

YESAA Designated Office Evaluation Report

1) Environmental and Socio-economic Assessment File Information

Project Title Selwyn Project	Project File Number 2008-0280
Proponent Name Selwyn Resources Ltd.	Evaluation Start Date December 2, 2008
Contact Person Justin Himmelright	Evaluation Finish Date March 5, 2009
Designated Office Recommendation Summary Pursuant to Section 56(1) of the <i>Yukon Environmental and Socio-economic Assessment Act</i> it is recommended to the decision body(ies) that the project be allowed to proceed, subject to specified terms and conditions, as the Designated Office has determined that the project will have significant adverse environmental or socio-economic effects in or outside Yukon that can be mitigated by those terms and conditions;	

2) Designated Office Assessment Officer Identification

Designated Office Watson Lake	Assessment Officer Steven Jakesta
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3) Decision Body or Bodies and Potential Authorization Identification

Decision Body	Potential Authorization(s) Required	Act or Regulation
YG EMR – Mineral Resources Branch	Class III Quartz Mining Land Use Approval	<u>Quartz Mining Act, Quartz Mining Land Use Regulations</u>
	Land Use Permit	<u>Territorial Lands (Yukon) Act, Lands Act, Land Use Regulation</u>

4) Project Activity or Activities Included in Schedule 1 of the Regulations* and not Excepted

Proposed Activity	Part	Item
Exploration for the purpose of quartz mining	1	1

* *Assessable Activities, Exceptions, and Executive Committee Projects Regulations*

5) Project Location

Latitude and Longitude or UTM Coordinates		
NW Boundary 440683.16E 6954927.0N Zone 9	NE Boundary 490798.8E 6955520.0N Zone 9	
SW Boundary 440639.16E 6923726.0N Zone 9	SE Boundary 490680.8E 6913184.5N Zone 9	
NTS Map Sheet # 105 J / 105 I	Nearest Community Ross River	Distance 160 km

First Nation Traditional Territories Involved Kaska: Liard First Nation, Ross River Dena Council
Watershed(s) and Drainage Region Major Drainage Area: Pacific Sub Drainage: Pelly Sub-Sub Drainage: Upper Pelly
Nearby Watercourse(s) or Waterbody(s) Don Creek, Prevost River, Ross River, Pelly River

6) Statement of Project Scope

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, approximately 160 km northeast of Ross River. The Yukon portion of the project is located within the upper Pelly River watershed on Don Creek. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

Principal activities:

- Diamond drilling
 - Helicopter supported drill pads
 - Cat supported drill pads
- Mechanized trenching
- Line cutting
- Trail upgrading, construction and maintenance
- Road upgrading, construction and maintenance
- Airstrips maintenance and upgrading

Accessory activities:

- Operation and maintenance of two existing 50-person camps. (Don Camp, XY Camp)
- Stream crossings
- Fuel storage, transport and use
- Waste management of camp waste, solid waste and special waste
- Reclamation

7) Project Notification List

Proponent- Selwyn Resources Ltd., Justin Himmelright		
Decision Body- YG – EMR- Mineral Resources Branch		
YFN Government –Liard First Nation – Laurie Allen		
YFN Government –Ross River Dena Council – Greg McLeod, Mary Maje, Nora Ladue		
Interested Person- Yukon Fish and Wildlife Management Board- Graham Van Tighem		
Interested Person- Yukon Salmon Sub Committee- Yukon Salmon Committee		
Adam Greetham	James Miller	Nathan Millar
Allan Doherty	James Smith	Neil Salvin
Andre Fortin	Jarrett Deuling	Nicholas Aplin
Andre Zadrazil	Jason Herbert	Nichole Hulstein

Andrea Fischer	Jean-Francois Latour	Nichole Speiss
Andrea Morgan	Jean Legare	Noreen Hirtle
Andrea Wilson	Jean Lucas	Normand Larocque
Angus Cumming	Jeff Bailey	Ossie Venasse
Anne Reyner	Jeff Hamm	Patricia Randell
Annick LeHénaff	Jeff Peters	Pat Tobler
Ben Campbell	Jeffery Green	Patrick MacDonell
Benoit Godin	Jennifer Peterson	Paul Kloepfer
Bill Dunn	Jennifer Russell	Paul Levelton
Brian Bell	Jerry Kruse	Pauline Koller
Brian Charles	Jesse Duke	Peter Jakesta
Brian Crist	Jim Connor	Phil Smerchanski
Brian Hemsley	Joe Murdock	Randy Carey
Brian Miller	Joe Yanisiw	Reiner Rembe
Brian Smart	Joel Wilkinson	Ricardo Colaci
Briar Young	Johanne Koser	Rick Reaume
Bruce Funk	John Ryder	Rob Kelly
Bryan Buchanan	John Witham	Rob Smith
Cameron Beemer	Joost van der Putten	Robert Moar
Candace Ross	Judy Shannon	Ron Billingham
Charles MacQueen	Julie Desbrisay	Ron McFadyen
Cheryl Kawaja	Juri Peepre	Rory Farrell
Cheryl Thompson	Justin Himmelright	Roxanne Schofield-Wray
Christoph Altherr	Justina Michel	Roy Slade
Christopher Anderson	Justine Davidson	Roy Wares
Chuck Tobin	Kaori Torigai	Ruth Wilkinson
Column McCready	Karen Baltgailis	Ryan Drummond
Corey De La Mare	Karen Clyde	Ryan Gould
Corrine Porter	Kate Bartel	Sam Ahad
Daithi Mac Gearailt	Katherine Cumming	Sam Cheng
Dan Davidson	Kelly Senkiw	Sandra Horvath
Dan Russell	Ken Reeder	Sarah Niman
Darren Kippenstein	Kevin Brewer	Scott Cole
Dave Croft	Kevin Maichen	Scott Davidson
Dave Joe	Kim Cholette	Scott Herron
Dave Laveck	Kim Kalen	Scott McAllister
Dave Wotton	Kim Redies	Scott Weston
David Bridger	Kirk Cameron	Sean Collins
David Guhl	Kurt Gantner	Sean Smith
David Isopo	Kurt Neunherz	Sebastian Schnuelle
Derek Loots	L. Crawford	Shannon MacPhee
Development Assessment Branch	Lara Lewis	Shawn Taylor
Diane Sheldon	Laura Hoversland	Shirley Roburn
Diarmuid Collins	Leonard Linklater	Simon Lapointe
Don MacDonald	Les Laverdure	Stan Dueck
	Leslie Peters	Stephen Hureau

Don Wedman	Lewis Rifkind	Stephen Walsh
Donald Murphy	Lin Ward	Steve Gordey
Donn Wilkinson	Lisle Gatenby	Steven Bartsch
Doug Davidge	Mac Hislop	Susan Gleason
Douglas R. Brown	Marcel Beaudoin	Sylvia Larocque
Drew Mildon	Mark Brodhagen	Tania Perzoff
Ed Brodhagen	Mark Evans	Tawanis Testart
Emma Cunningham	Mark Nelson	Ted Murphy-Kelly
Eric Hellsten	Mark O'Donoghue	Terry Eisenman
Ernie Hallonquist	Mark Ritchie	Theresa Gulliver
Evalina Zamana	Mark Stephens	Tim Hall
Francis Wilson Paglicawan	Mark Vainio	Tim Moon
Gail M. LaRocque	Martin Eckervogt	Tom Cove
Gary Bauer	Martin Haefele	Tor Forsberg
Gavin More	Mary Walden	Travis Ritchie
Gerry Couture	Meghann-Leigh Willard	Trevor Luft
Gordon Allison	Melanie Brais	Troy Pretzlaw
Gordon Nettleton	Michael Settington	Vanessa Law
Grant Lundy	Michael Wark	Viola Mullet
Greg Kent	Mike Burke	Wade Strogan
Gregor Hamilton	Mike Kroeker	Warren LaFave
Gregory Keating	Milada Pardovicova	Wayne Kettley
H. Leo King	N. Hughes	William Polonsky
Habitat Biologist	Nancy Moore	Yukon Energy Corporation
Heather Desmarais	Nathalie Lowry	Yukon River Inter-Tribal
Helmut Grünberg	Nathan Ferguson	Watershed Council
Hilary Gladish		Yvette Brown
Irving Leblanc		
Jacine Fox		

*See Appendix I - Summary of Responses from Interested Persons and Others

8) Potential Effects Assessment Summary and Reasons for Recommendation

Context of this assessment:

1. The assessment of environmental and socio-economic effects, including cumulative effects is in accordance with Section 42 of *YESAA*.
2. The mitigations identified herein are proposed to address project effects that the assessor believes to be potentially significant and adverse. They do not preclude the application of other mitigations as required by relevant legislation.
3. This assessment does not include Selwyn's leases of 5,535 ha of property within the Northwest Territories. Selwyn has an application for a Type B Land Use Permit for mineral exploration for their NWT lease that is currently under review by the MVEIRB.

The following valued components have been considered in this evaluation of the proposed project:

1	Wildlife and Wildlife Habitat
2.	Environmental Quality
3.	Fish and Fish Habitat
4.	Land Interest
5	Health and Safety

1. Wildlife and Wildlife Habitat

1.1 Temporal and spatial overlap summary

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, approximately 160 km northeast of Ross River. The Yukon portion of the project is located within the upper Pelly River watershed on Don Creek. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

The proposed area is occupied by several species of wildlife including; moose, caribou, sheep, wolves, bears and a variety of furbearers and a number of bird species including raptors and migratory birds. Currently, Don Valley has a high importance for animal populations moving back and forth between Yukon and the Northwest Territories. Project activities that have the potential to overlap with wildlife and wildlife habitat include human presence, the use of heavy equipment, use of helicopter, clearing, upgrading the existing access roads, establishing trails and new access roads, trenching, fuel use and storage, waste management, and reclamation. The temporal scope of the project is from January 1st to December 30th for 5 years.

