



## **Mackenzie Valley Environmental Impact Review Board**

### **Scope of the Environmental Assessment**

**Chedabucto Mineral Exploration Development**

**EA1415-02**

**Husky Oil Operations Limited**

**May 5, 2015**

**Mackenzie Valley Review Board**

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## 1 INTRODUCTION

### 1.1 Overview

In December 2014 Husky Oil Operations Limited (Husky or the developer) applied to the Wek'èezihìi Land and Water Board (WLWB) for a land use permit to conduct the Chedabucto Mineral Exploration project located on the western shore of the north arm of Great Slave Lake (see Figure 1). The project area is bound by Whitebeach Point to the north, Wrigley Point to the south, Great Slave Lake to the east and Chedabucto Lake to the west. The purpose of the proposed exploration project is to delineate and evaluate a silica deposit located in the area. The Mackenzie Valley Environmental Impact Review Board (the Review Board) is conducting an environmental assessment (EA) of this project.

### 1.2 Purpose

The purpose of this document is to describe the EA process and set out the scope of development and assessment.

Due to the limited scale of the development, the EA process for this project is a variation of the process outlined within the Review Board's *Environmental Impact Assessment Guidelines*. The Review Board considers the information provided by the developer in its Land Use Permit (LUP) application package along with additional information submitted by the developer and parties during the review process, such as information requests and responses, Traditional Knowledge (TK) studies, and results of on-going public engagement as a sufficient description of the project and the developer's views of the potential impacts.

The Review Board will hold community hearings to allow interested parties to express their views on the project directly to the Review Board. The community hearings, in conjunction with the EA process described in this document, will allow the Review Board to assess any public concern, the potential impacts of the development and the significance of these impacts. If there remain outstanding issues by the end of the community hearings, the Review Board may secure additional information through an additional round of information requests or other appropriate means.

### 1.3 Background

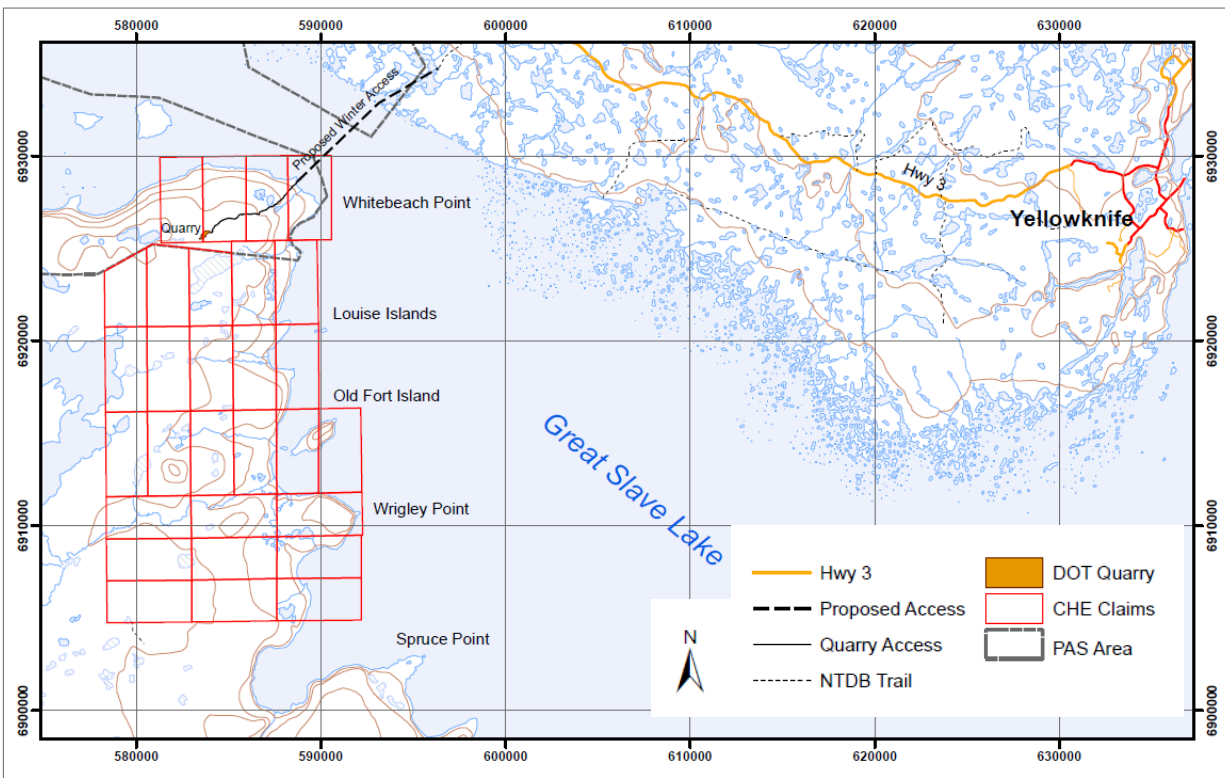
The Chedabucto mineral claims total approximately 30,000 hectares and include 29 mineral claims. The area has both consolidated and unconsolidated silica deposits which may be viable for resource extraction. Husky's proposed project is to evaluate the potential of the silica deposits for extraction and use as a proppant for hydraulic fracturing.

