be kept to a minimum. No winter roads will be built in support of the exploration activity conducted under this LUP. A summer site inspection will be conducted.</p>
3	General	<p>Comment It is paramount to NSMA members that the</p>	<p>Jan 28: Husky does not have photographs of</p>

	al Comm ents	<p>aesthetic and cultural integrity of the site remains relatively intact. However, the Proponent's application does not include photographic descriptions of the proposed exploration sites to inform what sort of landscape changes NSMA members should expect.</p> <p>Recommendation Please provide photographic record of proposed drilling, roads/trails, heli-pads, and other areas where proponents are planning to significantly modify the vegetation and landscape.</p>	<p>specific drilling, roads/trails, heli-pad sites. Access to the program area will be by helicopter or fixed wing aircraft for the drilling program. Heli-pads will use existing clearings wherever possible. No winter roads will be constructed to support any activity conducted under this Land Use Permit. Should over land access be required for a mini-bulk sample, a rubber tracked vehicle with a sloop or sled will be employed to access program area along the existing winter access trail from Highway 3 to the existing DOT quarry and on snow covered trails from the quarry to the sampling sites. Trails will be scouted to avoid trees and slashing will be avoided or kept to a minimum. Wherever possible, existing clearings will be utilized for winter trail access to limit new clearing. Frozen ground conditions will mitigate potential damage to ground vegetation, surface soils and permafrost.</p>
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Gener al File	<p>Comment (doc) NWT CoC Comments</p> <p>Recommendation</p>	
2	Refer for Enviro nment al Assess ment	<p>Comment The NWT Chapter of the Council of Canadians opposes the granting of a Type A Land Use Permit to Husky Oil Operations Ltd. to carry out exploratory drilling for silica in the North Arm of Great Slave Lake. The reasons for opposing this licence are as follows:</p> <ul style="list-style-type: none"> • The North Arm remains a pristine landscape with clean water; abundant fish populations; a variety of wildlife, including migratory birds, moose, and boreal caribou, which is a threatened species under NWT Species at Risk legislation. Although forest fires have affected portions of this area, the eco-system will regenerate itself and continue to provide habitat for a range of wildlife species. This exploratory program is the beginning phase of a development process that could fundamentally damage, in perpetuity, large sections of the land. • The North Arm remains a popular and well-used public recreation area, for canoeists/kayakers, snowmobilers, hunters, fishers, and boaters. The recreational and tourism potential of the area is high as long as it remain a pristine land use area. Industrial scale development will severely undermine the long-term recreational and tourism value of the area – and tourism has longer term economic potential than non-renewable resource extraction. 	<p>Jan 28: The purpose of Husky's proposed exploration program is to evaluate the resource so that informed decisions can be made regarding the potential for any future commercial development on the Chedabucto mineral claims.</p>

- Although CoC NWT does not formally represent Indigenous interests, it knows that the North Arm is a traditional hunting, fishing, and gathering area for Aboriginal peoples throughout the North Slave region. An industrial mining operation will interfere with traditional travel and harvesting activities and damage wildlife habitat.
- Silica is a known health hazard and even in small amounts can lead to lung damage of persons exposed to the mineral. The mining and transporting of silica will create a significant amount of dust that both humans and wildlife in the area will be exposed to. Creating this type of health hazard in a recreational and harvesting area poses a direct risk to public health and potentially to wildlife.
- The silica is specifically being mined for the purpose of horizontal hydraulic fracturing (fracking) in the NWT and potentially in other jurisdictions. The recent report of the Canadian Council of Academes, referenced this past week by a Committee of the Yukon Government, has clearly ~stated that there is high risk associated with horizontal fracking and limited meaningful research to support industry claims that it is a safe activity. Damaging a pristine environment to access a known health hazard to support a controversial and unproven oil extraction process that will significantly contribute to increased greenhouse gas emissions and freshwater loss makes no sense. It should be stopped at the earliest stage and not be allowed to progress to the point where minerals rights are acquired and the development becomes inevitable.
- Exploration for silica in the North Arm does not have social licence. There has been no meaningful attempt by the developer or the WLWB to engage the public in an open discussion of the proposed exploration project and the potential impacts of large scale silica mining in the area.

Recommendation Recognizing that the WLWB does not have the authority to halt this exploration application, we strongly recommend that the WLWB use its existing authority under the MVRMA to refer this application to an environmental assessment at this early stage in the development process, so that the full consequences of this type of operation are publicly considered prior to any activity in the area. Without clear social licence, the development should not proceed without thorough scrutiny of its long term socio-environmental impacts. Public engagement and scrutiny need to be a first priority for such a potentially large and

		environmentally damaging project – even at this early stage in the development.	
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Winter Road	<p>Comment Proposed activities include “pioneering of winter road routes in the area for logistical support”.</p> <p>Recommendation Provide additional details on winter road construction, including locations, length, width, type of equipment and personnel needed for the construction and maintenance, water requirements and water withdrawal locations. Confirm that the daily water withdrawals will be less than 100 cubic metres.</p>	<p>Jan 28: The results of the 2015 winter drilling program will be used to determine if mini-bulk samples are needed. Should over land access be required for Phase 2 (mini-bulk sampling), a rubber tracked vehicle with a sloop or sled will be employed to access program area from Highway 3 along the existing winter access trail to the existing DOT quarry and on snow covered trails from the quarry to the sampling sites. Post-2015, Phase 2 would take place in the "March-April" time period and would involve the minimal clearing of trails approximately 4 metres wide. Trails will be scouted on foot or snowmobile to minimize forested areas so that slashing can be kept to a minimum and large stands of trees will be avoided. Husky is not constructing a road but rather utilizing an existing winter access trail and it will not require the withdrawal of water. The lake crossing will not require any flooding. We will utilize a rubber-tracked snow cat to pack down the snow. The trails will not be traversible by any wheeled vehicle. Husky is confirming that daily water withdrawals will be less than 100 cubic metres.</p>
2	Wildlife Management Plan	<p>Comment Wildlife Management Plan includes general wildlife protocols.</p> <p>Recommendation The staff shall also be strictly forbidden from fishing and trapping.</p>	<p>Jan 28: Confirmed. Husky employees and contractors working on the exploration program will be prohibited from fishing and trapping.</p>
3	Drilling Waste	<p>Comment The exploration phase of the program proposes to utilize reverse circulation drilling and diamond drilling with a combined total of approximately 200 holes over the five year life of the initial permit and possible extension for two years.</p> <p>Recommendation Clarify if the proposed drilling methods will use any fluids/additives/chemicals, and generate any waste. Indicate the total volume of drill cuttings expected from all of the drill targets (in cubic metres).</p>	<p>Jan 28: Limited use of drill polymer (refer to "Poly Drill" MSDS sheet originally submitted within the Spill Contingency Plan) will be required for the drilling program. Drill cuttings will be captured and directed to a natural depression. Total drilling waste will be less than four 5 gallon pails of cuttings per hole.</p>
4	Mini-Bulk Sample Program	<p>Comment Mini-bulk sample program will include collecting a representative sample material from test pits. Approximately 10 mini bulk samples will be collected.</p> <p>Recommendation Indicate the total volume for the ten mini-bulk sampling (in cubic metres), total disturbed area (in hectares) and locations.</p>	<p>Jan 28: The scope of the Phase 2 mini-bulk is contingent on the results of the drilling program and therefore not well defined. We envision that a mini-bulk sampling program could involve up to 10 sample sites with removal of a total of 50-100 cubic metres of material, disturbing less than 1 hectare of</p>

			land. Sample locations are not known at this time.
6	Permafrost Protection	<p>Comment The Chedabucto Property is located in Discontinuous Permafrost Coverage area. In discontinuous permafrost areas, removal of vegetation cover (tree and bush cutting and removal of organic matting) generally leads to warming and thawing of the ground.</p> <p>Recommendation Indicate any potential impacts of the proposed field operations on permafrost conditions, and associated mitigation measures.</p>	<p>Jan 28: None expected. Access to the program area will be by helicopter or fixed wing aircraft for the drilling program. No winter roads will be constructed to support any activity conducted under this Land Use Permit. Should over land access be required for a mini-bulk sample, a rubber tracked vehicle with a sloop or sled will be employed to access program area along the existing winter access to the DOT quarry and on snow covered trail from the quarry to the sampling site. Trails will be scouted to avoid trees and slashing will be avoided or kept to a minimum. Wherever possible, existing clearings will be utilized for winter trail access and 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 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.</p>
7	Contaminated and remediation site	<p>Comment The Land Use Permit application indicates that there will be drilling on federal lands (Wrigley Point) that is designated as a contaminated and remediation site (parcel CHE-6.)</p> <p>Recommendation Clarify what protective measures Husky will implement to ensure safety of staff.</p>	<p>Jan 28: We are currently working, through CARD, to determine the impacts at the Wrigley Point site and the timeline to remediate it. Appropriate safety plans will then be put in place.</p>
8	Archaeological Impact Assessment Report	<p>Comment Archaeological Impact Assessment Report indicates that 100 proposed drill locations were included in the report, and the assessment of the remaining sites is currently underway.</p> <p>Recommendation Confirm if archaeological impact assessment will be completed for the remaining 100 drilling sites prior to the commencement of field operations.</p>	<p>Jan 28: Husky recognized that no more than 100 holes could realistically be drilled in the March-April timeline and therefore conducted and AIA of those first 100 holes. Results of the 2015 program will determine if additional drilling is required. Should additional holes, up to a total of 200, be required to obtain more information, Husky confirms that an AIA will be conducted on those holes prior to drilling.</p>
9	Helicopter Landing Sites	<p>Comment The program proposes to utilize up to six helicopter landing sites, and it is anticipated that these landing sites may need to be cleared with the typical size of a helicopter landing site being approximately 700 square metres (total 420 square meters).</p>	<p>Jan 28: Husky intends to utilize existing clearings wherever possible. If pads are cleared, trees will be cut into 4' lengths and stacked off to the side.</p>

		Recommendation Indicate what restoration activities will take place for the landing sites.	
10	Winter Road	<p>Comment The application indicates that "to facilitate the mini-bulk sampling, winter access to the area will be required".</p> <p>Recommendation Indicate if the proposed exploration program (i.e., ~200 drill targets) requires winter road access to the area.</p>	<p>Jan 28: Access to the program area will be by helicopter or fixed wing aircraft for the drilling program. The results of Phase 1 will be used to determine if mini-bulk samples are needed. Should over land access be required for Phase 2 (mini-bulk sampling), a rubber tracked vehicle with a sloop or sled will be employed to access program area along the existing winter access to the existing DOT quarry and on snow covered trails from the quarry to the sampling site. Trails will be scouted on foot or snowmobile to minimize forested areas so that slashing can be kept to a minimum and large stands of trees will be avoided. No water will be required for building the winter access. The lake crossing will not require any flooding.</p>
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	General File	<p>Comment (doc) Re: Husky Land Use Permit W2014Q0005 from Tlicho Government</p> <p>Recommendation</p>	
2	Dinàgà Wek'èhodì	<p>Comment We would like the Board to consider a measure requiring no drilling in areas considered for the PAS. The mineral leases held by Husky are in Wekheezhi Lands, where the NWT Protected Area Strategy is currently proposing and considering the protected area, Dinàgà Wek'èhodì. In the most recent PAS meeting, Elder Harry Apples said: "The land it represents is important to the Tli'cho?; Elders before this time went there to hunt, trap, and fish. The Tli'cho? still use the area today. The Tli'cho? want to protect this land. Other people should ask for permission to explore and use the area, out of respect for the Tli'cho? and the history of the place. Harr asked the question "If any minerals are found in the area will it ever be the same?" and stressed importance of Waite Island" (October 24, 2014, PAS Meeting Minutes). This overlap of interests should be given particular consideration, and the interest of the Protected Areas Strategy prioritized</p> <p>Recommendation We recommend the Board to consider a measure requiring no drilling in areas considered for the Protected Area Strategy (PAS).</p>	<p>Jan 28: One of the primary objectives of the PAS process is to access the resource potential of areas being considered for protection. The purpose of Husky's LUP application is to explore the mineral claims area and evaluate the silica deposit to determine if there is the potential for commercial development. Husky's exploration program is of short duration, and designed to minimize the impact to the environment. Husky's Chedabucto mineral claims are adjacent to, but do not overlap the Dinàgà Wek'èhodì candidate National Wildlife Area. Field operations proposed in Husky's LUP application are contained entirely within the Chedabucto mineral claims and are therefore not in the Dinàgà Wek'èhodì candidate National Wildlife Area.</p>
3	Drilling near shorelines	<p>Comment In the PAS meeting (October 24, 2014) Joyce Rabesca indicated concern that the North Arm is particularly vulnerable to environmental changes already, using the sesh tides as an example. This type of concern leads us to recommend the Board include a measure to ensure there is no drilling near the shore line in any of Husky's mineral leases</p>	<p>Jan 28: Acknowledged. Husky will not conduct any drilling or quarry operations within 100 metres of the ordinary high water mark of any watercourse in any of Chedabucto mineral leases.</p>