Woodland Caribou

The Finlayson and South Nahanni caribou herds can be found within and around the project area. Woodland caribou seasonal range surveys conducted by the proponent has indicated that caribou can be found within and around the project area during their life cycle including caving, post-caving, rutting and wintering. Yukon Government, Department of Environment (YG Environment) has indicated that anecdotal evidence suggest that the South Nahanni caribou herd is declining and this herd has become a priority for management objectives in recent years. The areas SW of Don Camp has been identified as a key wintering area for the Finlayson Caribou herd, and winter range, and particularly late winter range is known to be key habitat for caribou. Woodland caribou can be expected to be present and encountered frequently during the project operations.

Thinhorn Sheep

Several claims overlap sheep rutting grounds, winter range and lambing range. The sheep habitat overlaps with claims on the east end of the project area. The map submitted by YG Environment (YOR reference #2008-0280-029-1) shows a large polygon that delineates keys sheep habitat. Sheep lambing occurs from May 1st to June 15th, presenting a temporal overlap between the lambing season and project activities. Project activities within this area will overlap with the life cycle of sheep in this location.

Bears

Grizzly and black bears are known to be present within the proposed project area. Bears generally use valley bottoms, stream corridors, and alpine and sub-alpine areas for travel routes. Yukon grizzlies and black bears generally spend 6-7 months in their winter dens, which occurs from October to April. During the summer and

fall, bears actively search for food to prepare for the following winter.

Furbearers

Wolverines, grey wolf, red fox, beaver, hoary marmot, arctic ground squirrel and marten are known to occupy the project area. Wolverines are known to occupy large home ranges utilizing a variety of habitat, but particularly rely on alpine environment for movement and foraging opportunities. Project activities may result in loss of key habitat project activities, or may result in direct mortality if individuals are attracted to improperly handle camp wastes and destroyed as a result.

Raptors

Golden Eagles and gyrfalcon can be found within the project area, and there's a potential for Species at Risk to be encountered at the project site. The project overlaps with golden eagle and gyrfalcon nesting habitat and known sites. Summer nesting sites are key habitat for golden eagles. Disturbance during the nesting season can result in parents being absent from the nest and in some instances nest abandonment.

1.2 Effects characterization and significance determination

Woodland Caribou

The presence of humans, mobilization of equipment and supplies, use of existing trails, development of new roads and trails, frequency of helicopter flights, operation and maintenance of camps, clearing of land and vegetation, leveling land for drill pads, use of heavy equipment to mobilize the diamond drill in and around the project site, and noise generated from the operation of equipment (diamond drill) during exploration and camping may cause caribou to avoid any critical summer and winter habitat area within and near the project. Helicopter activity associated with the movement of personnel and equipment can have a negative effect on the caribou herd and other wildlife. The impacts of the proposed project are related primarily to disturbance and displacement of wildlife from project activities. Disturbance can reduce energy budgets during the key life function periods (fall rutting, winter range) and throughout the summer by requiring vigilance at the expense of feeding. Avoidance of functional range may affect these animals during key life cycle stages, restrict access to habitat where the animals may find refuge from predation, and increase their vulnerability to hunting pressure. The frequency of disturbance within the area is expected to be intense during the use of existing trails, trails construction, operation of equipment and drilling units, and from movement of the field crew throughout the area (including camping activities). Animals disturbed during periods of foraging or resting may become stressed, which could lead to the exertion of critical energy resources. Unnecessary exertion can decrease the animal's critical energy stores, leaving it fatigued and vulnerable to predation and possibly starvation.

Thinhorn Sheep

The presence of humans and noise generated from the operation of equipment during exploration and camping may cause sheep to avoid the project area. Avoidance of functional range may affect these animals during key life cycle stages, such as during spring lambing, restrict access to habitats where the animals may find refuge from parasitic insects, and increase their exposure to predators. Sheep are known to reuse the same migration routes and seasonal habitat, and therefore are vulnerable to disturbance and destruction. Project activities may disturb sheep during periods of foraging or resting, which could lead to stress and the exertion of critical energy resources. Activities that take place within or close proximity to known sheep habitat may lead to an avoidance of the area by sheep, which can result in nutrient deficiencies and low reproduction success.

Bears

The operation and maintenance of two remote camps each set up to accommodate 50 people will generate a substantial amount of wastes that will likely attract bears. The proposed project operations will be carried out during the months when bears are known to be present and/or are actively searching for food. Odours from wastes that are not handled appropriately may encourage bears to enter certain areas, if they are not immediately and consistently deterred from accessing these sites. Bears may become habituated when they are disturbed from foraging grounds and wander into the camp in search of food, or when actively fed by humans, or by making “raids” on food and garbage containers. Such situations often result in human-wildlife conflicts that can lead to the destruction of the animals in order to preserve human safety and property. Given that the project will occur in a very remote area from January 1st to December 31st for 5 years, there is a high likelihood for human encounters with bears.

Diamond Drilling/Trenches/Roads/Waste

The Selwyn Project is a mineral exploration and development project that encompasses 26, 668 ha of land in the Yukon. The project size and operations may affect wildlife habitat productivity through improper separation, storage and care of the vegetative mat and/or abandonment of the quartz claims without reclamation. If the vegetative mat is not properly separated and protected from erosion and contamination, the seed and root stock may be lost or damaged, thereby decreasing or preventing the natural re-vegetation of the area once reclamation measures have taken place. Wildlife habitat may also be compromised by the construction of trenches, roads and trails.

The project proposal states that excavation of trenches under Yukon QMLU Regulations for class 3 program, allows for up to 5000m³ per claim, per year to a maximum of 10,000 m³ over the life of the exploration project. These excavations may fragment wildlife habitat and create barriers to the movement of wildlife. In addition to the effects to habitat, trenches and other excavations pose the risk of injury or death in the event that an animal steps or falls into a depression. Animals that are trapped in trenches or other depressions and that cannot easily egress from these structures will become stressed and will exert considerable energy in attempting to escape. Unnecessary exertion can decrease the animal’s critical energy stores, leaving it fatigued and vulnerable to predation and possibly starvation.

New access roads and trails will include: the construction of up to 15 km of new roads, and upgrading for up to 30 km of existing roads, both with no limits to width; up to 40 km of permanent, and 40 km of temporary trails, both limited to a 15m width. Roads may create effective predator vectors through ease of movement and increased line of sight, as well as fragment and degrade habitat by improving access to the area for human uses. Some animals will use trails as an easier way of travel where wolves have been known to be successful in hunting animals such as moose and caribou along trails and roads. Cleared trails create effective predator vectors that affect the number of moose or caribou removed during any stage of the species life cycle. An increase in hunting pressure, whether human or non-human, may cause individual disruption, lead to elevated stress, increased energy expenditures, and injury or mortality to these species.

Ingestion of domestic waste (such as plastics) and deleterious substances (such as petroleum products) can endanger the health of wildlife if wildlife comes into contact with it or ingests it directly or indirectly, (i.e. ingestion of vegetation that has come into contact with deleterious substances). This may result in sickness, injury and/or death of wildlife. Along with creating an unattractive area, garbage and debris can also create hazards to small animals and birds as they may get tangled and trapped in refuse.

The assessor has considered the requirements of the following legislation:

- 1) *Operating Conditions* contained in Schedule 1 of the Quartz Mining Land Use Regulation, particularly sections A, B, C, D, F, G, H, J, and L, which contain provisions respecting the revegetation of disturbed areas, controlling the spread of contaminants and waste, and prohibiting the placement of cut brush and/or timber in such a way as to block the movement of wildlife;
- 2) Solid Waste Regulation, particularly Part II – Dumps and Waste Disposal Facilities; and
- 3) *Wildlife Act*, particularly section 91 respecting the protection of beaver dams, wildlife dens and nests, and section 92 – 93 prohibiting the creation of nuisance and/or dangerous wildlife.
- 4) *Migratory Birds Regulation*, specifically section 6 which contains general prohibitions against the disturbance and destruction of nest.
- 5) *Migratory Birds Convention Act*, section 5.1(1) prohibits the deposit of harmful substances into areas frequent by migratory birds.

The assessor is of the opinion that compliance with these regulations will provide minimum mitigation measures for elimination, reduction or control of potential effects of the proposed project on wildlife and wildlife habitat. The assessor believes that without further mitigation, the project could still result in significant adverse effects to wildlife and wildlife habitat as a result of the above project activities.

1.3 Mitigations

The following mitigative measures shall be complied with in order to eliminate, reduce or control potentially significant, adverse effects of the proposed project as they relate to wildlife and wildlife habitat.

- The proponent shall keep all garbage, including kitchen waste, in a container that prevents access by bears and other wildlife until properly disposed of in accordance with the Solid Waste Regulations. When burning kitchen waste on site, it must be burned regularly to reduce odours that might attract wildlife and be burned to ash by forced air or fuel fire incineration.
- The proponent shall equip each camp infrastructure including but not limited to kitchen/dining facilities, sleeping accommodations, daily solid waste storage, incinerator, and privy/wash house facilities, with an electric fence and ensure it is in good working order throughout the duration of camp occupancy. *The District Conservation Officer can be contacted for any necessary information regarding bear deterrent devices.*
- Block or gate main access road into the project area to restrict secondary users, such a hunters, snowmobiles, and all-terrain vehicles.
- The proponent shall back fill trenches, or construct trenches with a ramp at one end of the structure to provide an exit for potential wildlife entrapment. *This mitigation is to allow for the egress of large mammals that may become trapped in trenches.*
- When aircraft is used for project activities, pilots shall avoid flying over raptor nesting sites.
- No exploration activity within 1 km of known raptor nest.
- No project activities or helicopter flights shall occur within 1 km of mapped spring sheep lambing areas from May 1st – June 15th, and sheep winter range during the winter period of October 1st to May 30th each year. *The purpose of this mitigation is to avoid disturbances that may cause significant adverse effects to thinhorn sheep during their lambing and winter season. The mitigation places the responsibility on the proponent to reduce and/or avoid potential project impacts on sheep during this narrow window of a key life stage.*
- The proponent shall use existing accesses and previously disturbed sites where possible. All roads/accesses shall be shutdown seasonally. *The intent of this mitigation is to reduce the access potential*

to sensitive wildlife populations and habitat that may increase upon the creation of new access routes and the up-grading of existing roads and trails.