Husky is proposing to complete the exploration in two phases:

- **Phase I** includes drilling approximately 200 boreholes using diamond drilling and reverse circulation drilling and geophysical surveys. Husky proposes to conduct these activities over the course of two to three years during frozen ground conditions. The first round of drilling is proposed to take place between March and April and would last three to six

weeks. Additional drilling may be required over the subsequent years of the land use permit term. Access to the site would be via air only.

- **Phase II** will be undertaken if results from Phase I indicate a prospective silica resource. The primary purpose of Phase II would be to collect a bulk sample from approximately ten pits. The estimated material removed from each test pit would weigh approximately 10 tonnes for an estimated total of 100 tonnes for the entire bulk sample. For Phase II, equipment would be moved on land and would require clearing and construction of winter access trails. Existing trails will be used as much as possible.



**Figure 1 Proposed development location**

#### 1.4 Referral to Environmental Assessment

In December 2014 Husky submitted a LUP application to the WLWB for exploration activities on its mineral claims, referred to collectively as the Chedabucto project. The WLWB commenced a preliminary screening of the proposed project according to s. 124 of the *Mackenzie Valley Resource Management Act* (MVRMA).

The application was sent out for review and comments were received from:

- Aboriginal Affairs and Northern Development Canada (AANDC),
- Alternatives North,
- Environment Canada (EC),

- Fisheries and Oceans Canada (DFO),
- Government of the Northwest Territories,
- North Slave Metis Alliance (NSMA),
- Northwest Territories Chapter Council of Canadians (CoC NWT),
- Tłıchq Department of Lands and Culture (TG),
- Wek'èezhii Renewable Resources Board (WRRB),
- Yellowknives Dene First Nation (YKDFN), and
- members of the public.

Based on the comments received, the WLWB determined that there is public concern about the proposed development. The WLWB further concluded that the public concern is widespread, having been voiced by the Tłıchq Government, YKDFN, and NSMA, as well as non-governmental organizations and individual members of the general public.

In the Preliminary Screening Decision, the WLWB found that:

- Potential environmental effects could be mitigated through conditions in the land use permit.
- There is concern about the cultural, traditional and recreational value of the Whitebeach Point area.
- Engagement on the proposed project was not adequate.
- There is concern about site access associated with Phase II.

The WLWB determined under s. 125(1) of the MVRMA that the project was cause of public concern and referred the project to the Review Board for an EA.

## **1.5 Legal Context**

In accordance with s. 115 of the MVRMA, the Review Board must conduct an EA of the proposed development with regard for the protection of the environment from significant adverse impacts, and the protection of the social, cultural and economic well-being of Mackenzie Valley residents and communities. Section 114(c) of the MVRMA further requires the Review Board to ensure that concerns of Aboriginal people and the general public are taken into account.

## **2 SCOPE CONSIDERATIONS**

This section sets out the scope of development and the scope of the EA.