	Land Use Permit , Part C, p.5, statement #5.	and exploration activities. Recommendation We recommend to the board inclusion of a measure to ensure that there is no drilling near the shore line in any of Husky's mineral leases and exploration activities. We note that there is a statement to this effect in the draft land use permit (heading corresponding to the Mackenzie Valley Land Use Regulations Subsection 26(1)(a)), and we support this measure. 5. The Permittee shall not conduct a quarry operation within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector (Draft Land Use Permit, p. 5)	
4	Drilling at the high water mark " Draft Land Use Permit , Part C, p.7, statement #30.	Comment In the PAS meeting (October 24, 2014) Joyce Rabesca indicated concern that the North Arm is particularly vulnerable to environmental changes already, using the sesh tides as an example. This type of concern leads us to recommend the Board include a measure to ensure there is no drilling near the high water mark in any of Husky's mineral leases and exploration activities. Recommendation We recommend to the board that there be no drilling allowed near the high water mark and or waterline. This measure will require a change to statement 30 (corresponding to Mackenzie Valley Land Use Regulations Subsection 26(1)(g)) in the the draft land permit. 30. When drilling within 100 metres of the Ordinary High Water Mark of any Watercourse, and when drilling on ice, the Permittee shall contain all drill water and waste in a closed circuit system for reuse, off-site disposal, or deposit into a land-based Sump or natural depression (Draft Land Use Permit, p.7).	Jan 28: Husky will not conduct any drilling activities within 100 metres of the ordinary high water mark of any watercourse in any of Chedabucto mineral leases. Drill cuttings will be captured and directed to a natural depression.
5	Drill Plan and Drilling Locations " Draft Land Use Permit , Part C, p. 5, statement #4.	Comment We note some uncertainty with the Aurora Geoscience drill plan, leaving it unclear where roughly half the drilling would occur. We support the board's statement 4 (corresponding to Mackenzie Valley Regulations Subsection 26(1)(a)) in the draft land use permit requesting both the coordinates and a 1:50,000 map. We request that the drill plan be prepared and shared with the Tli?cho? Government before any exploration activity that varies from the set plan occurs. Recommendation We recommend to the proponent and the board that the drill plans and any amendments to the drill plan be shared with the Tli?cho? Government before any exploration activity that varies from the set plan occurs. We support the board's statement 4 (corresponding to Mackenzie Valley Regulations Subsection 26(1)(a)) in the draft land use permit requesting both the coordinates and a 1:50,000 map. 4. Prior to the commencement of drilling, the Permittee shall submit the drill target locations on a 1:50,000-scale map with coordinates and map datum to an Inspector and the Board (Draft Land Use Permit, p. 5).	Jan 28: Husky's LUP application seeks regulatory approval to conduct an exploration program over a five year period to evaluate the resource potential of the identified silica deposit. The results of 2015 drilling program will be used to determine if additional drilling (up to a maximum of 200 holes), geophysics and/or mini-bulk samples are needed. Husky consulted on the objectives of the exploration program and in detail regarding the 2015 program. Meaningful discussion and engagement will be a critical part of the planning for any post-2015 field operations. A revised 1:50,000 scale program map has been submitted to the WLWB for the proposed 2015 and similar program maps will be prepared for proposed post-2015 field operations.
6	Mini Bulk	Comment In the plan, the company suggests there will be 10 mini-bulk samples in undetermined locations. The size and	Jan 28: The mini-bulk sampling program envisioned would consist of excavating up to

	Sampling â€“ Land Use Permit Application, Section 5 a) Summary of Operation, Phase 2 Mini Bulk Sampling.	<p>scale of the bulk samples is unclear, and could vary from site to site. We request further information on the proposed size, timing, and location of the proposed mini-bulk samples, before any bulk samples are taken. In addition, this information will be important to contrast with other bulk sampling programs so that there is a good understanding of what constitutes a mini bulk sample and what constitutes a regular sized bulk sample. We are concerned that the use of the term `mini` is used intentionally to underplay the extent of a bulk sample.</p> <p>Recommendation We are not in favour of mini bulk sampling, given lack of information. Further we recommend that this element be the subject of further examination, and removed from the application.</p>	<p>10 trenches or small pits to collect approximately ten tons of sand from each site. The exact sample size, location and number of the sites sampled will depend upon the results of the drilling program. The program would be conducted in the winter under frozen ground conditions to minimize environmental impact. Husky would use existing winter access to the quarry and a trail for a rubber tracked vehicle pulling a sloop or sled from the quarry to the test sites. The trail will be scouted on foot or snowmobile to avoid large stands of trees so that slashing can be kept to a minimum. The sides of the sample pits will be smoothed and any vegetation removed before digging replaced, resulting small depression. Material collected will be taken by rubber tracked vehicle and sled to Highway 3 where the material will be transferred to a truck for transport to a processing facility. Meaningful discussion and engagement will be a critical part of the planning for any post-2015 field operations.</p>
7	Future development of the resource.	<p>Comment If this proponent does consider developing the resource (i.e, if it is found to be an economic resource), the Tli?cho? Government will work to ensure that any land use activity is consistent with our Land Use Plan.</p> <p>Recommendation We recommend that the proponent works with the Tli?cho? Government now and in the future to ensure that any land use activity is consistent with the Tli?cho? Land Use Plan.</p>	<p>Jan 28: The Chedabucto mineral claims are located on crown lands within the Wek'Ã"ezhÃ-i Land Area and as such Husky is committed to working with the Tli?cho Government.</p>
8	Appendix VIII Engagement Plan and Record of Engagement	<p>Comment The proponent is using T'licho to refer to the Tli?cho? Government. It would be a good idea to use Tli?cho? Dene fonts, and the right name for the Government</p> <p>Recommendation We recommend that the proponent utilizes the correct name for the Government they are engaging with in their engagement plan.</p>	<p>Jan 28: Acknowledged</p>
9	Appendix VIII Engagement Plan and Record of	<p>Comment The plan notes that there is a `strong desire by each of the groups to participate in and benefit from any development of resources in area.` It is early days to make this kind of statement, given there is not an economic resource proven in the region, and the Tli?cho? Government will weigh the facts if there is a case made for further development.</p> <p>Recommendation We recommend that the proponent retract</p>	<p>Jan 28: Agreed, the Engagement Plan will be revised accordingly.</p>

	Engagement, Background, Bullet 5	this statement from their engagement plan.	
10	Appendix VIII Engagement Plan and Record of Engagement	<p>Comment We would also like the Engagement Plan to include copying for all applications to the Department of Culture and Lands Protection (DCLP), Manager Sjoerd van der Wielen.</p> <p>Recommendation We recommend that the copying of all applications to the Department of Culture and Lands Protection (DCLP), Manager Sjoerd van der Wielen be included in the proponents engagement plan.</p>	Jan 28: Agreed, the Engagement Plan will be revised accordingly.
11	Notes regarding the Tli?cho? Government	<p>Comment Note the company also refers to the Tli?cho? Government "Chief and Council". The Tli?cho? Agreement has the Chief's Executive Council (CEC) and the Tli?cho? Assembly. A copy of the Tli?cho? Land Claim and Self Government Agreement may help for you to get the context of the Government which whom you are working. Furthermore, please note that this falls within the Wekeezhi Management Area, and within Monphwi Territory</p> <p>Recommendation We recommend that the board and the proponent review a copy of the Tli?cho? Land Claim and Self Government Agreement in order to better familiarize themselves with the Tli?cho? Government.</p>	Jan 28: Agreed, the Engagement Plan will be revised accordingly.
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
5	General File	<p>Comment (doc) WRRB comments re:Husky's Land Use Permit Application W2014Q0005</p> <p>Recommendation</p>	
1	Potential future activities	<p>Comment The WRRB notes that though the application is specific to activities listed under Phase 1 and Phase 2, that a "Phase 3" would be applied for in the future as a separate application, as it is outside of the scope of this Land Use Permit. Phase 3: Feasibility and Engineering, would occur subsequent to the successful exploration program, and Husky would evaluate the socio-economic and environmental impact, and engineering feasibility of the property to develop and implement a resource extraction strategy. The Board notes that both the unconsolidated and consolidated sources of silica identified are considered viable resource targets which warrant further investigation to determine the potential for economic extraction. The Board also notes that high quality silica may be used as a proppant in the hydraulic fracturing process and is considered a key component in the development of unconventional hydrocarbon resources. If extraction of the high quality silica is considered to be</p>	Jan 28: No comment.

		<p>economically feasible, it is conceivable that there will be considerable interest in the potential resource extraction strategies. It is the Board's perspective that the "resource extraction strategy" mentioned under Phase 3 may potentially, at some point in the future, require the use of a mine to extract the high-quality silica resource</p> <p>Recommendation n/a</p>	
2	Environmental and resource impact assessment: Protected Areas	<p>Comment Dinàgà Wek'èhodi is a Candidate National Wildlife Area located on the northern portion of the North Arm of Great Slave Lake. This area was identified for protection by the Tlicho Government, and the area is at step 5 of an 8 step process under the NWT Protected Areas Strategy used to identify, create, and manage a protected area (please refer to http://www.nwtpas.ca/area-dinagawekehodi.asp for details). Dinàgà Wek'èhodi encompasses portions of Whitebeach Point, where a portion of Husky's mineral claims and potential drill locations are also found. The Board appreciates that if Husky mineral claims remain active that the Interim Land Withdrawal (ILW) proposed for the North Arm will not include those lands.</p> <p>Recommendation The proximity of proposed activities to Dinàgà Wek'èhodi requires vigilance by Husky and its contractors in order to minimize potential impacts, as well as considerations related to Husky's social licence to operate near a candidate National Wildlife Area which has been following the NWT Protected Areas Strategy process since 2008.</p>	<p>Jan 28: Husky acknowledges the proximity of the Dinàgà Wek'èhodi Candidate Protected Area to the Chedabucto mineral claims. In recognition of the long history of traditional use of the area, preliminary Archaeological and Traditional Knowledge Studies were conducted for the proposed 2015 drilling locations. A consequence of these studies was that a number of drilling locations (9 in total) were deleted from the 2015 program. The proposed exploration program's objective is obtain the necessary information and samples to evaluate the deposit and to do so while minimizing the impact on the environment. The proposed exploration program could be viewed as complementary to the PAS process, in that the intent is to assess the resource potential of the area so that informed decisions regarding future development options can be made. The LUP application contains the full extent of a five-year exploration program that may be required to determine if the silica deposit on the Chedabucto mineral claims is a candidate for commercial development. Husky consulted on the objectives of the exploration program and provided detailed information on proposed 2015 drilling program. Results of the 2015 program will determine if additional drilling, geophysics and mini-bulk sampling is required. Meaningful discussion and engagement will be a critical part of the planning for any post-2015 field operations. Husky will consult on subsequent proposed programs during the planning stage, well in advance of conducting field operations and well before submitting proposed programs to the Land Use Inspector. The same rigor will be applied to subsequent/follow up activity as was applied to the proposed 2015 program.</p>
3	Environmental	<p>Comment Though the claims on Whitebeach Point are not part of the ILW, the assessment of Dinàgà Wek'èhodi noted</p>	<p>Jan 28: Confirmed.</p>

	al and resource impact s re: Species at Risk	<p>the candidate Protected Area hosts several species at risk, including:</p> <ul style="list-style-type: none"> • boreal woodland caribou; • wood bison; • wolverine; • rusty blackbird; • common nighthawk; • barn swallow; and, • short-eared owl. <p>Dinàgà Wek'èhodi is also classified as an Important Bird Area in Canada and is considered a key migratory bird site in the NWT with large numbers of tundra swans, Canada geese, and other waterfowl using it as a staging area. The Board notes that Appendix III, Wildlife, Archaeological & Environmental Awareness Plan, does not mention the proximity of the proposed activities to Dinàgà Wek'èhodi, or considerations which more completely contextualize the location of the proposed activities.</p> <p>Recommendation The potential impacts of activities on species at risk and the habitat(s) they utilize requires that Husky and its contractors operate in a fashion which complies with the Terms and Conditions of the relevant licenses and permits issued by government agencies that allows for the proposed work, as well as all applicable environmental legislation and regulations.</p>	
4	Environmental and resource impact s re: access, fish and fish habitat	<p>Comment The application mentions that to facilitate the Phase 2 mini-bulk sampling, winter access to the area will be required and that Husky will utilize existing trails wherever possible, though new access may be required. The maps provided suggest where the winter access may be located, though it is unclear where the final location of the access will be, and where water withdrawal locations will occur. The drawdown of water has the potential to affect fish and fish habitat, and if drawdown occurs in lakes, turbidity levels may be raised and oxygen levels depleted under the ice.</p> <p>Recommendation Water withdrawal for winter road construction should use Department of Fisheries & Oceans (DFO) approved screens on all water intake pipes to prevent the uptake of fish. The Board also echoes the DFO request for clarification on what mitigation measures will be implemented during the winter access construction, including mitigation measures to prevent serious harm to fish and fish habitat within waterbodies designated for water withdrawals</p>	<p>Jan 28: No water will be required for building the winter access. Existing snow covered winter access to the DOT quarry will be utilized by a rubber tracked vehicle pulling a sled or sloop. The lake crossing will not require any flooding. Access to the sample sites will be by rubber tracked vehicle and sled along a snow covered trail.</p>
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	Drilling Program, Bulk	<p>Comment (doc) YKDFN's engagement with the Proponent has been positive, and YKDFN offered a conditional support to the exploration program. The Proponent has supported both Traditional Knowledge and archaeological impact assessment,</p>	<p>Jan 28: (doc) The Husky LUP application reflects the exploration scope of work that could be required over the five year term of the Land Use Permit to evaluate the silica</p>

Sampling and Winter Road	<p>and YKDFN remains prepared to support a limited drill program that consist of 100 holes along the lines discussed as part of the engagement that has taken place, not a 200 hole program as proposed by the Proponent in the complete application. In addition, the bulk sampling program and a winter road construction into the area were not part of YKDFN's conditional support for the project, and there has been no meaningful discussion or engagement on this matter. YKDFN believes that the bulk sampling program and winter roads pose significant threat to cultural and environment assets. Had this project discussed introduction of winter road with YKDFN, they would have immediately faced opposition as YKDFN has consistently fought against the development of winter roads in the area.</p> <p>Recommendation YKDFN is not prepared to support an expanded drill program, the bulk sampling or the winter road. YKDFN asks the Board to reject the portions of the project which have not been part of meaningful engagements. If the Board is not able to do this, YKDFN requests that the project be referred to Environmental Assessment.</p>	<p>deposit on the Chedabucto mineral claims. Husky consulted on the preliminary prospecting efforts completed to date, on our current understanding on the nature and extent of the deposit, on what exploration steps would be needed to evaluate the deposits and on the details of the 2015 drilling program. Contingent on results of the 2015 program, subsequent/follow-up activity could include additional drilling, geophysics and mini-bulk sampling. Field operations for 2015 and any subsequent follow up programs will be conducted in such a way as to minimizing environmental impact. The exact number and location of follow up sampling sites including additional drilling locations, and/or trench's or pits is unknown at this time. Any additional sampling sites will be assessed to insure that cultural/heritage sites are not impacted. Meaningful discussion and engagement will be a critical part of the planning for any post-2015 field operations. Access to the program area will be by helicopter or fixed wing aircraft for the drilling program. No winter roads will be constructed to support any activity conducted under this Land Use Permit. Should over land access be required for a mini-bulk sample, a 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 to avoid trees and slashing will be avoided or kept to a minimum. Husky will consult on the details of any proposed post-2015 activity well in advance of conducting field operations and before submitting program maps to the Land Use Inspector for approval.</p>
--------------------------	--	--



Husky Oil Operations Limited

707 8th Avenue S.W.
Box 6525, Station D
Calgary, Alberta, Canada
T2P 3G7

Bus: (403) 298-6111
Fax: (403) 750-1722

February 3, 2015

To: Lillith Brook
NWT Protected Areas Strategy Secretariat, Government of the Northwest Territories

Email to: lillith_brook@gov.nt.ca

In December 2014, Husky Oil Operations Limited ("Husky") submitted to the Wek'èezhii Land and Water Board (WLWB) a Land Use Permit (LUP) application proposing to conduct an exploration program on mineral claims it holds near Chedabucto Lake, on the North Arm of Great Slave Lake. Information Requests and Comments received during the application review period, indicate a fair bit of confusion regarding a perceived overlap between the Husky mineral claims and the area the Dinàgà Wek'èhodi Candidate Protected Area (CPA).