- Progressive reclamation of all sites shall occur as soon as it obvious that no further work will be done at the site.
- The proponent shall maintain a log of wildlife encounters throughout the duration of the project. This log should be extended to monitoring the effects of the project in respect to its impact on wildlife and wildlife habitat. *The intent of this mitigation is to monitor for potential adverse effects to wildlife and their use of the area, in recognition of the additive impact of the proposed project on an area that contains extensive exploration activity. Further justification for this mitigation is discussed in the Cumulative Effects assessment of this report.*
- Avoid helicopter flights over areas where caribou are concentrated on their winter range or during the fall rut.
- Where conditions permit, helicopters should remain 600m above ground level when flying over caribou or other wildlife.

2. Environmental Quality

2.1 Temporal and spatial overlap summary

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, approximately 160 km northeast of Ross River. The property is situated in the Selwyn Mountains Ecoregion, the physiography of the area consist of a U-shaped glaciated valleys with steep talus-covered slopes culmination in rounded peaks. Property elevation ranges from 1,083 m asl at the confluence of Don Creek and Pelly River to 2,030 m asl atop an unnamed peaked located in the southeast end of the claims. Permafrost is discontinuous but present throughout the project area. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

The proposed project area encompasses 26, 668 ha of land that consist of five different ecozones: alpine, parkland, subalpine, upland, and lowland. The ecozones are different by elevation and vegetation characteristics; the alpine ecozone is located above 1,500 m asl and is treeless with sparse vegetation; the parkland ecozone is located above 1,430 m asl to 1,500 m asl with vegetation of forb and dwarf shrub, lichen and moss ground cover on talus and rock-dominated sites; the subalpine ecozone has patchy to continues shrubby subalpine fir up to seven meters in height; the upland ecozone is located immediate down from the subalpine ecozone, vegetation consist of subalpine fir, with white spruce, with willow and scrub birch; the lowland ecozone is located on level to gentle sloping valley bottoms at low elevations where there's white spruce and subalpine fir, with willows and scub birch frequently occurring. Project activities that may affect environmental quality include the use of heavy equipment; site preparation; trenching; pit sampling; waste management; fuel use, transport and storage; the operation of two camps; improper separation, storage and care of the vegetative mat and reclamation.

2.2 Effects characterization and significance determination

Sedimentation and erosion

Earthworks associated with the proposed project have the potential to affect the environmental quality of the area. Project activities include; the excavation of trenches which allows for 5000m³ per claim, per year to a maximum of 10,000m³ over the life of the exploration program; the construction of up to 15 km of new roads, and upgrading for up to 30 km of existing roads, both with no limits to width; up to 40 km of permanent, and

40 km of temporary trails, both limited to a 15m width. These activities will require the use of heavy equipment and vehicles throughout the life of the project.

Alterations to surficial geology have the potential to change existing drainage and run-off patterns. The use of heavy equipment, 4x4 trucks, and ATVs to carry out the proposed project activities may cause rutting and gouging of the ground surface, particularly on moist or water logged soil, which may contribute to sediment loading of nearby streams. Clearing of land for trails/roads, pits and trenches will expose soil to the natural elements. This could potentially alter the stability and erosion resistance of organic and inorganic matter, thereby increasing the vulnerability of relatively stable matter to erosion. Areas that are cleared of vegetation and organic layers near a watercourse are more susceptible to slumping and eroding into receiving water due to a decrease in soil stability. Furthermore, removal of the vegetation may result in reduced up-take of water by plants, potentially increasing surface water flow and subsequently the rate of erosion and sedimentation of nearby streams. The disturbance of the soil, the removal, destruction and/or loss of natural sources of plants such as roots, seed stocks and nutrient components, and compaction of the soil which can alter soil water intake and affect root growth, may have negative consequences on the regeneration of the area. Earthworks occurring in alpine vegetative communities, and those areas at lower elevations along the access roads, make regeneration of the area a concern. Of particular note is the sensitivity of alpine vegetation to disturbance. The ability of the area to regenerate may be further undermined when permafrost, if present, is damaged or destroyed.

Contaminants and waste

The storage, handling and transportation of large volumes of petroleum increases the potential for fuel spills to occur. The proposed project has the storage capacity and may have on site approximately 276,000 l of fuel at each of the two camps (Don Camp and XY Camp). Fuel is transported to equipment in 205 l drums and in 230 l tidy takes. The proponent has indicated that typically, up to 5 drums of fuel is kept at a drill site. A Spill Contingency Plan was submitted by the proponent, outlining procedures for the handling, storage, and clean-up of petroleum fuels.

Soil contaminated with fuel can affect the productivity of terrestrial habitats, harm vegetation, and may create fire hazards. Improper transport and re-fueling procedures by employees and any use of equipment adjacent to waterbodies may potentially result in chemical contamination of water resources from spillage/leakage of petroleum products and/or lubricants. Improperly or poorly maintained equipment and vehicles can also result in drips, leaks and breakdowns, which can contaminate surrounding soils, vegetation and water. The storage and disposal of waste products generated during the life of the project, such as fuel drums, filters, machinery parts, oil, lubricants, solvents and containers containing petroleum products, may significantly contaminate surface and/or groundwater, soil, vegetation, create fire hazards, and if left on site can affect the aesthetic quality of the surrounding environment.

Other waste that may be generated includes: but is not limited to, scrap metal, buildings, building materials, and domestic waste (i.e. kitchen waste and sewage). The project includes the operations and maintenance of two 50 person camps, with the use of a pit privy for sewage disposal. Improper storage and disposal of domestic wastes generated by the camp, and any other harmful liquid materials, increases the potential for contamination of soils and water systems when these substances are allowed to spread to the surrounding environment. Metals, garbage, plastics and other materials that do not readily decompose or biodegrade into inert natural elements can have a significant adverse effect on environmental health when they enter the environment. Along with creating an unattractive area, garbage and debris can also create hazards to small

animals and birds as they may get tangled and trapped in refuse.

The assessor has considered the requirements of the *Public Health and Safety Act*, and the Sewage Disposal Systems Regulation. The proposed sewage disposal system must comply with these legislations. Section 17 of the Sewage Disposal Systems Regulation prohibits the construction of a pit-privy within 30 m of any potable water source, and sections 26-27 and 30 speak to the standards for the construction, installation and maintenance of a pit-privy, including the requirement that the pit-privy be emptied, replaced, and/or abandoned when sewage is within 46 cm of the ground surface. In addition to this legislation, the assessor has also considered 1) the Air Emissions Regulations, particularly section 5 which prohibits the open burning of greater than 5 kg of garbage per day without a permit; 2) the Solid Waste Regulations, section 4, prohibiting the disposal of waste except at a designated waste disposal facility; and 3) the Special Waste Regulations, sections 3 and 12, prohibiting the release of special wastes into the environment except in quantities as determined by the regulations, and the transfer of special waste except to a designated destination. The assessor is satisfied that compliance with these legislations will adequately eliminate, reduce or control the potential effects of project generated wastes so that they are not significant and adverse.

The *Operating Conditions* contained in Schedule 1 of the Quartz Mining Land Use Regulation, particularly sections A, B, C, D, F, G, H, J, K, L, M, and O, speak to the removal and re-establishment of the vegetative mat, erosion control and permafrost, trenching, solid waste, petroleum storage, spills and spill contingency plans, timber and brush, drilling, road, trails and off road trail use, the release of sediment, and waste rock. It is the opinion of the assessor that compliance with the above legislation will satisfactorily eliminate, reduce and/or control the potentially significant, adverse effects of the project as they relate to environmental quality.

2.3 Mitigations

- n/a

3. Fish and Fish Habitat

3.1 Temporal and spatial overlap summary

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, the property is defined by the watershed divide between the Yukon and Mackenzie Rivers. The watershed in the Yukon portion of the project drains generally westward via Don Creek to the Pelly River and ultimately to the Yukon River.

The Don Creek watershed is approximately 298 km² and ranges in elevations from 1,083 m asl to 2,030 m asl. Lower Don Creek host four species of fish: arctic grayling, slimy sculpin, round whitefish and burbot. The Pelly River host four fish species as well: arctic grayling, slimy sculpin, burbot and bull trout. Project activities that have the potential to affect fish and fish habitat include the use of heavy equipment for earthworks, clearing of land and removal of the vegetative mat, fuel use and storage, water withdrawal, waste management, and reclamation. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

3.2 Effects characterization and significance determination

Sedimentation of nearby watercourses

Earthworks carried out within the vicinity of a watercourse may potentially affect fish and fish habitat through

the process of sediment loading. The use of heavy equipment for exploration activities may lead to compaction and/or rutting, potentially increasing the risk and rate of erosion and pooling of surface water, which become sources of sedimentation. Associated earthworks, such as the excavation of trenches and sampling pits, and the construction of new roads and trails, will expose soil to the natural elements. This could alter the stability and erosion resistance of organic and inorganic matter, thereby increasing the vulnerability of relatively stable matter to erosion. Earthworks, including the compaction of soil from heavy equipment could decrease the soils ability to regenerate vegetation as root and seed stock are destroyed, exacerbating the potential for long term erosion. Similarly, clearing vegetation may cause the loss of a physical barrier to sediments carried in surface run-off.