### **2.1 Scope of Development**

Under s. 117(1) of the MVRMA, the Review Board must determine the scope of development for every EA it conducts. The scope of a development includes all the physical works and activities required for the project to proceed. For this EA, the scope of development is based on Husky's LUP application. The development can be divided into two phases and includes:

- *Phase I*
  - drilling approximately 200 boreholes over two to three years;
  - the first season of exploration is anticipated to include 25 holes using diamond drilling and 70 holes using reverse circulation drilling;
  - collecting soil and groundwater samples from boreholes;
  - transporting equipment and personnel via helicopter;
  - temporary first aid and emergency shelter;
  - fuel storage;
  - clearing helicopter landing sites and drill pad sites; and,
  - conducting ground-based geophysical surveys;
- *Phase II*
  - Excavating test pits (approximately 10) and collecting a bulk sample from each (10 tonnes per sample);
  - making winter access trails over snow to and within the claim blocks; and,
  - transporting equipment and personnel via winter access trails.

## 2.2 Exclusions from the Scope of Development

During the preliminary screening and the Review Board's scoping phase, some reviewers described concerns about effects that may occur if the Chedabucto project leads to large scale extraction of silica. Reviewers also described concerns about hydraulic fracturing that would use the silica, and its effects. Reviewers raised concerns about the safety of hydraulic fracturing and its contribution to climate change.

The Review Board considered these concerns but excluded them from this EA based on the following reasons. The Review Board's *Environmental Impact Assessment Guidelines* identifies three tests to determine whether a development should be scoped as part of a larger development. These tests are:

- Dependence – If the principal development could not proceed without the undertaking of another physical work or activity, then that work or activity is scoped as part of the proposed development;
- Linkage – If a decision to undertake the principal development makes another work or activity inevitable, then the linked or interconnected physical work or activity is scoped as part of the proposed development; and,
- Proximity – If the same proponent is undertaking two physical works or activities in the same area, then the two may be considered to form one development.

Given the above tests, the Chedabucto project is not considered to be part of any other development, such as a silica mine or hydraulic fracturing for oil and gas. The dependence and linkage tests show that this proposed exploration project should not be considered as part of a large scale silica extraction project. Husky's decision to proceed with the proposed project does not necessarily lead to large silica extraction. Results of the exploration project may indicate that a

large scale silica extraction project is possible, but may also indicate the contrary. Any proposal for a large scale silica development would require consideration under Part 5 of the MVRMA and would undergo a preliminary screening. The preliminary screening process would determine whether a large scale silica development is referred to the Review Board.

Regarding the proximity test, the developer is proposing a single exploration project. This test does not apply in case, as it only applies to multiple projects.

This development does not include hydraulic fracturing. Potential hydraulic fracturing in the Mackenzie Valley is not dependent on any silica resources at the Chedabucto project site. Similarly, any possible future hydraulic fracturing in the Mackenzie Valley will not result from silica resources being proven by this proposed exploration project. The impacts of possible future hydraulic fracturing will therefore not be assessed during this EA. Any such projects will be subject to additional regulatory authorizations that would be subject to Part 5 of the MVRMA if and when they are proposed.

The scope of the development for this EA includes what was applied for in Husky's LUP application, specifically exploration activities associated with Phase I and Phase II. It does not include any developments or activities that may occur as a result of the successful completion of the exploration phase. Any development that may occur after the completion of this project would require consideration under Part 5 of the MVRMA and undergo a preliminary screening that would determine whether a development is referred to the Review Board.

### 2.3 Scope of Assessment

The scope of assessment defines which issues will be examined in the EA. Requirements for the scope of the assessment are outlined in s. 117 (2) of the MVRMA and are elaborated on in this section.

When determining the scope of assessment the Review Board considered information from the preliminary screening, the *Reasons for Decision* by the WLWB<sup>1</sup>, and comments from reviewers and the proponent submitted during the Review Board's scoping phase.