Articles 4a and 4b of the September 27, 2013 Order-in-Council that formed the Interim Land Withdrawal, which is the basis for the Dinàgà Wek'èhodi CPA, clearly state that pre-existing mineral claims are exempt from the Interim Withdrawal Area. At the October 24th Dinàgà Wek'èhodi Working Group meeting, it was acknowledged that the Husky mineral claims are not part of the Interim Withdrawal Area. The October 2014 brochure available on the NWT-PAS website (<http://www.nwtpas.ca/areas/sitesheet-Dinagawekehodi.pdf>) states that "*Existing third party rights are respected under the PAS.*" however, the map provided shows the Dinàgà Wek'èhodi CPA erroneously overlapping the area of Husky's mineral claims.

Husky obtained from the PAS Secretariat, a shape file for the Dinàgà Wek'èhodi CPA which was used in the application. The application program maps show an apparent overlap of the mineral claims and CPA; we explain in the text and in our response to Information Requests, that there is no overlap, that the mineral claims are adjacent to but do not overlap the CPA.

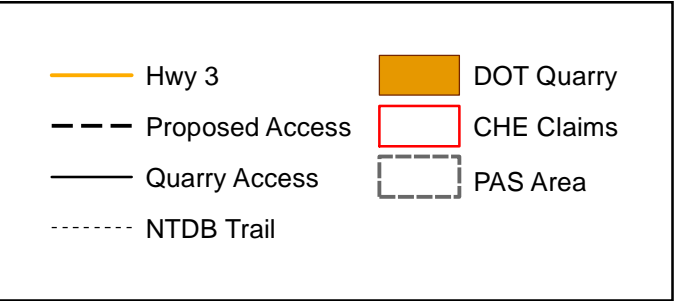
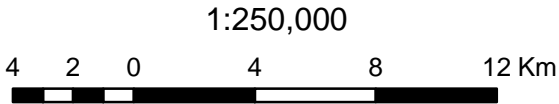
It would be helpful if the PAS Secretariat could post a revised map and provide a revised shape file showing that the pre-existing mineral claims are excluded from and therefore do not overlap of the Dinàgà Wek'èhodi CPA.

Yours truly,

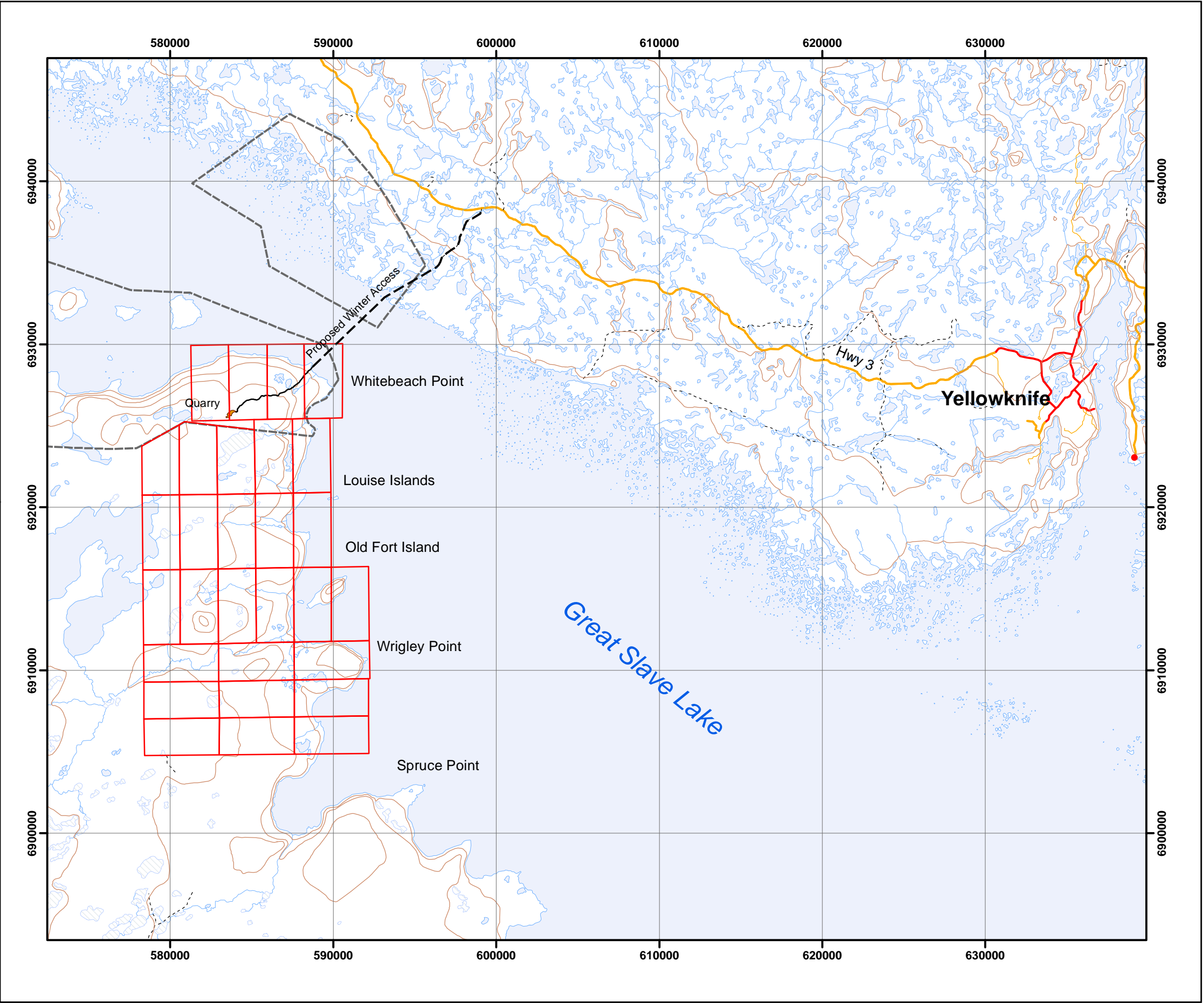
Kenneth Hansen, PGeo
Project Manager - NWT

CC/ **Wek'èezhii Land and Water Board**

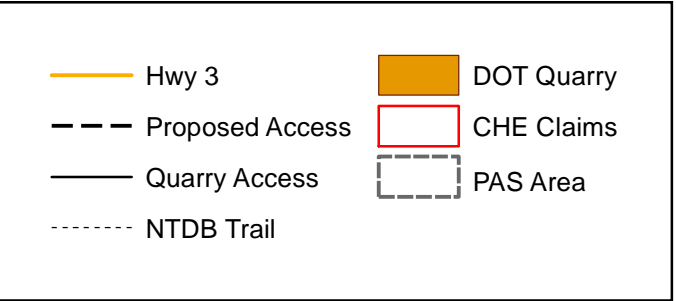
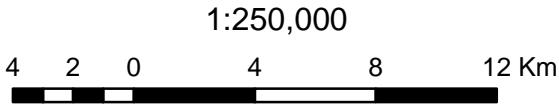
2015 Chedabucto Project



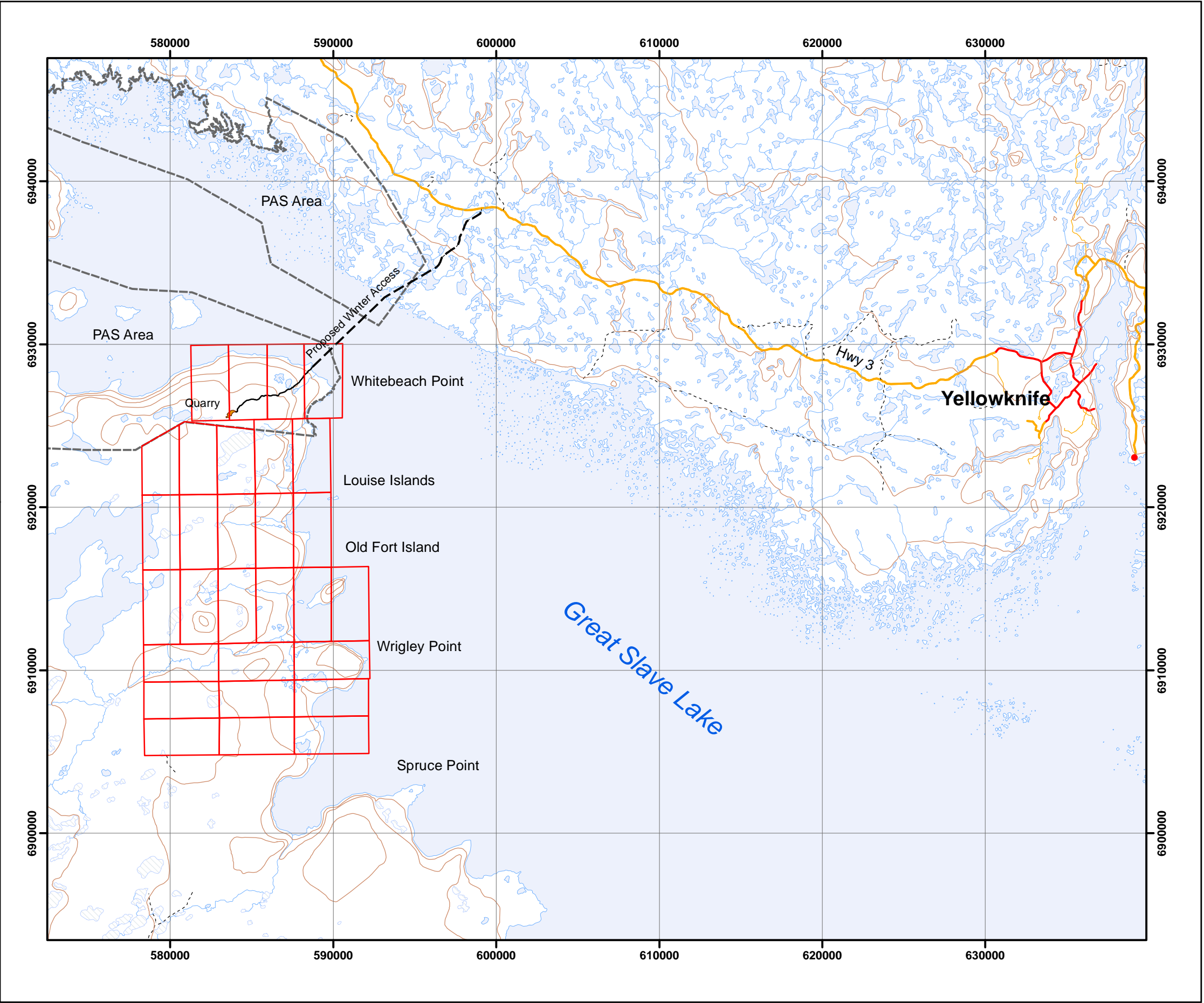
Universal Transverse Mercator
North American Datum 1983
Zone 11 North



2015 Chedabucto Project



Universal Transverse Mercator
North American Datum 1983
Zone 11 North





Canada Gazette

[Home](#)

> [Publications](#)

> [ARCHIVED — Vol. 147 \(2013\)](#)

> [ARCHIVED — October 9, 2013](#)

> ARCHIVED — Withdrawal from Disposal of Certain Tracts of Territorial Lands in the Northwest Territories (Kwets'ootł'àà (North Arm...)

ARCHIVED — Vol. 147, No. 21 — October 9, 2013

 [This Web page has been archived on the Web.](#)

Archived Content

Information identified as archived is provided for reference, research or recordkeeping purposes. It is not subject to the Government of Canada Web Standards and has not been altered or updated since it was archived. Please contact us to request a format other than those available.

Registration

SI/2013-106 October 9, 2013

TERRITORIAL LANDS ACT

Withdrawal from Disposal of Certain Tracts of Territorial Lands in the Northwest Territories (Kwets'ootł'àà (North Arm of Great Slave Lake)) Order

P.C. 2013-950 September 27, 2013

His Excellency the Governor General in Council, on the recommendation of the Minister of Indian Affairs and Northern Development, pursuant to paragraph 23(a) of the *Territorial Lands Act* ([see footnote a\)](#), makes the annexed *Withdrawal from Disposal of Certain Tracts of Territorial Lands in the Northwest Territories (Kwets'ootł'àà (North Arm of Great Slave Lake)) Order*.

WITHDRAWAL FROM DISPOSAL OF CERTAIN TRACTS OF TERRITORIAL LANDS IN THE NORTHWEST TERRITORIES (KWETS'OOTŁ'ÀÀ (NORTH ARM OF GREAT SLAVE LAKE)) ORDER

PURPOSE

1. The purpose of this Order is to withdraw from disposal certain tracts of territorial lands in order to facilitate the establishment of a National Wildlife Area.

LANDS WITHDRAWN FROM DISPOSAL

2. The tracts of territorial lands set out in the schedule, including the surface and subsurface rights to the lands, are withdrawn from disposal for a period of two years beginning on the day on which this Order is made.

This Web page has been archived on the Web.