The introduction of sediments to the aquatic environment has several detrimental effects to fish and fish habitat. Sediment loading in and along watercourses may increase turbidity to the point where the water quality is rendered unsuitable for aquatic organisms, impacting the existence of local and downstream aquatic resources. Effects to fish and fish habitat may include, but are not limited to:

1. alteration of water chemistry (e.g. increased turbidity can increase temperature and reduce oxygen content);
2. alteration of productivity (e.g. changes to types and numbers of invertebrate life, a food source for many kinds of fish);
3. abrasion or clogging of fish gills which may cause fish to suffocate;
4. stress and nervous system damage to fish, which may affect their ability to forage successfully, cause reproduction problems and increased offspring mortality, and death;
5. effects to fish reproduction through the:
 - alteration of oxygen levels which are important to the viability of eggs and young fish; and,
 - creation of a physical barrier (e.g. silt layer) that removes spawning or rearing habitat (gravels containing incubating eggs can become covered with sediment which can result in the eggs being smothered).

Deposition of contaminants and wastes

Deleterious substances, specifically chemical contaminants, can cause immediate death of fish (as well as vegetation and wildlife), if a lethal dose is received. Chemical contaminants in a sub-lethal dose can affect the long-term survival and/or reproductive success of organisms. Bioaccumulation of chemical contaminants can result in effects that may take a long time to be observed and affect organisms throughout the food web, including humans.

Chemical contaminants that may be associated with the proposed project include, but are not limited to, Jet A/B fuel, diesel fuel, gasoline, hydraulic fluids, coolants, lubricants, solvents, and cleansers. The project proposal indicates that approximately 546,000 of fuel will be stored on-claim in six 91, 000 l bulk-storage bladders. As a result of the potential environmental hazards associated with these substances there is a risk of these contaminants entering the environment and nearby watercourses.

The proponent has noted that Don Creek's water quality of the upslope headwaters is influenced by acidic runoff from several small, high alpine, ephemeral drainages. The highest elevations of these streams are entrenched in a Devonian shale unit which is acid generating. The proponent has also indicated that the Devonian shale unit exists only at high elevations and is not associated with the mineralized zone that is under exploration. However, should there be trenching within the Devonian shale this could expose sulphide bearing material to the natural elements that can result in acid rock drainage and/or metal leaching. Should the

proponent decide to conduct trenching within the Devonian shale zone, the assessor is not satisfied that the return of sulphide bearing material into trenches and pits, and the backfilling of these sites will completely remove the potential of ARD/ML. In order for backfilling to work successfully within potential ARD/ML areas, will depend upon the material used for backfilling and capping, and the elimination of all infiltration spaces/pockets where water and air could enter the sites and react with sulphide bearing materials. It is the opinion of the assessor that the potential for ARD/ML exists, and may have significant adverse effects to downstream fish and fish habitat.

Water withdrawal

The physical act of removing water from a water body has the potential to cause injury or death to fish or reduce suitable habitat. Death or injury to fish may occur as a result of entrainment, when fish are drawn into a water intake and cannot escape, or from impingement, when an entrapped fish is held in contact with the intake screen and cannot free itself. Reduction of suitable habitat may result from the removal of water through a decrease in water volume and/or changes in stream flow.

The assessor has considered the following legislation:

- 1) *Operating Conditions* contained in Schedule 1 of the Quartz Mining Land Use Regulation (O.I.C. 2003/64), particularly sections G, H and I respecting the management of contaminants; and sections C and M respecting erosion and the release of sediments;
- 2) *Yukon Environment Act*, specifically Part 9 (Release of Contaminants) and Part 11 (Spills);
- 3) Special Waste Regulations (O.I.C. 1995/047); and,
- 4) Spills Regulations (O.I.C.1996-193) specifically sections 2 through 4 respecting spills of substances.
- 5) *DFO Pacific Region Operational Statements* listed in Appendix IV of the proposal which include: Maintenance of Riparian Vegetation in Existing Rights-of-Way; Ice Bridge and Snow Fills; Dry Open-Cut Stream Crossings; Culvert Maintenance; Bridge Maintenance; and Temporary Ford Stream Crossing.

The assessor is not satisfied that compliance with the Act and Regulations listed above will satisfactorily eliminate, reduce or control the potential significant adverse effects of the project on fish and fish habitat. The assessor believes that without further mitigation, the project could still result in significant adverse effects to fish and fish habitat as a result of the above project activities.

3.3 Mitigations

The following mitigative measures shall be complied with in order to eliminate, reduce or control potentially significant, adverse effects of the proposed project, as they relate to fish and fish habitat.

- Petroleum products shall not be allowed to spread to surrounding lands or into water bodies.
- DFO should be notified of activities for new culvert and non-clear span bridge installations, and for multiple stream fordings.
- All water withdrawals must be screened to prevent the entrainment of fish. Standards for screening can be found in DFO's *Freshwater Intake End-of-Pipe Fish Screen Guidelines*.
- If clear span bridges are used to cross watercourses, the proponent must comply with the conditions laid out in *Pacific Regional Operational Statement-Clear-Span Bridges*.
- The proponent shall ensure that all trenches and sampling pits are backfilled with a suitable material and are capped and leveled in such a manner that infiltration by water and air, and the subsequent exposure of

sulphide bearing material to these elements, is minimized/prevented.

- The proponent shall conduct periodic sampling throughout the exploration program to obtain data on the potential for ARD as a result of undertaking exploration activities. If the results of the sampling program or further geochemical testwork indicate a potential problem with ARD, the proponent shall develop and implement an appropriate mitigation strategy to deal with potential effects.

4. Land Interest

4.1 Temporal and spatial overlap summary

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, approximately 160 km northeast of Ross River. The Yukon portion of the project is located within the upper Pelly River watershed on Don Creek.

The proposed project is located in the Traditional Territories of the Kaska, which includes the Ross River Dena Council and the Liard First Nation. The project footprint encompasses 26,668 ha and overlaps with 2 Outfitting Concessions areas (#20 & #22), 1 Registered Group Trapline Concession (405), and has a contiguous boarder with Liard First Nation's Interim Protected Land selection R-137B. Project activities that have the potential to overlap with these land interests include the use of heavy equipment, clearing, upgrading the existing access roads, establishing trails and new access roads, trenching, fuel use and storage, and reclamation. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

4.2 Effects characterization and significance determination

Trapping

Trapping within the Yukon is an important source of revenue for many individuals in the winter. Project activities which disturb or damage traps, snares and other trapping equipment within the area may significantly affect the trapping concession holder's ability to harvest fur bearing animals and therefore affect trapping success. Failure to restore affected trapping areas could result in significant effects, by means of damage to the trapper's equipment, and/or impact accessibility to the trapline.

Outfitting

Wildlife stocks within the area, which the outfitters relies on for business, may be affected by project activities that cause wildlife to avoid the area. Improved access into the area that may attract and allow other users, including recreational and subsistence hunters, easier access to resources. The proposed project is located in an area that is known to have extensive past and present disturbance from exploration activities. As such, there is a potential for wildlife stocks to be affected by increased access and other disturbances associated with project activities, which could result in reduced hunting opportunities for the concession holders. Such effects could lead to client dissatisfaction and may potentially affect the success of an outfitting business. However, no concerns were submitted in relation to project effects on the outfitting business.

Interim Protected Settlement Land

The proposed project's southeast boarder is contiguous with Liard First Nation's Interim Protected Land selection R-137B. Project activities may directly increase the ease and usability of existing camps and trails by the public that are not members of the Liard First Nation. Increased presence of humans within the area may affect and compromise the Interim Protected Settlement Land. Project activities that alter the local surficial

geology, and removes/modify vegetation and/or habitat have the potential to change the physical and productivity characteristics within a watershed landscape. These changes may affect the values upon which the land was chosen. Effects caused to the land as a result of project activities could be in the form of soil instability, erosion, damage to wildlife habitat, displacement/avoidance of wildlife from the area, and removal of the plants traditionally harvested by Liard First Nation members.

4.3 Mitigations

The following mitigative measures shall be complied with in order to eliminate, reduce or control potentially significant, adverse effects of the proposed project, as they relate to land interests.

- The proponent shall make every effort to avoid disturbing, covering or destroying set traps or snares and trapping equipment encountered within the project area.
- The proponent shall remediate any obstructions caused by their activities on trails used by trappers along the access routes by slashing any and all trees that may fall across these paths or trails and by removing any other obstructions that may be pushed across the trails.
- The proponent shall use existing access where possible. All new and up-graded roads/accesses shall be shutdown seasonally.
- The proponent shall contact other land users within the area, primarily LFN, RRDC, , the trapper, and the outfitters, prior to undertaking the project. *The intent of this mitigation is to identify any areas that may be used by the affected parties, with the aim of reducing any conflicts that may arise from overlapping land uses.*

5. Health and Safety

5.1 Temporal and spatial overlap summary

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, approximately 160 km northeast of Ross River. The Yukon portion of the project is located within the upper Pelly River watershed on Don Creek. The proposed project will accommodate up to 100 persons at two camp locations. Project activities that have the potential to overlap with health and safety include the use of heavy equipment, handling and storage of fuel, camp operations, and waste management. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

5.2 Effects characterization and significance determination

Use of Heavy Equipment

Workers may encounter safety concerns while carrying out project activities. These include, but are not limited to, use of heavy equipment, storage and handling of petroleum products, and earthworks. Poorly serviced equipment, improper operation, careless use, and failure to observe safety practices and measures may result in serious injuries or death to the field crew. The likelihood of these effects occurring is low, but if they were to occur, the effects on those involved could be significant and adverse.

Camp facility operations

The camp facility operations may also increase the potential for impacts on human health through contamination of soil and potable water supplies, and by improper handling/disposal of waste (human and domestic). The uncontrolled release of sewage into the environment by way of improper storage or containment may pose a significant risk to human health due to water-borne diseases and parasites. Effects can

range from minor gastrointestinal problems associated with some parasites, to kidney failure and death, as known to occur with some strains of bacteria. Unsanitary food preparation and clean-up also increases the risk of camp occupants coming into contact with germs and bacteria. Bacteria, such as *Salmonella sp.*, causes food poisoning, and effects can range from vomiting to death.