The Review Board determined that the issues for consideration during this EA are potential effects:

- on traditional land use and resource use in and around the project area;
- on archeological sites within the project area;
- associated with access;
- on recreational use and aesthetic values;
- on wildlife; and,
- any other matters that in the Review Board's opinion need to be addressed.

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<sup>1</sup> [Preliminary Screening Decision and Reasons for Decision from the WLWB](#)

In addition to the above issues the MVRMA s. 117(2) requires that once a development is referred to EA the following topics must be considered:

- cumulative effects
- alternatives means of carrying out activities
- accidents and malfunctions

The Review Board also considers traditional knowledge in its deliberations.

The Review Board has and will continue to solicit evidence from parties and the developer including, but not limited to, traditional knowledge, cumulative effects, alternative means, and accidents and malfunctions. Information on these topics has been received in response to information requests by the Review Board and parties. Additional opportunities to submit information to the Review Board and ask questions include information requests, interventions and community hearings.

The requirements listed above, and the Review Board's consideration of TK, are explained in detail in the following sections.

### **2.3.1 Cumulative Effects**

Paragraph 117(2)(a) of the MVRMA requires the Review Board to consider cumulative effects. Cumulative effects are the combined effects of the development in combination with other past, present and reasonably foreseeable future human activities. In its LUP application and in response to a Review Board information request the developer identified other past, present and reasonable foreseeable activities in the project area. The YKDFN and TG expressed their views that cumulative effects should include consideration of traditional activities and socio-economic effects its members may experience. For this assessment the consideration of cumulative effects will include, at a minimum, the effects of the project in combination with the effects of:

- previous exploration activities in or near the project location;
- the existing DoT quarry;
- the fishing camp at Wrigley Point; and,
- tourism lodges.

The consideration will examine biophysical and socio-cultural effects that are cumulative in nature, including the project's potential cumulative impacts on culture for individuals and groups affected by other human activities.

### **2.3.2 Alternatives Means**

The Review Board notified the developer in a Review Board IR (PR#16) and in the Proposed Scoping Document (PR#20) of the requirement for information on alternative means of carrying out project activities. The developer provided its response on March 10, 2015 (PR#18).



The Review Board will consider alternative means for carrying out project activities that are technically and economically feasible. This may include alternatives such as of the timing of activities, site access, drilling methods or drilling locations.

### **2.3.3 Accidents and Malfunctions**

The Review Board will consider potential accidents and malfunctions, their effects and possible mitigation measures. Given the size and scale of the proposed project, the accidents and malfunctions of primary concern are related to spills and spill management.

### **2.3.4 Incorporation of Traditional Knowledge**

Subsection 115(c) of the MVRMA states that the Review Board is required to have regard to “the importance of conservation to the well-being and way of life of the Aboriginal peoples of Canada to whom s. 35 of the *Constitution Act* 1982 applies and who use an area of the Mackenzie Valley”. TK is one source of information on traditional use. The Review Board considers both traditional knowledge and scientific knowledge in its deliberations.

The Review Board expects the developer to make all reasonable efforts to assist in the collection and consideration of traditional knowledge relevant to the project for the Review Board’s consideration. The developer should refer to the Review Board’s *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*.

The developer’s LUP application stated that the developer is willing to facilitate, and has facilitated, TK studies by Aboriginal groups. The LUP application contained a TK study from the YKDFN and stated that the TG and NSMA may also submit TK studies. On May 1, 2015 the developer submitted a TK study from the Tlicho Government. The Review Board will consider TK studies that are submitted prior to the community hearing and encourages the NSMA to submit its TK study to the public record.

### **2.3.5 Geographic Scope**

The geographic scope includes the project footprint but also includes areas outside the immediate project footprint that may experience effects from project activities. The geographic scope for each valued component will be appropriate for the characteristics of the valued component. For instance, the geographic scope for assessing impacts to the human environment should include, at a minimum, consideration of the potential impacts to the Tlicho, Yellowknives Dene First Nation, North Slave Metis Alliance, the NWT Metis Nation, the Deninu Kue First Nation, and recreational users.