EXCEPTIONS

DISPOSITION OF SUBSTANCES OR MATERIALS

3. Section 2 does not apply to the disposition of substances or materials under the *Territorial Quarrying Regulations*.

EXISTING RIGHTS AND INTERESTS

4. For greater certainty, section 2 does not apply to

- (a) the locating of a mineral claim by the holder of a prospecting permit that was granted before the day on which this Order is made;
- (b) the recording of a mineral claim that is referred to in paragraph (a) or that was located before the day on which this Order is made;
- (c) the granting of a lease under the *Northwest Territories and Nunavut Mining Regulations* to a person with a recorded claim, if the lease covers an area in the recorded claim;
- (d) the issuance of a significant discovery licence under the *Canada Petroleum Resources Act* to a holder of an exploration licence that was issued before the day on which this Order is made, if the significant discovery licence covers an area that is subject to the exploration licence;
- (e) the issuance of a production licence under the *Canada Petroleum Resources Act* to a holder of a significant discovery licence that is referred to in paragraph (d), if the production licence covers an area that is subject to the significant discovery licence;
- (f) the issuance of a production licence under the *Canada Petroleum Resources Act* to a holder of an exploration licence or a significant discovery licence that was issued before the day on which this Order is made, if the production licence covers an area that is subject to the exploration licence or the significant discovery licence;
- (g) the issuance of a surface lease under the *Territorial Lands Act* to a holder of a recorded claim under the *Northwest Territories and Nunavut Mining Regulations* or of an interest under the *Canada Petroleum Resources Act*, if the surface lease is required to allow the holder to exercise rights under the claim or interest; or
- (h) the renewal of an interest.

SCHEDULE (Section 2)

GEOGRAPHIC COORDINATES OF THE NORTH ARM OF GREAT SLAVE LAKE

In the Northwest Territories;

In the North Arm of Great Slave Lake;

All that parcel being more particularly described as follows, all geographic coordinates being North American Datum of 1983 and any references to straight lines mean points joined directly on a North American Datum of 1983 Universal Transverse Mercator projected plane surface:

Commencing at the point of intersection of the Tlicho lands boundary with latitude 62°37'36" North and approximate longitude 115°19'28" West;

Thence southeasterly in a straight line to a point at latitude 62°36'12" North and longitude 115°13'56" West;

Thence southeasterly in a straight line to a point at latitude 62°34'32" North and longitude 115°11'16" West;

Thence southeasterly in a straight line to a point on the Weleeezhii boundary at latitude 62°32'03" North and approximate longitude 115°08'27" West;

Thence southwesterly along said boundary to a point at latitude 62°29'59" North and approximate longitude 115°11'56" West;

Thence northwesterly in a straight line to a point at latitude 62°32'08" North and longitude 115°19'31" West;

Thence northerly in a straight line to a point at latitude 62°33'30" North and longitude 115°20'06" West;

Thence northwesterly in a straight line to a point at latitude 62°34'59" North and longitude 115°25'20" West;

Thence northwesterly in a straight line to a point at latitude 62°36'18" North and longitude 115°32'44" West;

Thence northwesterly in a straight line to a point at latitude 62°37'16" North and longitude 115°37'42" West;

Thence westerly in a straight line to a point at latitude 62°37'21" North and longitude 115°46'59" West;

Thence northwesterly in a straight line to a point at latitude 62°38'44" North and longitude 115°51'35" West;

Thence northeasterly in a straight line to a point at latitude 62°39'13" North and longitude 115°50'11" West;

Thence northerly in a straight line to a point at latitude 62°40'30" North and longitude 115°49'40" West;

Thence northwesterly in a straight line to a point at latitude 62°42'07" North and longitude 115°51'59" West;

Thence northwesterly in a straight line to a point at latitude 62°42'58" North and longitude 115°54'49" West;

Thence southwesterly in a straight line to a point at latitude 62°41'29" North and longitude 115°56'53" West;

Thence southeasterly in a straight line to a point at latitude 62°38'20" North and longitude 115°53'13" West;

Thence southeasterly in a straight line to a point at latitude 62°37'02" North and longitude 115°49'16" West;

Thence southeasterly in a straight line to a point at latitude 62°36'04" North and longitude 115°44'32" West;

Thence southeasterly in a straight line to a point at latitude 62°34'52" North and longitude 115°39'49" West;

Thence southeasterly in a straight line to a point at latitude 62°32'31" North and longitude 115°35'55" West;

Thence southeasterly in a straight line to a point at latitude 62°31'24" North and longitude 115°29'28" West;

Thence easterly in a straight line to a point at latitude 62°31'15" North and longitude 115°25'12" West;

This Web page has been archived on the Web.

Thence southeasterly in a straight line to a point at latitude 62°27'24" North and longitude 115°15'35" West;

Thence southeasterly in a straight line to a point on the Wekeezhii boundary at latitude 62°28'18" North and approximate longitude 115°14'46" West;

Thence southwesterly along said boundary to a point at latitude 62°26'23" North and approximate longitude 115°16'43" West;

Thence westerly in a straight line to a point at latitude 62°26'58" North and longitude 115°25'57" West;

Thence southwesterly in a straight line to a point at latitude 62°26'05" North and longitude 115°29'29" West;

Thence westerly in a straight line to a point at latitude 62°26'08" North and longitude 115°33'13" West;

Thence westerly in a straight line to a point at latitude 62°26'18" North and longitude 115°38'57" West;

Thence westerly in a straight line to a point at latitude 62°26'34" North and longitude 115°42'56" West;

Thence northwesterly in a straight line to a point at latitude 62°28'07" North and longitude 115°47'07" West;

Thence northwesterly in a straight line to a point on the Tlicho lands boundary, said point being the intersection of the west bank of a stream with a southerly Tlicho lands boundary, at approximate latitude 62°30'01" North and approximate longitude 115°48'20" West, as shown on the plan recorded in the Canada Lands Surveys Records under the number 98087 C.L.S.R.;

Thence generally northerly along the Tlicho boundary to its intersection with the Behchoko community government boundary at approximate latitude 62°41'01" North and approximate longitude 116°02'35" West, as shown on the plan recorded in the Canada Lands Surveys Records under the number 98145 C.L.S.R.;

Thence northeasterly along the Behchoko community government boundary to its intersection with the Tlicho lands boundary at approximate latitude 62°45'33" North and approximate longitude 115°55'00" West;

Thence generally southerly along the Tlicho lands boundary to the point of commencement.

Said parcel containing approximately 594 km².

EXPLANATORY NOTE

(This note is not part of the Order.)

The Order withdraws from disposal the surface and subsurface rights of certain tracts of territorial lands located in the Northwest Territories (Kwets'oot''àà [North Arm of Great Slave Lake]), for the period beginning on the day on which this Order is made, in order to facilitate the establishment of a National Wildlife Area.

[Footnote a](#)
R.S., c. T-7

Date modified: 2013-10-09

4.0 EQUIPMENT

The list provided has been compiled in as much detail as available at the time of writing. It provides an indication of the general types of equipment used to support the upcoming 2015 exploration season at Chedabucto. Work will commence in the winter of 2015 with bore hole drilling exploration and follow with additional drilling, geophysics and/or mini-bulk sampling activities in subsequent years. The list also contains the equipment required for trenching, and for winter ice road construction/maintenance. If equivalent equipment is substituted, the Land Use Inspector will be notified.

Type & Number	Weight (kilograms)	Proposed Use
1 x Hornet dry or equivalent RC drill rig	4,350kg	Drill testing glacial stratigraphy
1 x Boyles 25A/37 or equivalent diamond drill rig	8,600kg	Drill testing bedrock targets
1 x Bell 407 helicopter or equivalent	1,300kg	Drill & crew movements
1 x Twin Otter DHC-6 or equivalent fixed-wing aircraft	5,670kg	Crew movements, supply runs (future activity planned in Phase 2)
2 x Bombardier skidoo or equivalent	250kg ea.	Camp support
2 x Honda 350 ATV or equivalent	250kg ea.	Camp support
1 x 10 kW diesel generator or equivalent	350kg	Electrical power supply
1 x powered ice auger or equivalent	20kg	Ice hole drilling for water supply and grab samples
3 x Honda water pumps or equivalent	25kg ea.	Tent camp/core shack and diamond drill water
TL-120 Terrax (excavator/loader) or equivalent	3,175kg	To move material for trench bulk sample (future activity planned in Phase 2)
2 x mobile canvas tent & floor or equivalent core logging shack and survival tent	500kg ea.	Camp support
1 x Pisten Bully 200 tracked snow cat or equivalent	8,800kg	Winter access trail and hauling of granular material for the mini bulk sampling (future activity planned in Phase 2)



January 21st, 2015

Ryan Fequet
Wek'eezhii Land and Water Board
Yellowknife, NT

Emailed to rfequet@wlwb.ca

Regarding W2014Q0005

Dear Mr. Fequet,

This letter is to notify the Wek'eezhii Land and Water Board that the NWT Chapter of the Council of Canadians opposes the granting of a Type A Land Use Permit to Husky Oil Operations Ltd. to carry out exploratory drilling for silica in the North Arm of Great Slave Lake.

The reasons for opposing this licence are as follows:

- The North Arm remains a pristine landscape with clean water; abundant fish populations; a variety of wildlife, including migratory birds, moose, and boreal caribou, which is a threatened species under NWT Species at Risk legislation. Although forest fires have affected portions of this area, the eco-system will regenerate itself and continue to provide habitat for a range of wildlife species. This exploratory program is the beginning phase of a development process that could fundamentally damage, in perpetuity, large sections of the land.
- The North Arm remains a popular and well-used public recreation area, for canoeists/kayakers, snowmobilers, hunters, fishers, and boaters. The recreational and tourism potential of the area is high as long as it remain a pristine land use area. Industrial scale development will severely undermine the long-term recreational and tourism value of the area – and tourism has longer term economic potential than non-renewable resource extraction.
- Although CoC NWT does not formally represent Indigenous interests, it knows that the North Arm is a traditional hunting, fishing, and gathering area for Aboriginal peoples throughout the North Slave region. An industrial mining operation will interfere with traditional travel and harvesting activities and damage wildlife habitat.
- Silica is a known health hazard and even in small amounts can lead to lung damage of persons exposed to the mineral. The mining and transporting of silica will create a significant amount of dust that both humans and wildlife in the area will be exposed to. Creating this type of health hazard in a recreational and harvesting area poses a direct risk to public health and potentially to wildlife.
- The silica is specifically being mined for the purpose of horizontal hydraulic fracturing (fracking) in the NWT and potentially in other jurisdictions. The recent report of the Canadian Council of Academes, referenced this past week by a Committee of the Yukon Government, has clearly

stated that there is high risk associated with horizontal fracking and limited meaningful research to support industry claims that it is a safe activity. Damaging a pristine environment to access a known health hazard to support a controversial and unproven oil extraction process that will significantly contribute to increased greenhouse gas emissions and freshwater loss makes no sense. It should be stopped at the earliest stage and not be allowed to progress to the point where minerals rights are acquired and the development becomes inevitable.

- Exploration for silica in the North Arm does not have social licence. There has been no meaningful attempt by the developer or the WLWB to engage the public in an open discussion of the proposed exploration project and the potential impacts of large scale silica mining in the area.

Recognizing that the WLWB does not have the authority to halt this exploration application, we strongly recommend that the WLWB use its existing authority under the MVRMA to refer this application to an environmental assessment at this early stage in the development process, so that the full consequences of this type of operation are publicly considered prior to any activity in the area.

Without clear social licence, the development should not proceed without thorough scrutiny of its long term socio-environmental impacts. Public engagement and scrutiny need to be a first priority for such a potentially large and environmentally damaging project – even at this early stage in the development.

Thank you for considering our recommendation.

Respectfully.

A handwritten signature in dark ink, appearing to read 'Peter Redvers', written in a cursive style.

Peter Redvers
Co-Chair



Environment Canada Environnement Canada

Environmental Protection Operations Directorate (EPOD)
Prairie & Northern Region (PNR)
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

January 21, 2015

EC File: 5410 000 036 /001
WLWB File: W2014Q0005

Ryan Fequet
Regulatory Manager
Wek'eezhii Land and Water Board
#1-4905 48th St
Yellowknife, NT X1A 3S3

Via online submission

RE: W2014Q0005 – Husky Oil Operations Ltd. – Chedabucto Mineral Exploration Program – Type A Land Use Permit Application

Attention: Ryan Fequet

Environment Canada (EC) has reviewed the information submitted to the Wek'eezhii Land and Water Board (WLWB) regarding the above-mentioned Land Use Permit application and is submitting comments via the online review system as requested by the WLWB. EC's specialist advice is provided pursuant to the *Canadian Environmental Protection Act, 1999*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*.

Should you require further information, please do not hesitate to contact me at (867) 669-4744 or loretta.ransom@ec.gc.ca.

Sincerely,

Loretta Ransom
Senior Environmental Assessment Coordinator

Attachments: EC comments Excel Sheet

Figure 1. Nesting zones in the Northwest Territories and Nunavut.

Table 1. Species at risk that may interact with proposed project.

cc: Dave Fox, A/Head, Environmental Assessment North (NT and NU), PNR-EPOD
Jean-Francois Dufour, EA Officer, Canadian Wildlife Service, EC
Devin Penney, EA Coordinator, EA North, PNR-EPOD

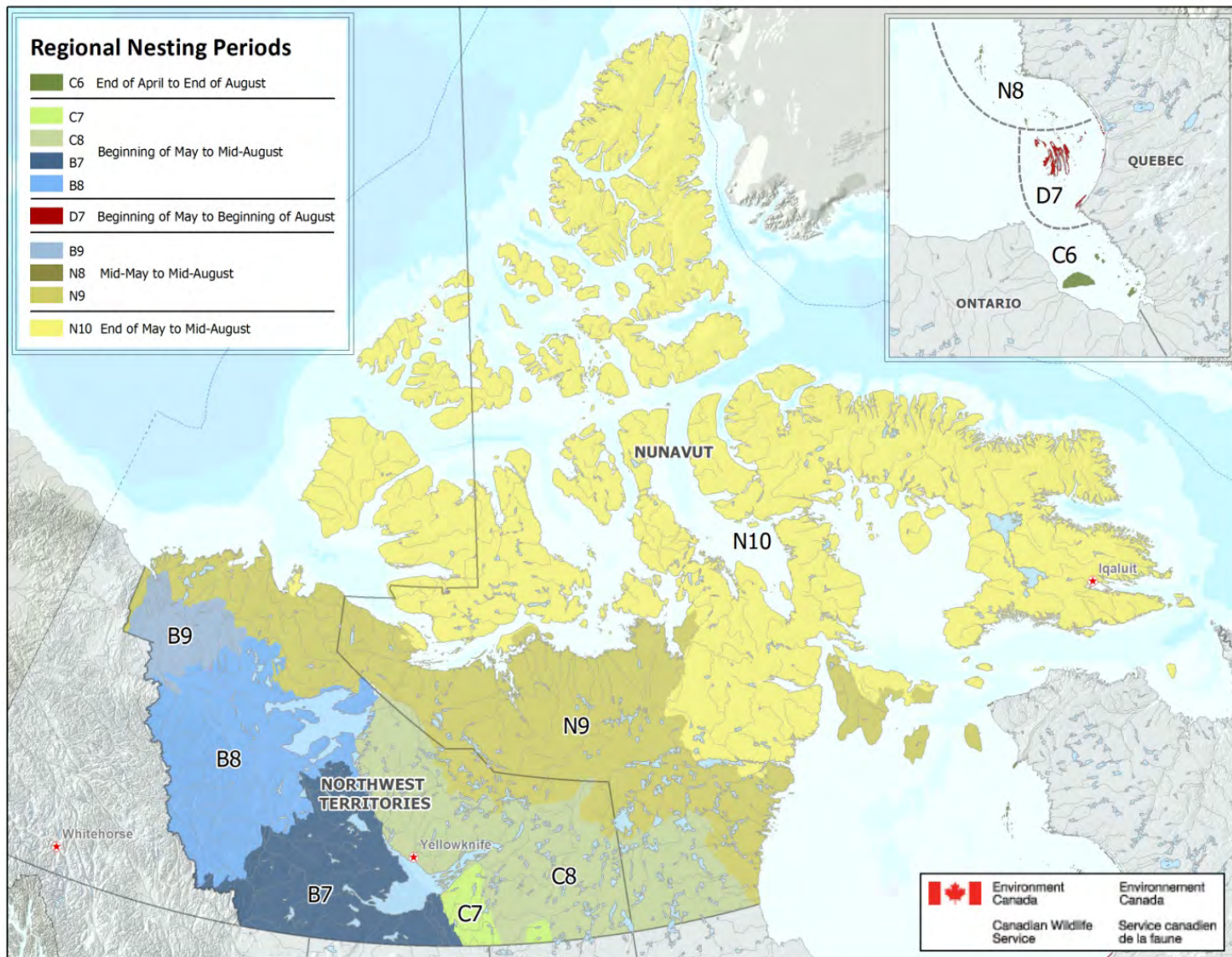


Figure 1. Nesting zones in the Northwest Territories and Nunavut.