Workers' safety may also be affected when project activities cause a disturbance or threaten large mammals within the area. Camp wastes that are not handled appropriately may attract wildlife to the project site, as described above in section 1.1 *Wildlife and Wildlife Habitat*. Animals such as bears, wolves and foxes that gain access to human foods or wastes, either as a result of being disturbed from foraging grounds, actively fed by humans, or by making "raids" on food and garbage containers often result in human-wildlife conflicts that can lead to the destruction of animals in order to preserve human safety and property.

The assessor has considered the requirements of the following legislation:

- 1) *Occupational Health and Safety Act*, specifically sections 3, 4, 7, 9, 11, and 15 respecting the reduction and management of potential safety hazards;
- 2) Sewage Disposal Systems Regulations (O.I.C. 1999/82), section 17 prohibiting the construction of a pit-privy within 30 m of any potable water source, and sections 26-27 and 30, respecting the standards for the construction, installation and maintenance of a pit-privy, including the requirement that the pit-privy be emptied, replaced, and/or abandoned when sewage is within 46 cm of the ground surface; and,
- 3) *Wildlife Act*, section 92 – 93, which prohibit the harassment of wildlife and any activities that may result in the creation of nuisance and/or dangerous wildlife.

The assessor is of the opinion that compliance with the above legislation will provide adequate mitigation for the elimination, reduction or control of potential significant, adverse effects of the proposed project on health and safety.

Cumulative Effects Assessment

A. Temporal and Spatial Scope Summary and Residual effects

The principal activity of the proposed project is to conduct quartz exploration on the Selwyn claims and leases. The Selwyn Project straddles the Yukon Territory and Northwest Territories border, approximately 160 km northeast of Ross River. The Yukon portion of the project is located within the upper Pelly River watershed on Don Creek. The project operation schedule is from January 1st to December 31st annually over the next 5 years.

Existing and Past Activities

1. Quartz Exploration

There are several active and inactive mineral claims within approximately 25 km of the proposed project area. Potential effects that may have occurred from mineral exploration would be similar to those for the proposed project and may include:

- contamination of soil and/or water by fuel, sewage, and/or garbage and other wastes left on site or disposed of improperly,
- injury to wildlife species when they become trapped in trenches and through the ingestion of contaminants,
- wildlife habitat alteration/fragmentation,
- potential increase in predation and hunting due to increased access via existing/new roads/trails,

- soil disturbance resulting in increased deposition of sediments into waterbodies, affecting fish and fish habitat, and
- habituation of wildlife, which may have lead to human-wildlife conflicts.

2. Selwyn Resources Winter Trail

In 2006 an assessment under *YESAA* was conducted on a proposed winter trail from the Robert Campbell Highway (165 Km southeast of Ross River) to the Selwyn exploration program at Howard's Pass (Yukon/NWT Border, SE Yukon). The trail was used for moving supplies and equipment to the exploration site during the winter months of 2007 and 2008. Potential residual effects that were anticipated for this proposed activity included:

- wildlife disturbances including loss of functional range, habitat fragmentation, increase in predation and hunting, and a decline in population stocks;
- deposition of sediments and contaminants into watercourses which would affect fish and fish habitat; and
- soil disturbances as a result of a decrease in soil stability, long-term erosion and contamination.

The assessment concluded that the project was not likely to contribute to significant cumulative effects once the mitigation measures identified in the report were implemented.

There are no future projects in the area known to the assessor at this time nor were any identified in the course of this assessment.

B. Residual effects interaction and significance determination

Potential residual effects that may occur from the proposed project could include contamination of soil and/or water by fuel, sewage and garbage or other wastes left on site or disposed of improperly, wildlife disturbances during key life stage and habitat alteration/fragmentation, and soil disturbance resulting in increased deposition of sediments into waterbodies which may affect fish and fish habitat. Various studies are available that points to the disturbances caused by certain activities on wildlife, for example aircraft use, liner developments, human presence etc. The proponent has well established Standard Operating Procedures for Employees and Contractors. (YOR document # 2008-006-1) Their Operating Procedure includes the use and implementation of the best practices documents on *Flying in Sheep Country* and *Flying in Caribou Country*.

The residual effects identified above are expected to be short-term and localized, with the exception of and water contamination, and wildlife disturbances. It is anticipated that the implementation of the mitigation measures recommended in this report would reduce the likelihood of significant residual effects occurring as a result of the project. Specifically, the wildlife mitigations largely speak to the avoidance of certain habitats during critical periods and place the responsibility on the proponent to refrain from accessing those areas during the time when disturbances can cause significant and adverse effects on key wildlife values. The absence of significant residual effects is expected to decrease the likelihood of the proposed project contributing to significant cumulative effects.

9) Designated Office Recommendation

The Watson Lake Designated Office, in concluding its evaluation of Project #2008-0280, pursuant to Section 56(1) of the Yukon Environmental and Socio-economic Assessment Act:

<input type="checkbox"/>	S56 (1)(a)	recommends to the decision body(ies) that the project be allowed to proceed, as the Designated Office has determined that the project will not have significant adverse environmental or socio-economic effects in or outside Yukon;
<input checked="" type="checkbox"/>	S56 (1)(b)	recommends to the decision body(ies) that the project be allowed to proceed, subject to specified terms and conditions, as the Designated Office has determined that the project will have significant adverse environmental or socio-economic effects in or outside Yukon that can be mitigated by those terms and conditions;
<input type="checkbox"/>	S56 (1)(c)	recommends to the decision body(ies) that the project not be allowed to proceed, as the Designated Office has determined that the project will have significant adverse environmental or socio-economic effects in or outside Yukon that cannot be mitigated; or
<input type="checkbox"/>	S56 (1)(d)	refers the project to the Executive Committee for a screening, as the Designated Office cannot determine whether the project will have significant adverse environmental or socio-economic effects after taking into account any mitigative measures included in the project proposal.

56(1)(b) Recommended Terms and Conditions for the Project

The following mitigative measures shall be complied with:

1. The proponent shall keep all garbage, including kitchen waste, in a container that prevents access by bears and other wildlife until properly disposed of in accordance with the Solid Waste Regulations. When burning kitchen waste on site, it must be burned regularly to reduce odours that might attract wildlife and be burned to ash by forced air or fuel fire incineration.
2. The proponent shall equip each camp infrastructure including but not limited to kitchen/dining facilities, sleeping accommodations, daily solid waste storage, incinerator, and privy/wash house facilities, with an electric fence and ensure it is in good working order throughout the duration of camp occupancy.
3. Block or gate main access road into the project area to restrict secondary users, such as hunters, snowmobiles, and all-terrain vehicles.
4. The proponent shall backfill trenches, or construct trenches with a ramp at one end of the structure to provide an exit for potential wildlife entrapment.
5. When aircraft is used for project activities, pilots shall avoid flying over raptor nesting sites.
6. No exploration activity within 1 km of known raptor nest.
7. No project activities or helicopter flights shall occur within 1 km of mapped spring sheep lambing areas from May 1st – June 15th, and sheep winter range during the winter period of October 1st to May 30th each year.
8. The proponent shall use existing accesses and previously disturbed sites where possible. All roads/accesses shall be shutdown seasonally.
9. Progressive reclamation of all sites shall occur as soon as it obvious that no further work will be done at the site.
10. The proponent shall maintain a log of wildlife encounters throughout the duration of the project. This log should be extended to monitoring the effects of the project in respect to its impact on wildlife and wildlife habitat.
11. Avoid helicopter flights over areas where caribou are concentrated on their winter range or during the fall rut.
12. Where conditions permit, helicopters should remain 600m above ground level when flying over caribou or other wildlife.
13. Petroleum products shall not be allowed to spread to surrounding lands or into water bodies.
14. DFO should be notified of activities for new culvert and non-clear span bridge installations, and for multiple stream fordings.
15. All water withdrawals must be screened to prevent the entrainment of fish. Standards for screening can be found in DFO's *Freshwater Intake End-of-Pipe Fish Screen Guidelines*.
16. If clear span bridges are used to cross watercourses, the proponent must comply with the conditions laid out in *Pacific Regional Operational Statement-Clear-Span Bridges*.
17. The proponent shall ensure that all trenches and sampling pits are backfilled with a suitable material and are capped and leveled in such a manner that infiltration by water and air, and the subsequent exposure of sulphide bearing material to these elements, is minimized/prevented.

18. The proponent shall conduct periodic sampling throughout the exploration program to obtain data on the potential for ARD as a result of undertaking exploration activities. If the results of the sampling program or further geochemical testwork indicate a potential problem with ARD, the proponent shall develop and implement an appropriate mitigation strategy to deal with potential effects.
19. The proponent shall make every effort to avoid disturbing, covering or destroying set traps or snares and trapping equipment encountered within the project area.
20. The proponent shall remediate any obstructions caused by their activities on trails used by trappers along the access routes by slashing any and all trees that may fall across these paths or trails and by removing any other obstructions that may be pushed across the trails.
21. The proponent shall use existing access where possible. All new and up-graded roads/accesses shall be shutdown seasonally.
22. The proponent shall contact other land users within the area, primarily LFN, RRDC, the trapper, and the outfitters, prior to undertaking the project.