### **2.3.6 Temporal Scope**

The temporal boundaries for this EA correspond to the duration of potential impacts, rather than on a single generic timeline. The temporal boundaries may not necessarily end with the cessation of operations.

## 2.4 Public Engagement

The Review Board will consider the developer's ongoing engagement with communities, Aboriginal groups, other governments, or other organizations with interests related to areas that might be affected by the Chedabucto project. The Review Board will further consider whether the developer has modified the project in response to what it heard during the engagement process. Aboriginal groups, government agencies and other interested parties may have information useful to the conduct of this impact assessment. The developer will make all reasonable efforts to engage with them. The Review Board expects the developer to continue to meet with interested groups and to place any information from those discussions they consider may be relevant to the Review Board's decision on the public record. The following items are required for the Review Board's consideration of public engagement:

- An engagement log, describing dates, individuals and organizations engaged with, the mode of communication, discussion topics and positions taken by participants, including:
  - All commitments and agreements made in response to issues raised by the public during these discussions, and how these commitments altered the planning of the proposed Chedabucto project;
  - All issues that remain unresolved, documenting any further efforts envisioned by the parties to resolve them ;
- A description of all methods used to identify, inform and solicit input from potentially interested parties, and any plans Husky has to keep engagement moving forward;
- How Husky has engaged, or intends to engage, traditional knowledge holders in order to collect relevant information for establishing baseline conditions and the effects assessment of potential impacts, as well as a summary table indicating where and how traditional knowledge was incorporated (see *Review Board's Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*).

## 3 ASSESSMENT METHODOLOGY

The Review Board intends to use the technical information presented by Husky during the preliminary screening, information requests and responses, and comments on the Proposed Scoping Document to initiate further meaningful discussions between the developer and reviewers. As stated in section 1.2, in conjunction with the review of the Proposed Scoping Document, reviewers are also welcome to put information requests directly to the developer.

The intention for the EA is to conduct community hearings to gather further information. If, after the community hearings, it is determined that additional information is needed, the Review Board will initiate a further round of information requests. However, if the information presented up to and during the community hearings is adequate to address issues, the Review Board will use that information as the basis for its decision and will then prepare and release its Report of EA.

The proposed activities and schedule for the EA is outlined in Table 1 below.

**Table 1 EA milestones and schedule**

<b>Activity/Milestone</b>	<b>Estimated Dates</b>
Referral to EA	February 13, 2015
Review Board releases the Proposed Scoping Document	March 17, 2015
Comments from parties on the Proposed Scoping Document and initial information requests to the developer	March 17 – April 10, 2015
Responses from the developer on the Proposed Scoping Document, reviewer comments, and initial information requests	April 10–30, 2015
Review Board issues the Final Scoping Document	May 8, 2015
Call for intervenor status	May 8, 2015
Information requests (based on Final Scoping Document)	May 15, 2015
Developer’s response to information requests	May 22, 2015
Intervenor status applications due	May 19, 2015
Pre- Hearing conference	May 25, 2015
Interventions and presentations from parties	June 8, 2015
Developer’s response to interventions	June 17, 2015
Developer’s hearing presentation	June 19, 2015
Community hearings Yellowknife	June 23, 2015
Community Hearing Behchoko	June 26, 2015
If further evidence is required: the Review Board determines appropriate additional process steps	June 2015
If no further evidence is required after the completion of the hearing: Issuance of decision and Report of EA	August 2015

#### 4 CONCLUSION

This scoping document has described the EA process and scope of development and assessment for the Chedabucto Mineral Exploration Project. The Review Board considered the views of parties and the developer when determining the scope of assessment and development. The Review Board is of the opinion that the EA process and scope of assessment described above are fair and will allow for an appropriate assessment of the potential effects associated with the Chedabucto Mineral Exploration Project.

The scoping document has described why the Review Board does not find it reasonable to include potential induced future activities in the project scope for this EA. Any development that may occur as an indirect result of the Chedabucto project, such as large scale extraction of sand or hydraulic fracturing elsewhere, will be considered under Part 5 of the MVRMA and, if required, will undergo an Environmental Assessment.