Table 1. Species at risk that may interact with proposed project.

Terrestrial Species at Risk potentially within project area ¹	COSEWIC Designation	SARA Status	Government Organization with Primary Management Responsibility ²	Recovery Strategy, Action Plan or Management Plan posted on the Species at Risk Public Registry
Little Brown Myotis	Endangered	Schedule 1	GNWT	
Common Nighthawk	Threatened	Schedule 1	EC	
Olive-sided Flycatcher	Threatened	Schedule 1	EC	
Wood Bison	Special Concern	Schedule 1, Threatened	GNWT	
Woodland Caribou (Boreal population)	Threatened	Schedule 1	GNWT	Recovery Strategy - Final
Yellow Rail	Special Concern	Schedule 1	EC	Management Plan - Final
Rusty Blackbird	Special Concern	Schedule 1	GNWT	Management Plan - Proposed
Short-eared Owl	Special Concern	Schedule 1	GNWT	
Peregrine Falcon (anatum-tundrius complex)	Special Concern	Schedule 1	GNWT	
Gypsy Cuckoo Bumble Bee	Endangered	No Status	GNWT	
Bank Swallow	Threatened	No Status	EC	
Barn Swallow	Threatened	No Status	EC	
Horned Grebe (Western population)	Special Concern	No Status	EC	

Terrestrial Species at Risk potentially within project area ¹	COSEWIC Designation	SARA Status	Government Organization with Primary Management Responsibility ²	Recovery Strategy, Action Plan or Management Plan posted on the Species at Risk Public Registry
Wolverine	Special Concern	No Status	GNWT	
<p>Notes:</p> <p>¹ Fisheries and Oceans Canada has responsibility for aquatic species.</p> <p>² Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the <i>Migratory Birds Convention Act</i> (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of Government of the Northwest Territories (GNWT).</p>				

2014

Bear Occurrence Procedures Manual



Photo by Dean Cluff/ENR

Bear Occurrence Procedures Manual

Implementation of these procedures will allow ENR a greater ability to provide advice and assistance in preventing harm to humans, bear(s) or property. In addition, it will provide guidance on safely deterring bears that find themselves in areas of development, tourism camps or cabins with the aim of preventing habituation and unnecessary destruction.

Report any incidents such as sightings, encounters, injuries and/or mortalities to the ENR Regional Contacts listed below:

North Slave Region

Wildlife Emergency	(867) 873 - 7181 (24 Hours)
Yellowknife	(867) 873 - 7184
Fax:	(867) 873 - 6230

South Slave Region

Wildlife Emergency	(867) 872 - 0400 (24 Hours)
Fort Smith	(867) 872 - 6400
Fax:	(867) 872 - 4250

Inuvik Region

Wildlife Emergency	(867) 678 - 0289 (24 Hours)
Inuvik	(867) 678 - 6650
Fax:	(867) 678 - 6659

Sahtu Region

Wildlife Emergency	(867) 587 - 2422 (24 Hours)
Norman Wells	(867) 587 - 3500
Fax:	(867) 587 - 3516

Deh Cho Region

Wildlife Emergency	(867) 695 - 7433 (24 Hours)
Fort Simpson	(867) 695 - 7450
Fax:	(867) 695 - 2381

BEAR AWARENESS TRAINING

ENR supports the NWT Mine Health and Safety Regulations (s.15.05), which requires that all field personnel involved in mineral exploration undertake bear-safety training. However, human/wildlife incident prevention is a key component to the training.

Training of personnel in preventing and responding to wildlife incidents can reduce the likelihood of injury to personnel and wildlife. Therefore, all field personnel working on the project must receive bear awareness training from a professional trainer.

The training should include:

1. Recognizing the causes of human/wildlife conflicts;
2. How to prevent and respond to bear incidents;
3. Proper storage, transfer and disposal of camp waste; and
4. Proper use and safe application of deterrents.

INCIDENT PREVENTION

Refer to the ***Camp Waste and Wildlife Attraction Guideline***. This resource will provide guidance on how to reduce or prevent attraction from bears to your camp, cabin or work site.

OCCURRENCE RESPONSE

Small scale exploration and tourism camps should develop and implement Bear Incident Standard Operating Procedures (SOPs) that can be used in the field. The SOPs will allow all members on site to have knowledge of how to reduce or prevent any loss of life or property if there is a bear within the vicinity of your camp area or work site. SOPs may include such things as:

- a) Response team
- b) Equipment
- c) Action level
- d) Emergencies
- e) Reporting Requirement

1. *SIGHTING - Bear in the general vicinity (>1km)*

1. If it is within sight of your camp/cabin and it is safe to do so, use a ***Wildlife Sightings Log*** to record and report information regarding your observations.
2. Continue to monitor, if necessary.

2. *ENCOUNTER - Bear In Camp (<1km)*

1. If safe to do so; take a quick note of the location, direction of travel and general behaviour of the bear(s).
2. Sound the bear alarm.
3. If necessary, phone the ENR Regional contacts listed above for guidance on necessary next steps to ensure human/wildlife safety and protection of property.
4. If necessary, stay indoors or in your vehicle. **DO NOT APPROACH THE BEAR.**
5. Keep all doors and windows closed.

6. If necessary and safe to do so; continue to monitor the behaviour and movement until either the bear leaves on its own, deterrence is successful or response personnel arrive.
7. If possible, start deterrence procedures.
8. Report status of bear encounter to the ENR Regional contacts listed above when safe to do so.

3. Injury

1. Any injuries a bear may have obtained from direct or indirect contact with the camp or persons must be reported to the appropriate ENR Regional contact listed above.

4. Mortality

1. A bear may be destroyed if human life is in danger or destruction of property is imminent.
2. Mortalities must be reported to the appropriate ENR Regional contact listed above immediately. Under the NWT Wildlife Act, the responsible party is required to:
 - a) Skin the bear leaving the claws and head attached.
 - b) Preserve the hide by freezing and/or salting it and store it in a cool place.
Turn in the hide, the skull, evidence of sex and any other biological samples requested when filing the report to the nearest ENR Regional office or to an ENR Renewable Resource Officer.

If or when possible, the attached **Bear Occurrence Checklist** should be completed prior to calling ENR. It is critical that as much information as possible be provided in order for ENR to provide appropriate advice and guidance.

DENNING BEARS

- A. For exploration camps, if a bear is located in, at or near a den site, work in the area must halt. All employees should safely retreat from the area and report the incident to the Site Supervisor and/or Wildlife Monitor and the appropriate ENR Regional contact listed above for further advice and assistance.
- B. For cabin owners, if a bear is located in, at or near a den site, safely retreat from the area and report the incident to the appropriate ENR Regional contact listed above for further advice and assistance.
- C. Staff from ENR will be required to assess the den site and may implement measures to ensure both human safety and that the bear(s) remain undisturbed. This may include the establishment of a buffer zone of at least 300 meters around the den.
- D. Work inside the buffer zone may not be permitted until after den emergence.



ENR Bear Occurrence Checklist

Office Use Only
File#:
Date reported:
Name:

- Fill out or check all that apply

1. Complainant Details:				
Name, job title and affiliation:				
Contact information:				
Location of complainant: <i>(coordinates, lake or property name)</i>				
Other on-site contact information: <i>(wildlife monitors/site supervisors)</i>				
2. Bear Occurrence Details				
Date/Time:		Location: <i>(coordinates, lake or property name)</i>		
Type of bear occurrence:	<input type="checkbox"/> sighting	<input type="checkbox"/> encounter	<input type="checkbox"/> injury	<input type="checkbox"/> mortality <i>Ear tag/tattoo #</i>
	<input type="checkbox"/> Other, explain:			
Number of bears:		# of cubs		
Type:	<input type="checkbox"/> black	<input type="checkbox"/> grizzly	<input type="checkbox"/> unknown	
Sex :	<input type="checkbox"/> male	<input type="checkbox"/> female	<input type="checkbox"/> unknown	
Age Class:	<input type="checkbox"/> cub (<1)	<input type="checkbox"/> juvenile	<input type="checkbox"/> adult	<input type="checkbox"/> unknown
Behaviour:	<input type="checkbox"/> fearful	<input type="checkbox"/> not fearful	<input type="checkbox"/> aggressive	<input type="checkbox"/> other
General Observations	<input type="checkbox"/> moving toward site	<input type="checkbox"/> moving away from site	<input type="checkbox"/> at site	
Other observations: <i>(i.e. walking, resting, eating, mortality, injury, den site, number of cubs, etc.)</i>				
Has bear(s) been involved in a previous incident:	<input type="checkbox"/> No <input type="checkbox"/> Yes	If yes, explain:		
Did the bear obtain a reward	<input type="checkbox"/> No <input type="checkbox"/> Yes	If yes, explain:		
Any property damage or loss of life:	<input type="checkbox"/> No <input type="checkbox"/> Yes	If yes, explain:		

3. **Detection/Deterrent:**

Detection system on site:	<input type="checkbox"/> Alarm	<input type="checkbox"/> Dog	<input type="checkbox"/> Motion detector	<input type="checkbox"/> Other:
Deterrence on site:	<input type="checkbox"/> Bear boards	<input type="checkbox"/> Auditory <i>(Yelling/Flares/Alarm/Horn/Bell/Whistle/Cracker shells)</i>		<input type="checkbox"/> Projectile <i>(Rubber Bullets/Firearms)</i>
	<input type="checkbox"/> Electric Fence	<input type="checkbox"/> Chased <i>(Dog, vehicle)</i>		<input type="checkbox"/> Other:
Was deterrence used:	<input type="checkbox"/> No	Explain:		
	<input type="checkbox"/> Yes			
Was the deterrence successful:	<input type="checkbox"/> No	Explain:		
	<input type="checkbox"/> Yes			
Present status of bear with dates:	<input type="checkbox"/> at large	<input type="checkbox"/> captured	<input type="checkbox"/> deterred	<input type="checkbox"/> other

4. Additional Comments	
------------------------	--

[illegible]



Camp Waste & Wildlife Attraction Manual

To prevent or reduce attracting wildlife and to discourage wildlife habituation Environment & Natural Resources (ENR) strongly encourages that the recommendations listed below be implemented to ensure human safety and to protect our natural environment, including wildlife at a camp or cabin. This manual is intended for small scale campsites and recreational cabins however there are components that may be applied to larger scale operations. Examples of small scale camps include:

- Exploration camps
- Tourism outfitters & commercial companies
- Residential & recreational cabin owners

Camp Design

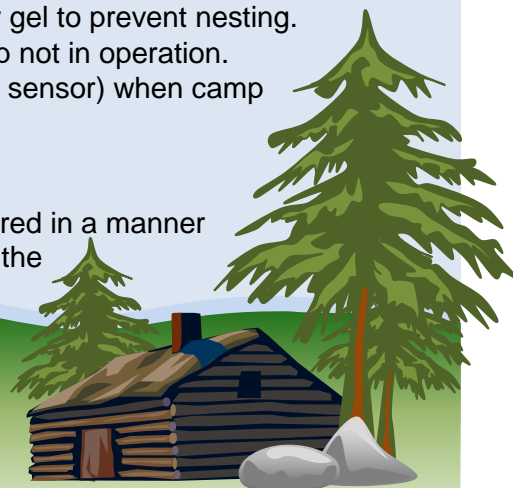
To prevent wildlife from accessing a camp/cabin and discourage habituation, a camp/cabin should be situated away from known or possible bear activity (previous camp/cabin, berry patches, dens, etc.) and designed in a manner that eliminates or reduces the potential for human and wildlife interaction.

- Clear brush to increase visibility and eliminate blind spots.
- Kitchen, latrine, food/waste storage, incinerator, composting site and garden should be at least 50 meters from sleeping area.
- Temporary cooking areas should be located down-wind from the sleeping area.
- All structures should be well spaced and the sleep tents or trailers arranged in a line rather than circular with doors facing the kitchen.
- There should be no food or cooking in the sleeping area.
- Properly install and maintain an electric fence around the camp or at minimum around incinerator, composting site and garden.
- Install skirting around infrastructure that extends approx. 1m+ underground to prevent wildlife tunnelling.
- Whenever possible, keep doors and windows closed, cover openings/crawl spaces, seal cracks, screen chimney caps and place spikes or tacky gel to prevent nesting.
- Install shutters on windows and use bear boards when camp not in operation.
- Consider installing noise deterrent (i.e. Critter Gitter" motion sensor) when camp is not in operation.

Food Storage

Amount of food at each camp/cabin will vary but food should be stored in a manner that will eliminate any food rewards if wildlife was to gain access to the camp/cabin.