10) Certification

Assessment Report Prepared By	
Signature Steven Jakesta	Date March 5, 2009
Authorized By	
Signature Steven Jakesta	Date March 5, 2009

Appendix I - Summary of Responses from Interested Persons and Others

Contributor	Document Ref #	Summary of Comments	Consideration for Use - used as valued component - information - basis for information request - potential project effect - possible mitigation - expert opinion - policy or position - outside scope of evaluation - beneficial effect/consideration complete
YG Environment	2008-0280-021-1	<p>In respect to the Yukon Environmental and Socio-economic Assessment Board project 2008-0280, Yukon Department of Environment Is:</p> <ul style="list-style-type: none"> • a Regulator and technical expert for the <i>Yukon Environmental and Socio-Economic Assessment Act</i> review of the Selwyn Project; and • conducting a technical review of the project proposal information provided by the proponent. <p>In our efforts to give full and fair consideration to the environmental assessment information, the technical review of the project proposal information provided by the proponent is not yet complete. Due to the remote location and large size of the Selwyn project, more time is required to sufficiently review the potential environmental impacts. In addition, our technical expert for the project area is currently on leave, and the extension will allow for him to adequately review the project and provide technical comments.</p> <p>We request that YESAB provide an extension to February 18, 2009 for completion of our technical review.</p>	<ul style="list-style-type: none"> • Information • Information • Extension Request
Yukon Conversation Society	2008-0280-023-1	<p>The Yukon Conservation Society has the following concerns about the above referenced project:</p> <p>Access If air access is to be used, has consideration been made on number and frequency of flights to the</p>	<ul style="list-style-type: none"> • Information • Potential project effect

	<p>project area? Numerous low flying air craft can have serious impacts on wildlife. Potential impacts will need to be mitigated by modifying routes, time of year, time of day etc.</p> <p>Access to the project is not clearly described in the proponent's application. If it is land based, which access route will be chosen? It is understood that in the past access has been from the Northwest-Territories, but will access for this particular project be in from the Yukon?</p> <p>Two land-based access routes are identified (but not clearly specified which one will be used) in the proponent's application:</p> <ol style="list-style-type: none"> 1) Winter Trail Access, Yukon Land Use Permit # YA6F 252 2) All Season Access, NWT Land Use Permit # MV2005F0028 <p>If land-based access is to be used for this project, which route will be used? What are the frequencies of vehicle movements on the route? What mitigative measures will be done to minimize impacts on wildlife, especially large ungulates? If the winter trail is to be used, what standards will be used to minimize impacts on surface flora and stream crossings?</p> <p>Cumulative Impacts The Selwyn Mountains are currently experiencing a flurry of YESAB applications from other resource extraction companies such as in the Canol Pass Region (the North American Tungsten Project, YESAB reference number 2008-0289).</p> <p>Will consideration be made of the cumulative affects this and other projects with their helicopter flights, access roads and winter trails will have on the entire region?</p> <p>While it is recognized that only a comprehensive land-use plan can realistically accomplish this, consideration of the multiple effects of multiple projects on an eco-region must be considered by YESAB at this stage until such time as land-use planning occurs.</p> <p>In addition, does consultation on project proposals formally occur with regulatory authorities on the Northwest Territories side of the border? Transboundary projects, while falling within the jurisdiction of two regulatory authorities, will also have environmental impacts on both sides of the border.</p> <p>Solutions or mitigations of environmental impacts within one jurisdiction might, or might not, be appropriate within the other. Without formal consultation between both jurisdictions these solutions or mitigations might not come to light.</p>	<ul style="list-style-type: none"> • Outside scope of evaluation • Outside scope of evaluation • Information • Potential project effect • Potential project effect • Information • Information
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<p>Department of Fisheries and Oceans</p>	<p>2008-0280-024-1</p>	<p>As requested, Fisheries & Oceans Canada has reviewed the project description to conduct quartz mining exploration on the Yukon portion of the Selwyn Resources Ltd. claims and leases property, provided by your office pursuant to subsection 55(4) of the <i>Yukon Environmental and Socio-economic Assessment Act</i>. Our review of this project was limited to an evaluation of possible effects to fish and fish habitat.</p> <p>Proposed project activities that may impact fish and fish habitat include:</p> <ul style="list-style-type: none"> • Vegetation clearing near watercourses as with: <ul style="list-style-type: none"> - trail upgrading, construction and maintenance - road upgrading, construction and maintenance • Bridge and culvert installations on streams • Equipment operation within and around watercourses • The deposit of deleterious substances in watercourses, including sediment • Withdrawal of water from streams associated with the property for camp and drilling use <p>From the project proposal and e-mail correspondence with Justin Himmerlight on February 11, 2009, it is also our understanding that:</p> <ul style="list-style-type: none"> ▪ there will be no significant activities within 30m of a watercourse beyond the watercourse crossings themselves; ▪ water use will be less than 300m³/day from watercourses associated with the property for camp, winter crossing and drilling use; ▪ the locations of trails and/or roads and subsequent watercourse crossings cannot be specified as yet since they will be developed in response to exploration findings; and ▪ work activities, where applicable, will comply with DFO Operational Statements listed in Appendix IV of the proposal which include: Maintenance of Riparian Vegetation in Existing Rights-of-Way; Ice Bridges and Snow Fills; Dry Open-Cut Stream Crossings; Culvert Maintenance; Bridge Maintenance; and Temporary Ford Stream Crossing. <p>Please be advised that activities such as new culvert and non-clear span bridge installations, and multiple stream fordings are not covered by the aforementioned DFO Operational Statements and may result in the harmful alteration, disruption or destruction of fish habitat. Therefore, DFO should be notified of such planned activities.</p> <p>Historic and recent fish distribution information indicates that burbot, arctic grayling, slimy sculpin and round whitefish have been found within lower Don Creek and associated tributaries</p>	<ul style="list-style-type: none"> • Information • Used as valued component • Potential project effect • Information • Possible mitigation • Information • Used as valued component