- Store all food in the kitchen or in a central location that is at least 50 meters away from the sleeping area.
- Cooking and eating area(s) should be thoroughly cleaned after every meal (including BBQs).



- If the camp is to become vacant for more than a week, food should be stored in sealed animal proof container.
- Do not feed wildlife including bird feeders that may also attract wildlife to the camp area.

Domestic Waste

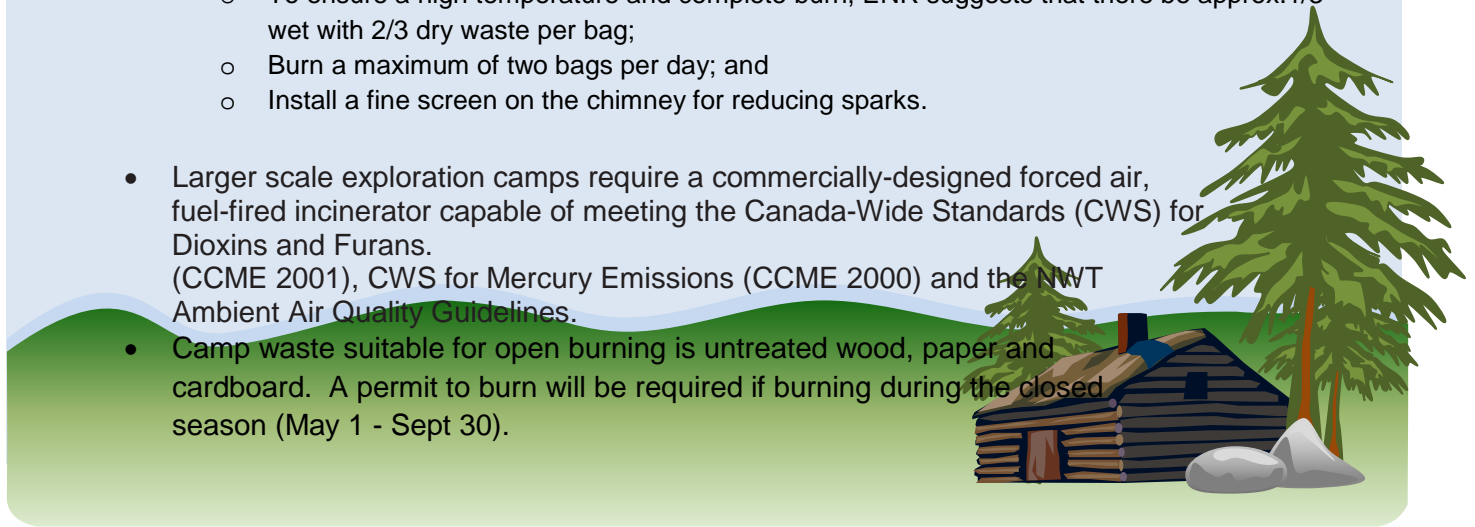
Inadequate storage, lack of onsite treatment and/or improper disposal of domestic waste (food & food contaminated waste) are the most common activities that contribute to the release of odours which may result in human/wildlife conflicts.

- Purchase bulk products to reduce amount of domestic waste produced.
- Implement a camp waste segregation system (recyclables, combustible, non-combustible and hazardous wastes) appropriate to the volume of waste produced.
- Domestic waste should not be stored in plywood boxes or in sheds as odours tend to permeate the wood and linger. Waste should be stored in a central area in a sealed animal proof container until final disposal.
- The sealed animal proof containers should be cleaned daily with bleach.
- Non-combustibles such as metal, glass and plastic should be cleaned with bleach and stored in a manner not to attract wildlife until transported back to an approved facility.
- Burying domestic waste is ineffective; the preferred method of disposal is backhauling domestic waste to an approved facility such as an approved landfill or bottle depot in a timely manner.

Burning/Incineration

An acceptable method of camp waste disposal but it should be considered only as an alternative to other methods. There are additional hazards associated with this method that may still result in wildlife attraction, forest fires and air contamination.

- Designate a person or trained staff member to be responsible for the daily duties involved with burning/incineration.
- For cabins and small scale exploration camps (~20 people or less), burning in a “modified burn barrel” is strongly recommended for a more timely disposal for cabin/camp waste.
 - To ensure a high temperature and complete burn, ENR suggests that there be approx. 1/3 wet with 2/3 dry waste per bag;
 - Burn a maximum of two bags per day; and
 - Install a fine screen on the chimney for reducing sparks.
- Larger scale exploration camps require a commercially-designed forced air, fuel-fired incinerator capable of meeting the Canada-Wide Standards (CWS) for Dioxins and Furans. (CCME 2001), CWS for Mercury Emissions (CCME 2000) and the NWT Ambient Air Quality Guidelines.
- Camp waste suitable for open burning is untreated wood, paper and cardboard. A permit to burn will be required if burning during the closed season (May 1 - Sept 30).



- Ensure that the fire is being monitored and is completely out before leaving it unattended.
- Residual waste such as ash needs to be collected, stored in a sealed animal proof container and transported back to an approved facility site for disposal.

Grey Water (dishes, showers, laundry, etc.)

- Bleach should be added to dish water and/or a grease trap installed.
- Disposed of in a natural depression/sump/pit a minimum of 30 meters from the high water mark.
- Disposal site should be covered and treated with lime or crystal lye daily.

Black Water (Sewage)

- Honey bags are stored in a manner that is inaccessible to wildlife and transferred to an approved facility for disposal in a timely fashion.
- Ensure that pits have sufficient depth and treated with lime or crystal lye daily.

Animal/Fish Parts

- As per the Government of Canada Northwest Territories Fishery Regulations fish entrails are not permitted to be disposed of on ice nor in the water.
- Clean away from camp and dispose of entrails a minimum of 3km away from camp area and on an island, if possible.
- Any surface used for cutting or cleaning should be cleaned immediately with bleach.
- Do not leave smoking/drying fish or meat unattended and at least 50m away from the sleeping area. Hanging meat should also be at least 50m from the sleeping area.

Other Attractants

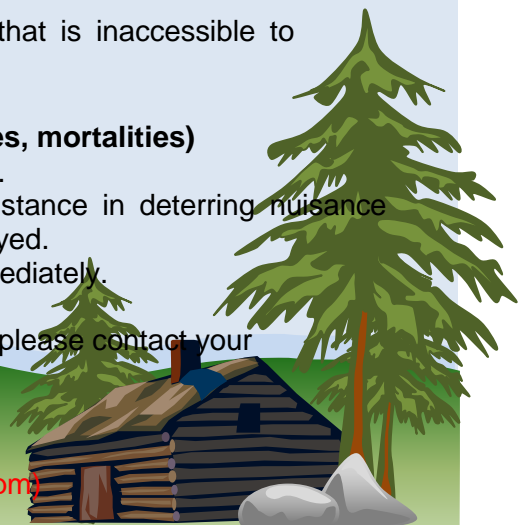
- Both the cooking (kitchen, fire pits, BBQs) and eating area(s) should be thoroughly cleaned after every meal.
- Do not leave bloody hunting clothes or items that smell like fish near the sleeping area.
- Pet food should be stored indoors in a sealed animal proof container and pets should be fed indoors, if possible.
- Any oils, gas or grease should be stored in a manner that is inaccessible to wildlife.

Reporting Wildlife Occurrences (sightings, encounters, injuries, mortalities)

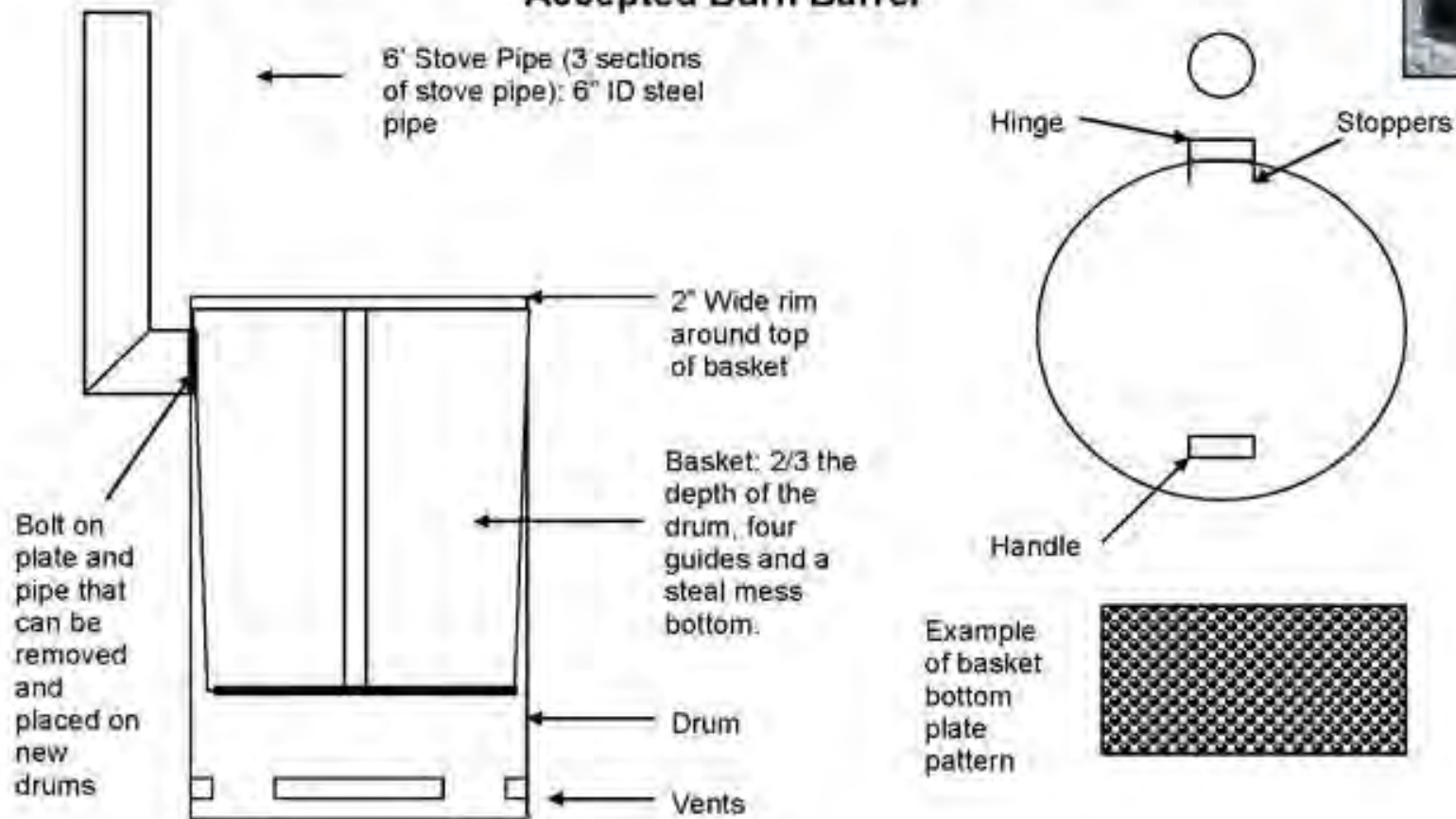
- Occurences should be reported at your earliest opportunity.
- Timely reporting allows ENR to provide advice and assistance in deterring nuisance wildlife before they become habituated and must be destroyed.
- Any defence of life and property kills must be reported immediately.

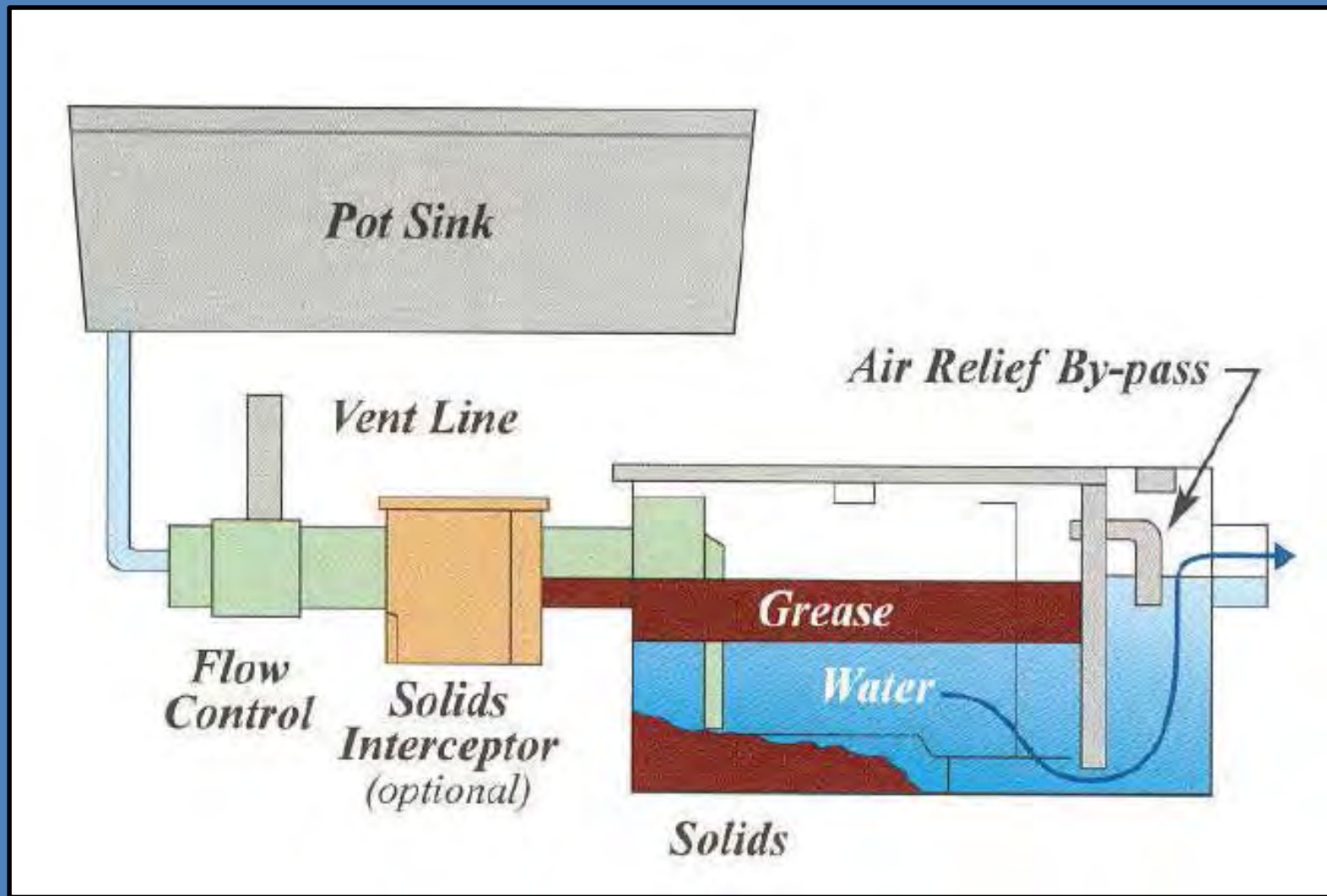
If you have additional questions, a report to file, or an emergency, please contact your Regional ENR office.

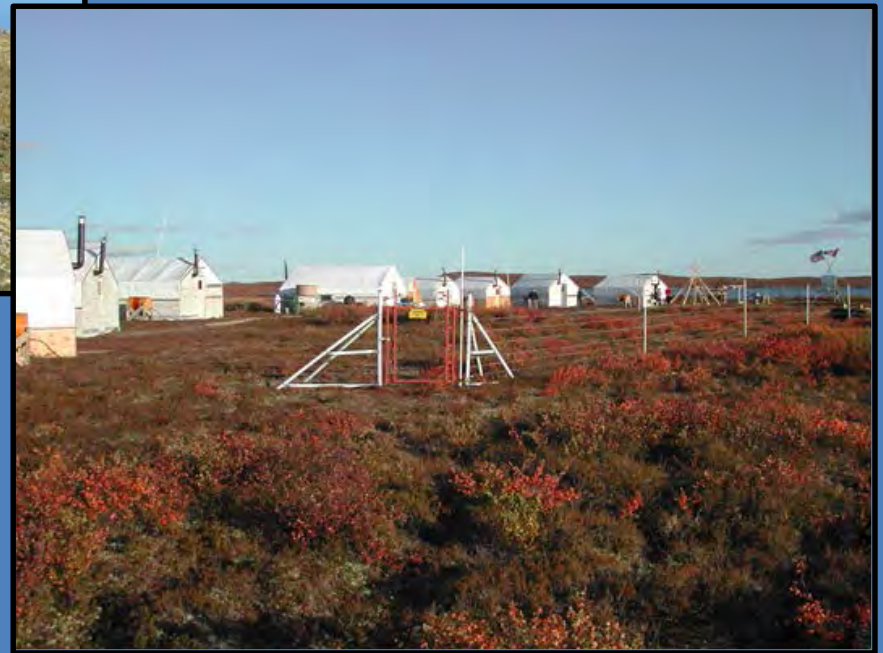
- 24hr Wildlife Emergency number at (867) XXX - XXXX
- Regional ENR Office at (867) XXX - XXXX (8:30am – 5:00pm)



Department Environment and Natural Resources Accepted Burn Barrel







GRIZZLY BEAR



2 - 4" long, light claws



FRONT

HIND

Dished face

Small round ears

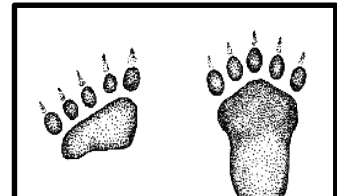
Shoulder hump



BLACK BEAR



1 ½" short, dark claws



FRONT

HIND

Straight face

Tall ears

No shoulder hump



Please:

- obey Transport Canada regulations and do not fly below 1,000 feet;
- find out where outfitter camps are located and avoid them during hunting season;
- avoid barren-ground caribou calving grounds during calving season;
- do not take-off or land in a calving area during calving season;
- do not chase or harass wildlife by flying too close; and
- respect our wildlife – keep to a safe altitude.

**Remember,
flying close enough
to an animal
so that it runs away
is too close!**

If geological survey or mineral exploration work is planned at any time, but especially during outfitting or calving seasons, please contact the regional office of Environment and Natural Resources for information before flying.

Mackenzie Mountains and Mackenzie Valley:

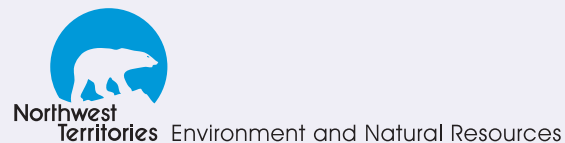
Sahtu Region(867) 587-3500
Dehcho Region(867) 695-7450
South Slave Region(867) 872-6400

Tundra:

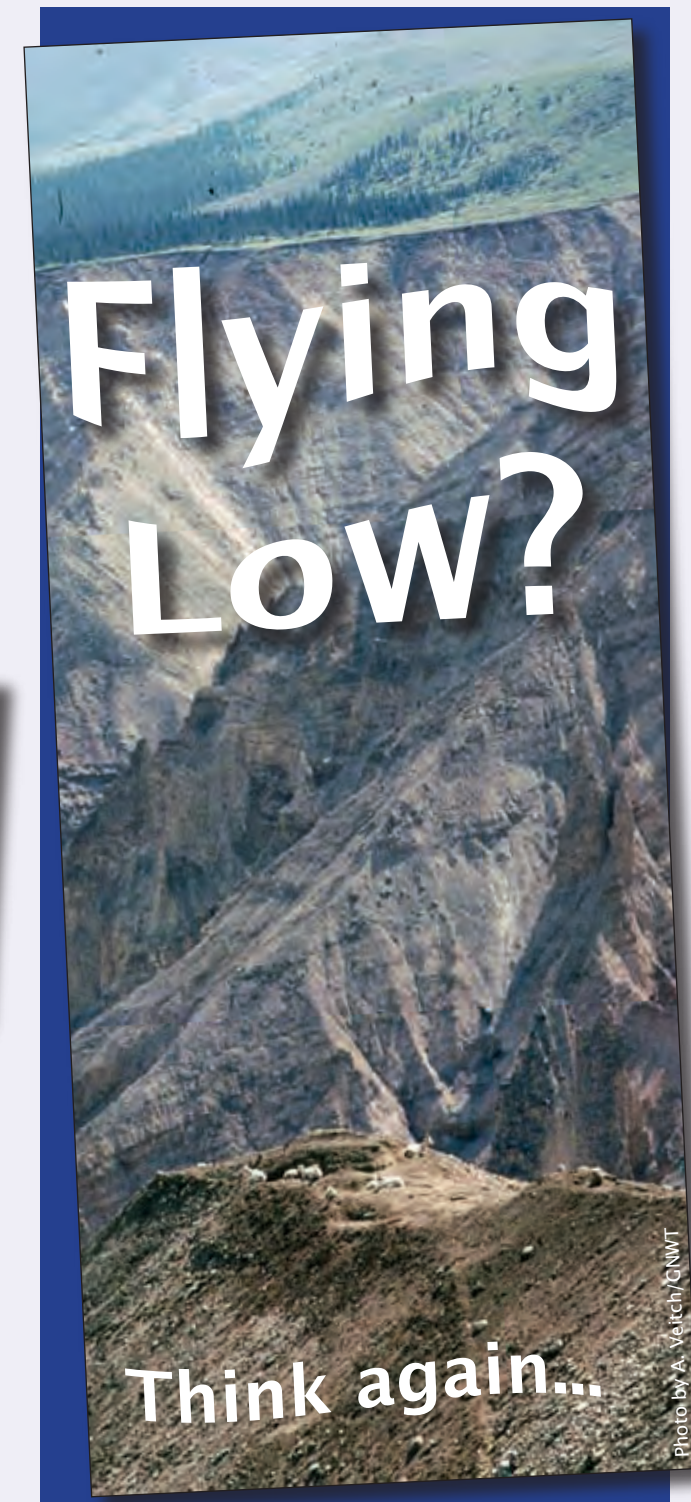
Inuvik Region.....(867) 777-7308
North Slave Region.....(867) 873-7184
South Slave Region(867) 872-7450



Visit the Wildlife Division web site
of Environment and Natural Resources
at <http://wildlife.enr.gov.nt.ca>.



June 2007



A variety of wildlife, quality guides and outfitters, spectacular scenery and solitude that only a location away from human habitation can offer...

The Northwest Territories is a popular destination for big game hunters and eco-tourists alike. But their experience can be ruined by low-flying aircraft that disturb wildlife.

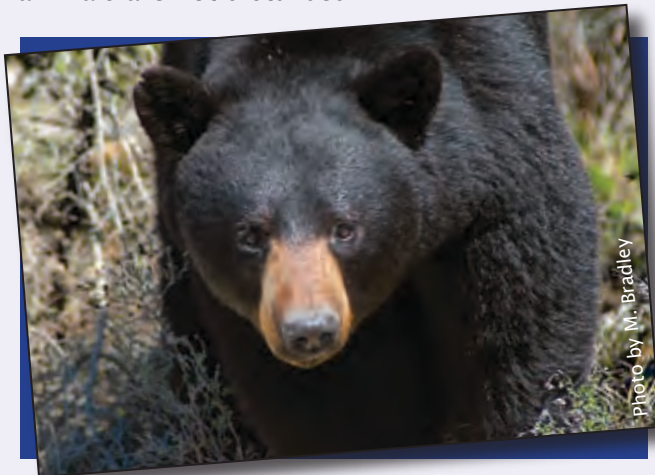
Increased exploration and development throughout the NWT also means increased air traffic. Pilot encounters with wildlife are becoming more frequent. If you are a fixed wing or rotary pilot, please respect our wildlife and keep to an elevation that does not disturb them.

Wildlife are Protected Under NWT Law

Section 38 of the NWT *Wildlife Act* protects wildlife by making it illegal to disturb or harass wildlife. Flying close enough to an animal that it runs away is flying too close!

In addition, Transport Canada regulations stipulate that aircraft may not fly lower than 1,000 feet above ground.

Please keep your aircraft at a safe elevation so animals are not disturbed.



In the Mackenzie Mountains

Big game hunters pay sizable fees for the chance to take home a trophy animal from the Mackenzie Mountains. Much of the hunting in this area is done on foot or on horseback and it is a time consuming process. Sound is amplified by the mountains and low flyovers can frighten an animal into flight, causing hours, or even days, of stalking to be wasted.

Wildlife that are affected by low level flyovers in the Mackenzie Mountains include Dall's sheep, mountain goat, mountain caribou and moose.

During the mid-July to end of September hunting season, please be cautious and avoid outfitter areas.



In the Mackenzie Valley

Boreal caribou are a threatened species found throughout the Mackenzie Mountains. Unlike barren-ground caribou, during the May calving period, boreal caribou go into hiding to have their calves. Low flying is especially harmful, stressing the female, which can cause separation from calves and lead to calf death. If electromagnetic surveys are going to be conducted in April or May, please contact the regional ENR office for information.

On the Tundra

During Hunting Season

Hunters also pay large fees for a hunting experience on the tundra. In late summer and



early fall, outfitters have active barren-ground caribou sport hunting camps. Aircraft must remain at least 1,000 feet above ground.

During the mid-August to end of October hunting season, please be cautious and avoid outfitter areas.

During Calving Season

Caribou are a valuable resource to the people of the Northwest Territories. From the end of May to the end of June, female barren-ground caribou come together at herd-specific locations on the tundra to give birth to their calves. Low flyovers, take-offs and landings in these areas are especially harmful as they can stress the cows, which can cause separation from calves and increased calf mortality.

Avoid barren-ground calving grounds from mid-May to early July. This is especially important during times of low barren-ground caribou numbers. Please contact the regional office of Environment and Natural Resources in your area.

Other Wildlife

Grizzly bears, pelicans, whooping cranes, polar bears, muskoxen, black bears, eagles and other wildlife are also disturbed by low flying aircraft. Please respect our wildlife and keep to a safe altitude.

GNWT-Lands: Map of the existing winter road route from Highway #3 (Km 298) to Whitebeach Point.





Northwest
Territories Environment and Natural Resources

Wildlife Sightings Log

Animal Species:

Number Seen: (exact or estimated)

Location: (Be as specific as possible - GPS coordinates or mark on a map)

Date: (MM/DD/YYYY)

Time of Day: (AM/PM)

What was it doing when you saw it:

(E.g. "running south along the road, then into the bush on the west side" is better than "running")

Other Comments/Interesting Markings:

(Anything interesting about the sighting – feeding, did the animal appear to have a limp, Etc?)

Name of Person(s) who saw it and contact information:

Please Return to:

Regional Biologist
Regional Environment & Natural Resources Office
Government of the Northwest Territories



January 21, 2015

Ryan Fequet
Regulatory Manager
Wek'eezhìi Land and Water Board
#1-4905 48th St., Yellowknife
Northwest Territories
X1A 3S3

Dear Mr. Fequet,

Preliminary Screening of Husky Oil Operations Ltd. Application for Type A Land Use Permit, Chedabucto Mineral Exploration Program (W2014Q0005)

In response to the Wek'eezhìi Land and Water Board (WLWB) request on December 31, 2014, to review the Husky Oil Operations Ltd. (Husky or Proponent) Type "A" Land Use Permit (W2014Q0005) for the subject-noted project (the Project), the Government of the Northwest Territories (GNWT) provides the attached comments and recommendations.

All GNWT departments with responsibilities related to the Project have considered the Project applications. Responding departments include: Environment and Natural Resources; Lands; Education, Culture and Employment (including Prince of Wales Northern Heritage Center); Municipal and Community Affairs; Transportation; and Health and Social Services. Other reviewing departments indicated they would not be providing comments on this application. Comments on land use permit conditions have been provided by Lands Inspectors directly to the WLWB through the online review system. The attached comments include greater detail on permit conditions related to wildlife-related waste management than the previously submitted comments.

While some of Husky's proposed drilling targets fall within the proposed Dinàgà Wek'èhodì Candidate Protected Area, which is under an interim land withdrawal, the withdrawal does not affect Husky's eligibility for a land use permit. Further detail is provided in the attached comments.

If WLWB or Husky has questions related to this submission, please contact me, Director, Land Use and Sustainability, at (867) 920-6237 or terry_hall@gov.nt.ca, or Ms. Lorraine Seale, Manager, Project Assessment Branch, at (867) 765-6786 or lorraine_seale@gov.nt.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Hall', with a stylized, cursive script.