		<p>such as Anniversary Creek.</p> <p><u>Withdrawal of water from streams for camp and drilling use</u> Please be advised that the waters of Don and Anniversary creeks are Canadian Fisheries Waters. A requirement for fish screening is stated under Section 30 of the <i>Fisheries Act</i>, which states that any water intake withdrawing water from any Canadian fisheries waters must provide for a screen to prevent the passage of fish into the water intake.</p> <p>Based on the information provided, we have concluded that if the following mitigation measures are incorporated into the project plan, the project is not likely to result in the harmful alteration, disruption or destruction of fish habitat or the killing of fish by means other than fishing:</p> <ul style="list-style-type: none"> ▪ All means by which water is withdrawn from watercourses within the property must be screened or otherwise guarded to prevent the passage of fish from these waters. Standards for screening can be found in DFO's <i>Freshwater Intake End-of-Pipe Fish Screen Guidelines</i>, which can be viewed at: http://www.dfo-mpo.gc.ca/Library/223669.pdf ▪ Water withdrawal from the aforementioned creeks should be undertaken such that sufficient flow remains in the watercourse to prevent downstream impacts (e.g. temporary dewatering) to fish and fish habitat. <p><u>Watercourse crossings</u> Based on the information provided, we have concluded that if the following mitigation measures are incorporated into the project plan, the project is not likely to result in the harmful alteration, disruption or destruction of fish habitat:</p> <ul style="list-style-type: none"> ▪ If clear span bridges are used to cross watercourses, the proponent must comply with the conditions laid out in <i>Pacific Region Operational Statement - Clear-Span Bridges</i> (Appendix 1). This document can also be found at: http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/os-clear_span_e.htm <p>Provided the fish and fish habitat mitigation measures recommended are incorporated into the project plan, a <i>Fisheries Act</i> Authorization is not required for the project as proposed. As such, our Department is not a <i>Decision Body</i> in the assessment of this project.</p> <p>Please note that this advice is provided to satisfy the requirements of subsection 55(4) of the <i>Yukon Environmental and Socio-economic Assessment Act</i> and should not be taken to imply approval in accordance with the habitat protection provisions of the <i>Fisheries Act</i> or any other federal or territorial legislation.</p>	<ul style="list-style-type: none"> • Possible mitigation • Possible mitigation • Possible mitigation • Information • Policy or position
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		<p style="text-align: center;"><u>APPENDIX 1 - PACIFIC REGION OPERATIONAL STATEMENT CLEAR-SPAN BRIDGES</u></p> <p>This Operational Statement applies to the construction of small-scale bridge structures that completely span a watercourse without altering the stream bed or bank, and that are a maximum of two lanes wide. The bridge structure (including bridge approaches, abutments, footings, and armouring) is built entirely above the high water mark (HWM). A clear-span bridge is preferred to a culvert as no structures are placed on the stream bed and therefore there is no alteration of natural channel processes.</p> <p>Clear-span bridge construction has the potential to negatively affect riparian habitat. Riparian vegetation occurs adjacent to the watercourse and directly contributes to fish habitat by providing shade, cover and areas for spawning and food production. Only the vegetation required to accommodate operational and safety concerns for the crossing structure and approaches, within the right-of-way, should be removed. Stormwater run-off and the use of machinery can introduce deleterious substances to the water body and result in erosion and sedimentation.</p> <p>Fisheries and Oceans Canada (DFO) is responsible for protecting fish and fish habitat across Canada. Under the <i>Fisheries Act</i> no one may carry out a work or undertaking that will cause the harmful alteration, disruption or destruction (HADD) of fish habitat unless it has been authorized by DFO. By following the conditions and measures set out below you will be in compliance with subsection 35(1) of the <i>Fisheries Act</i>.</p> <p>The purpose of this Operational Statement is to describe the conditions under which it is applicable to your project and the measures to incorporate into your project in order to avoid negative impacts to fish habitat and maintain passage of fish. You may proceed with your clear-span bridge project without a DFO review when you meet the following conditions:</p> <ul style="list-style-type: none"> ▪ the bridge is placed entirely above the high water mark (HWM), ▪ there is no alteration of the stream bed or banks or infilling of the channel, ▪ the bridge is no greater than two vehicle lanes in width, does not include sidewalks and biking lanes and does not encroach on the natural channel width by the placement of abutments, footings or rock armouring below the HWM, ▪ the work does not involve the clearing of riparian vegetation – removal of select plants with the road right-of-way can occur to meet operational and/or safety needs, ▪ your project does not require multiple bridge crossings over the same watercourse, and ▪ you incorporate the <i>Measures to Protect Fish and Fish Habitat when Constructing Clear-Span Bridges</i> listed below in this Operational Statement. 	<ul style="list-style-type: none"> • Possible mitigation • Potential project effect • Possible mitigation • Policy or position • Policy or position • Possible mitigation
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	<p>If you cannot meet all of the conditions listed above and cannot incorporate all of the measures listed below then your project may result in a violation of subsection 35(1) of the <i>Fisheries Act</i> and you could be subject to enforcement action. In this case, you should contact the DFO office in your area if you wish to obtain DFO's opinion on the possible options you should consider to avoid contravention of the <i>Fisheries Act</i>.</p> <p>You are required to comply with all municipal, provincial, territorial and/or federal legislation that applies to the work being carried out in relation to this Operational Statement.</p> <p>Measures to Protect Fish and Fish Habitat when Constructing Clear-Span Bridges</p> <ol style="list-style-type: none"> 1. Minimize the riparian area temporarily disturbed by access activities along the adjacent upland property. Use existing trails, roads, or cut lines wherever possible to avoid disturbance to the riparian vegetation. 2. Avoid building on meander bends, braided streams, alluvial fans, active flood plains, or any other area that is inherently unstable and may result in the alteration of natural stream functions or erosion and scouring of the bridge structure, 3. While this Operational Statement does not apply to the clearing of riparian vegetation, the removal of select plants within the road right-of-way (ROW) may be required to meet operational and/or safety concerns for the crossing structure and the approaches. This removal should be kept to a minimum and within the road right-of-way. When practicable, prune or top the vegetation instead of uprooting. 4. Ensure that the clear span bridge is properly designed to address river and channel processes at flows above the ordinary high water mark. 5. Design and construct approaches so that they are perpendicular to the watercourse to minimize loss or disturbance to riparian vegetation. 6. Design the bridge so that stormwater runoff from the bridge deck, side slopes and approaches is directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity and prevent sediment and other deleterious substances from entering the watercourse. 7. Generally there are no restrictions on timing for the construction of clear-span structures as they 	<ul style="list-style-type: none"> • Policy or position • Information • Possible mitigation • Possible mitigation • Possible mitigation • Possible mitigation • Possible mitigation • Possible mitigation
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		<p>do not involve in-water work. However, if there are any activities with the potential to disrupt sensitive fish life stages (e.g., crossing of watercourse by machinery), these should adhere to appropriate fisheries timing windows.</p> <p>Machinery fording the watercourse to bring equipment required for construction to the opposite side is limited to a one-time event (over and back) and should occur only if an existing crossing at another location is not available or practical to use. <i>A Temporary Ford Stream Crossings Operational Statement</i> is also available.</p> <p>7.1. To exercise this option, the stream bed at the fording site must be comprised of stable gravel or bedrock and the stream banks must be low and stable.</p> <p>7.2. If minor rutting is likely to occur, stream bank and bed protection methods (e.g., swamp mats, pads) should be used provided they do not constrict flows or block fish passage.</p> <p>7.3. Grading of the stream banks for the approaches is not permitted.</p> <p>7.4. If the stream bed and banks are steep and highly erodible (e.g., dominated by organic materials and silts) and erosion and degradation are likely to occur as a result of equipment fording, then a temporary crossing structure or other practice should be used to protect these areas.</p> <p>7.5. Time the one-time fording to prevent disruption to sensitive fish life stages by adhering to appropriate fisheries timing windows.</p> <p>7.6. Fording should occur under low flow conditions and not when flows are elevated due to local rain events or seasonal flooding.</p> <p>8. Install effective sediment and erosion control measures before starting work to prevent the entry of sediment into the watercourse. Inspect them regularly during the course of construction and make all necessary repairs if any damage occurs.</p> <p>9. Operate machinery on land (above the HWM) and in a manner that minimizes disturbance to the banks of the watercourse.</p> <p>9.1. Machinery is to arrive on site in a clean condition and is to be maintained free of fluid leaks, invasive species and noxious weeds.</p> <p>9.2. Wash, refuel and service machinery and store fuel and other materials for the machinery away from the water to prevent any deleterious substance from entering the water.</p> <p>9.3. Keep an emergency spill kit on site in case of fluid leaks or spills from machinery.</p> <p>9.4. Restore banks to original condition if any disturbance occurs.</p>	<ul style="list-style-type: none"> • Information • Policy or position • Information • Possible mitigation • Possible mitigation • Possible mitigation
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		<p>10. Use measures to prevent deleterious substances such as new concrete (i.e., it is pre-cast, cured and dried before use near the watercourse), grout, paint, ditch sediment and preservatives from entering the watercourse.</p> <p>11. No debris to remain within the high-water mark or placed into a stream.</p> <p>12. Stabilize any waste materials removed from the work site to prevent them from entering the watercourse. This could include covering spoil piles with biodegradable mats or tarps or planting them with preferably native grass or shrubs.</p> <p>13. Vegetate any disturbed areas by planting and seeding with native trees, shrubs or grasses and cover such areas with mulch to prevent erosion and to help seeds germinate. All seeding and/or planting trees should follow the DFO guidance on Riparian Revegetation. If there is insufficient time remaining in the growing season, the site should be stabilized (e.g., cover exposed areas with erosion control blankets to keep the soil in place and prevent erosion) and vegetated the following spring.</p> <p>13.1. Maintain effective sediment and erosion control measures until re-vegetation of disturbed areas is achieved.</p>	<ul style="list-style-type: none"> • Possible mitigation • Possible mitigation • Possible mitigation • Possible mitigation
GNWT Department Environment and Natural Resources	2008-0280-026-1	<p>The Government of the Northwest Territories (GNWT) would like to provide comments to the Yukon Environmental and Socio-economic Assessment Board (YESAB) regarding the Selwyn Resources Ltd. exploration project proposal.</p> <p>We have reviewed the information posted on your public registry and understand that Selwyn Resources Ltd. (Selwyn) is applying to renew the Mining Land Use Approval (LQ00017) that they have been working under for the past three years for another 5 years (2009 – 2014).</p> <p>The GNWT is also participating in the Mackenzie Valley Environmental Impact Review Board (MVEIRB) environmental assessment that is currently underway for the Northwest Territories portion of the Selwyn project and we see it as a great opportunity to be to evaluate and contribute to the project as a whole. The MVEIRB environmental assessment information can be found at http://reviewboard.ca/registry/index.php?btn=Search&active_flag=&company_id=32&project_id=48(EA0708-001 Selwyn Resources Ltd. Mineral Exploration).</p> <p>COMMENTS The Government of the Northwest Territories comments on Project Proposal documents are provided below regarding the Selwyn Resources Ltd. (Selwyn) Exploration Project Proposal</p>	<ul style="list-style-type: none"> • Information • Information • Information • Information