Terry Hall
Director, Land Use and Sustainability
Department of Lands

Attachments:

- GNWT Comments and Recommendations on Application
- Wildlife Sightings Log
- Low Flying Aircraft – Brochure
- Bear Occurrence Procedures Manual
- Camp Waste and Wildlife Attraction Manual



Tłıchǫ Government

Box 412, Behchokǫ, NT X0E 0Y0 • Tel: (867) 392-6381 • Fax: (867) 392-6389 • www.tlicho.ca

Ryan Fequet, BSc.
Regulatory Manager
Wek'eezhii Land and Water Board
#1-4905 48th St. | Yellowknife, NT | X1A 3S3
ph 867.765.4589 | fax 867.765.4593

January 21, 2014

Re: Husky Land Use Permit W2014Q0005

Dear Ryan,

The Tłıchǫ Department of Lands and Culture notes that Husky has applied for Land Use Permit, and offers comments for the consideration of the WLWB. Please see the attached table.

The Tłıchǫ Government understand that Husky has applied for a permit for drilling that is exploratory in nature. There are a range of concerns to consider, because this area is important to the Tłıchǫ for cultural, recreational and spiritual reasons. Our comments addressed in the table relate to drilling locations, the mini bulk sampling methods, and issues with the proponents engagement plan, among other concerns.

It is important to note that the mineral leases held by Husky are in Wek'eezhii Lands, where the NWT Protected Area Strategy is currently proposing and considering the protected area, Dinàgà Wek'èhodì. In the most recent PAS meeting, Elder Harry Apples said,

The land it represents is important to the Tłıchǫ; Elders before this time went there to hunt, trap, and fish. The Tłıchǫ still use the area today. The Tłıchǫ want to protect this land. Other people should ask for permission to explore and use the area, out of respect for the Tłıchǫ and the history of the place. Harry asked the question "If any minerals are found in the area will it ever be the same?" and stressed importance of Waite Island (October 24, 2014, PAS Meeting Minutes).



Tłıchǫ Government

Box 412, Behchokǝ, NT X0E 0Y0 • Tel: (867) 392-6381 • Fax: (867) 392-6389 • www.tlicho.ca

This overlap of interests should be given particular consideration, which is why we are bringing attention to it here and within our comment table.

In Tłıchǫ Unity,

Sjoerd van der Wielen,

Lands manager, DCLP



January 21, 2014

Ryan Fequet
Regulatory Mining Specialist
Wekeezhii Land and Water Board
#1-4905 48th Street
Yellowknife, NT, X1A 3S3

VIA Email: rfequet@wlwb.ca

**Re: Husky Oil Operations Ltd. Application for Type A Land Use Permit,
Chedabucto Mineral Exploration Program (W2014Q0005)**

Dear Mr. Fequet,

The Wek'èezhì Renewable Resources Board (WRRB) has a mandate for wildlife, plant and forest management in Wek'èezhì and adheres to the principles and practices of conservation in fulfilling its duties. The WRRB provides the following comments on the Husky Oil Operations Ltd. (Husky's) application for a Land Use Permit for the Chedabucto Mineral Exploration Program which allows for exploration assessment work on claims and mineral leases in order to evaluate a high quality silica deposit.

The Board understands the permit is for a five year period, with a possible extension for two years, and that proposed activities will be implemented via a phased approach with each phase contingent on the successful execution and positive results of the preceding phase. Proposed activities under Phase 1 and Phase 2 may include:

Phase 1, Exploration:

- A temporary 4-man tent camp, core shack, and generator shack set up on the property and maintained seasonally throughout the life of the project;
- Activities over 3-6 weeks between March and April of 2015;
- Approximately 10 diamond drilling (DD) holes, out of 25 identified locations, drilled in 2015 to obtain continuous core samples of bedrock; depths dependent on the thickness of bedrock to a maximum of 250m;
- Approximately 70 reverse circulation drilling (RC) holes drilled in 2015 to collect cuttings samples of the unconsolidated silica and bedrock, and to obtain baseline geotechnical groundwater and permafrost data; majority will be 5-30m, with approximately 10 holes to a maximum depth of 175m;
- Over the life of the permit the combined total of RC and DD holes will be approximately 200;
- Collection of baseline hydrogeological and permafrost information from the bore holes (e.g. temperature-depth profiles, groundwater water levels, etc.);
- Use of 2 helicopter portable drill rigs, with initial phase of drilling proposed for the spring (March-April) of 2015;
- Slashing to prepare drilling locations; up to 6 helicopter landing sites may need to be cleared; and,

- Follow-up geophysical and drilling activities in subsequent years to address information gaps following Phase 1; activities would consist of additional field mapping, geophysical (including but not limited to Ground Penetrating Radar, Resistivity Survey) and drilling activities (i.e. RC and DD).

Phase 2, Mini Bulk Sampling:

- Collection of a representative sample of material from test pits using a standard bucket loader and haul truck for unconsolidated or loosely consolidated material;
- Collection of approximately 10 mini bulk samples; locations to be determined;
- Winter access requiring equipment for trenching and for winter ice road construction/maintenance; and,
- Use of existing trails wherever possible; new access will kept to the minimum necessary to safely mobilize equipment to the selected locations.

The WRRB notes that though the application is specific to activities listed under Phase 1 and Phase 2, that a “Phase 3” would be applied for in the future as a separate application, as it is outside of the scope of this Land Use Permit. Phase 3: Feasibility and Engineering, would occur subsequent to the successful exploration program, and Husky would evaluate the socio-economic and environmental impact, and engineering feasibility of the property to develop and implement a resource extraction strategy. The Board notes that both the unconsolidated and consolidated sources of silica identified are considered viable resource targets which warrant further investigation to determine the potential for economic extraction. The Board also notes that high quality silica may be used as a proppant in the hydraulic fracturing process and is considered a key component in the development of unconventional hydrocarbon resources. If extraction of the high quality silica is considered to be economically feasible, it is conceivable that there will be considerable interest in the potential resource extraction strategies.

Dinàgà Wek'èhodì is a Candidate National Wildlife Area located on the northern portion of the North Arm of Great Slave Lake. This area was identified for protection by the Tchéno government, and the area is at step 5 of an 8 step process under the NWT Protected Areas Strategy used to identify, create, and manage a protected area (please refer to <http://www.nwtpas.ca/area-dinagawekehodi.asp> for details). Dinàgà Wek'èhodì encompasses portions of Whitebeach Point, where a portion of Husky's mineral claims and potential drill locations are also found. The Board appreciates that if Husky mineral claims remain active that the Interim Land Withdrawal (ILW) proposed for the North Arm will not include those lands. However, though the claims on Whitebeach Point are not part of the ILW, the assessment of Dinàgà Wek'èhodì noted the candidate Protected Area hosts several species at risk, including:

- boreal woodland caribou;
- wood bison;
- wolverine;
- rusty blackbird;
- common nighthawk;
- barn swallow; and,
- short-eared owl.

Further, Dinàgà Wek'èhodì is classified as an Important Bird Area (IBA) in Canada and is considered a key migratory bird site in the NWT with large numbers of tundra swans, Canada geese, and other waterfowl using it as a staging area. The Board notes that

Appendix III, Wildlife, Archaeological & Environmental Awareness Plan, does not mention the proximity of the proposed activities to Dinàgà Wek'èhodì, or considerations which more completely contextualize the location of the proposed activities.

The application mentions that to facilitate the Phase 2 mini-bulk sampling, winter access to the area will be required and that Husky will utilize existing trails wherever possible, though new access may be required. The maps provided suggest where the winter access may be located, though it is unclear where the final location of the access will be, and where water withdrawal locations will occur. The drawdown of water has the potential to affect fish and fish habitat, and if drawdown occurs in lakes, turbidity levels may be raised and oxygen levels depleted under the ice.

The Board provides these comments for consideration:

- It is the Board's perspective that the "resource extraction strategy" mentioned under Phase 3 may potentially, at some point in the future, require the use of a mine to extract the high-quality silica resource;
- The proximity of proposed activities to Dinàgà Wek'èhodì requires vigilance by Husky and its contractors in order to minimize potential impacts, as well as considerations related to Husky's social licence to operate near a candidate National Wildlife Area which has been following the NWT Protected Areas Strategy process since 2008;
- The potential impacts of activities on species at risk and the habitat(s) they utilize requires that Husky and its contractors operate in a fashion which complies with the Terms and Conditions of the relevant licenses and permits issued by government agencies that allows for the proposed work, as well as all applicable environmental legislation and regulations; and,
- Water withdrawal for winter road construction should use Department of Fisheries & Oceans (DFO) approved screens on all water intake pipes to prevent the uptake of fish. The Board also echoes the DFO request for clarification on what mitigation measures will be implemented during the winter access construction, including mitigation measures to prevent serious harm to fish and fish habitat within waterbodies designated for water withdrawals.

If there are any questions regarding these comments, please feel free to contact our office.

Sincerely,



Jody Pellissey, Executive Director

cc. Ken Hansen, Project Manager-NWT, Husky Oil Operations Ltd.

Sjoerd van der Wielen, Manager, Lands Section, Department of Culture and Lands Protection, Tich Government

rant Pryznyk, Interim Chair, Wek'èezhì Renewable Resources Board



Yellowknives Dene First Nation
Box 2514, Yellowknife, N.T. X1A 2P8

January 21, 2015

Ryan Frequet
Regulatory Manager
Wek'eezhii Land and Water Board
#1 – 4905 48th Street
Yellowknife, NWT
X1A 3S3

**RE: Husky Oil Operations Ltd. Application for Type A Land Use Permit,
Chedabucto Mineral Exploration Program (W2014Q0005) (WLWB)**

The Yellowknives Dene First Nation's (YKDFN) Lands and Environment office has reviewed Husky's Land Use Permit application and would like to make the Wek'eezhii Land and Water Board aware of some of our concerns.

The Importance of the Area

The west shore of Great Slave Lake, from near Whitebeach Point to beyond Wrigley Point, is referred to by the Yellowknives Dene as Èdaalà ("long point"). The area is known for its abundant fish, moose, woodland caribou, eagles, beavers, muskrats and more recently, bison. The Yellowknives Dene, descendants of the Tsetsqot'iné people, have hunted, trapped and lived in the Èdaalà area for many, many generations and for that reason is an important and valued part Chief Drygreese Territory.

In August 2014 YKDFN's Traditional Knowledge Program, and the Goyatiko Language Society, convened a group of Elders to discuss the past and present use of Èdaalà and they began the process of mapping the locations of cultural assets including trails, graves, cabins, camps, hunting and trapping areas, etc. YKDFN staff also participated in a preliminary archaeological assessment of Èdaalà, an assessment that backed up YKDFN Elder's assertion that the area is rich in cultural assets.

The Yellowknives Dene hold Èdaalà in high regard for its cultural and spiritual values. Elders are alarmed at the prospect that mining may some day take place in this area and that the values that make Èdaalà special may be disturbed or destroyed.

The Drilling Program

The Yellowknives Dene have offered conditional support to Husky's exploration program 'in the spirit of accommodation'. This tentative and limited support was possible

only because of two things: our understanding of the limited scope of the proposed drilling program and its temporary nature; and the company's willingness to engage with YKDFN in order to mitigate any possible impacts.

This tentative and limited support was based on a drill program that consisted of 100 holes. With this application for a 200 hole program, YKDFN were rather surprised to learn of the new drill holes – it was not part of the engagements to date and there has been no accommodation to our concerns. YKDFN cannot accept this expanded drill program.

The Bulk Sampling Program

However, the inclusion of a bulk-sampling program (Phase II) is of grave concern to the Yellowknives Dene. In Husky's presentations to our Lands and Environment Committee they stated, as part of their 2014 Program, they would "Prepare Land Use Permit application for Appraisal Drilling Program". It was therefore our understanding that mini-bulk sampling (Phase II Post-2015) would be part of a second land use permit application. Bulk sampling was not part of our conditional support for the project nor have we been meaningfully engaged on this matter. Other than a mention that bulk sampling may be an option in the future, there has been no meaningful discussion or engagement on this matter.

YKDFN believes that these activities pose a significant threat to Èdaalà's cultural and environment assets. We were not made aware of the proposed locations for these bulk sample sites, there is no proposed accommodation, nor has archaeological/traditional knowledge research been conducted for these areas.

Winter Road

For the purpose of bulk sampling the company is proposing a winter road into the area. This project was described to us only as a helicopter supported endeavour, with very little ground disturbance. The introduction of a winter road, with all of the implications associated with increased access by the general public, and additional pressures on wildlife, goes against everything we've tried to achieve with this company. Any increased access completely changes the dimensions of the impacts associated with this project.

YKDFN has consistently fought against the development of winter roads in this area. In 2008 Anglo American sought to have a winter road amended to their exploration project in the area (WLWB file: W2008C0010). Had this project discussed the introduction of the Winter Road with YKDFN or done any research, they would have immediately faced opposition. A winter road would allow far more impacts than the helicopter based drilling program that we had discussed with the company. A winter road results in much higher harvesting in the area, facilitates the construction of cabins and infrastructure (both by squatters and potential leaseholders), and the area will be degraded – the qualities that have made the site special will be altered. At this point, the YKDFN particularly rely on this area for harvesting success and food security. Several Yellowknives Dene families

have seasonal cabins in this area. Hunting and trapping are still important activities and given the current caribou crisis and the changing landscape, the Èdaalà area is expected to increase in importance.

Conclusion

YKDFN's engagement with Husky has been positive. They have supported both Traditional Knowledge and archaeological research and we remain prepared to support a limited drill program along the lines discussed as part of the engagement that has taken place. YKDFN is not prepared to support an expanded drill program, the bulk sampling or the winter road. We have been clear with the project – this area is special to the YKDFN. We worked with the company, in the spirit of accommodation, to find a way forward for their initial program. At the time, we did not believe that the project would result in significant public concern or environmental impacts.

After reviewing this application and the expanded elements being applied for, YKDFN can no longer provide any support for the project.

- YKDFN ask the Board to reject the portions of the project which have not been part of meaningful engagements.
- If the Board is not able to do this, YKDFN request that the project be referred to Environmental Assessment.

We trust that this letter makes our position clear. If you have any questions, please contact the Land and Environment office at 766-3496.

Sincerely,



Chief Edward Sangris

Copy: Todd Slack, YKDFN, Land and Environment, Yellowknife, Fax: (867) 766-3497
Randy Freeman, YKDFN, Land and Environment, Yellowknife, Fax: (867) 766-3497
Jenica von Kuster, Husky Energy, Calgary, Fax (403) 750-1722