	<p>application renewal of the Yukon Mining Land Use Approval (LQ00017) (YESAB Project Number 2008-0280). Comments focus on trans-boundary issues.</p> <p>Appendix A – Project Proposal</p> <p><i>Waste management – Open Burning</i></p> <p>In 2000 and 2001 respectively, the Canadian Council of Ministers of the Environment (CCME) endorsed the Canada-Wide Standards (CWS) for Mercury Emissions¹ and for Dioxins and Furans², which apply to waste incineration and contain emission limits for these toxic contaminants. The Government of Canada, the Government of the Northwest Territories (GNWT), and the Yukon Government are signatories to these CWS and have committed to implement them in their respective jurisdictions. The open burning of unsegregated solid waste and the resulting emissions is inconsistent with the commitment to meet these standards.</p> <p>The Proponent indicates that food wastes, packaging materials, waste paper, wood scraps, sorbent pads and rags are open-burned at permitted locations (pg. 30 Project Proposal Form 1 (section 18). The Department of Environment and Natural Resources (ENR), GNWT, understands that this practice is regulated by the Yukon Department of Environment through the issuance of a Commercial Dump Permit #81-011 for both Selwyn’s Don Camp and XY Camp located ~2km and ~1km away from Northwest Territories border, respectively. And, through the issuance of Air Emissions Permit (4201-60-023), Selwyn has been authorized to open burn solid waste in volumes greater than 5kg per day (4201-60-023). ENR understands that these Permits, along with a Special Waste Permit (#42-045), expire December 31, 2009.</p> <p>While ENR understands that Selwyn is complying with its Air Emissions Permit, ENR does not support the practice of open burning unsegregated solid waste that can result in the production of persistent, bioaccumulative and toxic air contaminants. These contaminants are transported through the air and result in negative impacts to air quality and in the deposition of these contaminants to land and water. Given the proximity of the Selwyn operations to the Yukon and NWT border, there is a potential for transport and deposition of contaminants to air, land and water to the NWT side of the border. The GNWT has previously discussed its concerns regarding the open burning of waste by Selwyn in GNWT’s September 26, 2008 Information Request letter to the Mackenzie Valley Environmental Review Board. Selwyn’s December 5, 2008 responses to the GNWT September 26 Information Requests is attached. The open burning of waste information request and response can be found on pages 13 and 14.</p>	<ul style="list-style-type: none"> • Potential project effect • Information • Information • Policy or position • Potential project effect • Information
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	<p>¹ http://www.ccme.ca/assets/pdf/mercury_emis_std_e1.pdf ² http://www.ccme.ca/assets/pdf/d_and_f_standard_e.pdf</p> <p>In striving to meet these CWS standards for Mercury Emissions³ and for Dioxins and Furans, the only wastes that ENR supports as suitable for open burning are paper products, paperboard packing (cardboard) and untreated wood wastes, as described in the ENR publication <i>Municipal Solid Wastes Suitable for Open Burning</i>⁴</p> <p>Hence, given the proximity of the Selwyn operations to the Yukon/NWT border, and the potential impacts to the NWT resulting from of the open burning of solid waste, ENR requests that any future burning permits be altered as to ensure that appropriate incinerator technology is used that strives to meet the CWS standards for Mercury Emissions and for Dioxins and Furans.</p> <p>Appendix IV - Standard Operating Procedures</p> <p><i>SOP for Preserving Wildlife and Wildlife Habitat during Project Activities</i></p> <p>Many of the Operating Procedures outlined in this document are positive with respect to staff and wildlife safety. For example, GNWT supports the Proponents commitment to cease activity if wildlife are within 500 meters of the road. However, there is not enough guidance in this document to ensure that staff/wildlife interactions will not result in harm to wildlife, and/or destruction of wildlife habitat, and/or the need for defence of life/property kills.</p> <p>For example the SOP states:</p> <ul style="list-style-type: none"> • Avoid bears whenever possible, and be aware of your surroundings when working in bear country. Try to avoid surprising a bear by making your presence known when working in the field. Additional information is available at camp or from the on-site environmental staff. <p>The SOP does not indicate what employees should do if avoidance of bears is not possible, thus increasing the probability of bear mortality (and staff safety issues) should bears occur in the project area. There is also no indication of what types of actions should be undertaken if bear (or wolverine) dens are located. This poses a potentially serious safety hazard for staff and denning wildlife.</p> <p>The SOP states:</p> <p>Migratory birds are protected in Canada under the <i>Migratory Birds Convention Act</i>. The collection</p>	<ul style="list-style-type: none"> • Possible mitigation • Possible mitigation • Potential project effect • Possible mitigation • Used as valued component • Potential project effect
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	<p>or destruction of birds, their nests, or their eggs is illegal. The disruption of nesting migratory birds is prohibited. All stick nests (including inactive nests) are protected under the <i>NWT Wildlife Act</i>. Destruction of these nests is illegal.</p> <p>³ http://www.ccme.ca/assets/pdf/mercury_emis_std_e1.pdf</p> <p>⁴ http://www.enr.gov.nt.ca/library/pdf/eps/burning.pdf.</p> <p>The SOP does not indicate how staff should proceed if an active nest is encountered, or where nests may be located (particularly for species at risk). Also, there is no indication of the time period when nests may be active (at which time extra care should be taken to not disturb nesting birds). This information would be useful to help Staff be aware of the likelihood of encountering nests, specifically active nests.</p> <p>The SOP states:</p> <ul style="list-style-type: none"> • If you encounter wildlife or a habitat area and you are unclear on how to proceed, contact Selwyn’s on-site environmental program staff for guidance. <p>To make the SOP more “user friendly” the Proponent should have a specific name, and/or title, and/or radio contact information for staff to use should they encounter wildlife. In addition, the SOP does not indicate whether or not wildlife has the right of way in any given situation. A lack of guidance in this regard may lead to unwanted staff/wildlife interaction, and potential wildlife/staff health and safety problems.</p> <p>In summary of this section, the SOP for preserving wildlife and wildlife habitat does not contain adequate detail to be a useful document for staff nor will the SOP in, its present form, ensure staff and wildlife safety, and the preservation of wildlife habitat.</p> <p>The section of the SOP that addresses the actions triggered by the occurrence of a Federally or Territorially listed Species at Risk does not contain the detail required under the <i>Species at Risk Act</i> (SARA). Section 79 of the SARA states that adverse effects on listed species must be identified and assessed and, regardless of significance, mitigated and monitored. In the view of GNWT, species listed as endangered, threatened and of special concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) should be treated consistently with those listed on Schedule 1 of SARA.</p> <p>The SOP does not properly identify the species at risk that may occur in the project area, nor does it identify potential adverse effects, mitigation, or provide adequate guidance for the monitoring of</p>	<ul style="list-style-type: none"> • Potential project effect • Information • Potential project effect • Possible mitigation • Possible mitigation • Information • Used as valued component • Potential project effect
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	<p>species at risk should they be encountered by employees.</p> <p>The list of species at risk in the SOP is incomplete. The proponent should also include:</p> <ul style="list-style-type: none"> • Olive Sided Flycatcher (Special Concern) • Common Nighthawk (Special Concern) • Short Eared Owl (Special Concern) <p>Because of the low level of detail provided in this SOP, GNWT recommends that the Proponent submit a detailed wildlife protection plan to ensure that wildlife, wildlife habitat, and staff are protected for the duration of the project. The GNWT also requests the company to commit to submitting their wildlife logs to regional GNWT biologists on a regular basis. This will help facilitate monitoring activities of species that occur in the Yukon and the NWT (trans-boundary monitoring), and cumulative effects research.</p> <p><u>Responses to DAR IR#2 from Selwyn Resources, Justin Himmelright</u></p> <p>IR Number: IR0708-001-01 Source: GNWT To: Selwyn Resources DAR Section: 11 Issues: Heritage Resources</p> <p>Preamble The DAR makes the following assessment of direct and indirect impacts on archaeological sites: “There are no known archaeological sites in the development area, so no direct or indirect impacts to sites are anticipated.” This assessment fails to account for potential impacts on unrecorded heritage resources in the development area. This area has never been inspected in detail by an archaeologist; thus, the locations and characteristics of potential heritage resources in the development area comprise an information gap in the DAR. A heritage resource impact assessment of the development area would resolve this information gap and facilitate a more accurate assessment of direct and indirect impacts to heritage resources.</p> <p>Request</p> <ol style="list-style-type: none"> 1. Will the proponent conduct a heritage resource impact assessment of their project area before beginning development activities? 2. If yes, please provide details on the planned methodology and timeline of this assessment. 	<ul style="list-style-type: none"> • Information • Possible mitigation • Policy or position • Possible mitigation
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		<p>3. If no, please provide a rationale for not doing this assessment and explain what steps will be taken to protect unknown heritage resources that may be found in the project area.</p> <p>Response</p> <ol style="list-style-type: none"> 1. We will not be conducting a formal archaeological survey of the project area prior to drilling. All work sites (trails, drill pads, etc.) are reconnoitered prior to disturbance. This process is undertaken to ensure that valued features, including heritage resources, are not disturbed. See our SOP on Heritage Protection in Appendix I of the DAR. 2. See above. 3. In mineral exploration programs, the selection of sites for drilling is progressive in nature and is based on a continually evolving understanding of the mineralized strata, including information attained from recently completed drill holes. Thus, knowledge gained from each completed drill hole affects the placement of subsequent drilling sites. For this reason it is not possible to plan specific sites for future drilling with any certainty (see pg 2 on page 15 of the DAR). Given this uncertainty, having company staff reconnoiter and inspect potential drill sites in advance of drill sitting and placement is believed to be an appropriate procedure to guard against impacts to potential heritage resources. <p>Additional notes.</p> <p>The Project area is in a remote location, and there is little information to suggest there has been any historic use of the Howard's Pass area. There are no recorded archaeological sites on either the YT or NT sides of the border at Howard's Pass, there are no fish-bearing streams, and no permanent ice patches. An Archaeological Overview Assessment (AOA) was recently completed for the YT portion of the Project, where the project is sufficiently advanced to warrant such research, this past summer. No archaeological sites were identified and the area was assessed to hold low archaeological potential. Traditional knowledge studies conducted in Tulita in 2006 (included in Land Use Permit application documents) indicated no traditional use of the area in the memory of community elders. This is further supported by research presented in the Sahtu Atlas¹ where historic access and transport routes are shown and there are none in the vicinity of the Project area.</p> <p>In summary there is very low risk to archaeological sites from this work; there are unlikely to be any in the area, the geographic extent of ground disturbance is small and diffuse, and all work sites are reconnoitered in advance of disturbance to prevent impact to previously unrecorded sites.</p> <p>¹ The Sahtu Atlas: Maps and Stories from the Sahtu Settlement Area in Canada's Northwest Territories. Sahtu GIS Project, 2005.</p>	<ul style="list-style-type: none"> • Information • Information • Information • Information
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		<p>IR Number: IR0708-001-02 Source: GNWT To: Selwyn Resources DAR Section: 10 Issue: Wildlife Protection Plan</p> <p>Preamble GNWT-ENR has reviewed a Wildlife Protection Plan (WPP) for the Selwyn Resources Ltd. Project Access Road (LUP MV2005F0028). The WPP “includes a description of physical measures to be put in place by the Operator (Selwyn Resources) to limit impacts to wildlife as well as the operational procedures and practices to be followed by employees and contractors”. At present there is no WPP, nor is there a wildlife management plan (WMP) for the mineral exploration program at Howard’s Pass.</p> <p>Requests</p> <ol style="list-style-type: none"> 1. Please clarify if the WPP created for the Selwyn Resources Ltd. Project Access Road will also apply to the proposed mineral exploration program? If not, provide a rationale. 2. If the WPP submitted for the Access Road will not also apply to the mineral exploration program, will the developer be developing a WPP and/or a WMP specific to this development? 3. Will these plans take into account potential cumulative effects of both the NWT and the Yukon developments, particularly as these developments may impact woodland caribou? <p>Responses</p> <ol style="list-style-type: none"> 1. The WPP was submitted to the Mackenzie Valley Land and Water Board as a requirement of a Land Use Permit that has been issued to Selwyn by that Board, and is unrelated to the Mackenzie Valley Environmental Impact Board’s assessment of Selwyn’s proposed mineral exploration program. Further, the WPP for the access road is not appropriate for the mineral exploration program, as the activities on the access road (transport) are dissimilar to activities on mineral claims (drilling). We note that Standard Operating Procedures (SOPs) included in the WPP for the access road are adhered to company wide, regardless of the jurisdiction in which the activity is to take place. 2. Selwyn will not be developing a WPP or WMP for the mineral exploration program. Selwyn’s updated SOP on “Preserving Wildlife and Wildlife Habitat during Project Activities” (Sept 2008) will be adhered to. This document was used in the WPP, and is attached to this response for reference. 	<ul style="list-style-type: none"> • Information • Potential project effect • Information • Possible mitigation
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		<p>3. SOPs are developed to protect natural features, and are adhered to as a matter of Company policy regardless of jurisdiction.</p> <p>IR Number: IR0708-001-03 Source: GNWT To: Selwyn Resources DAR Section: 10 Issue: Potential Wildlife Impacts</p> <p>Preamble GNWT-ENR is concerned about the timing of the drill program (June-November). In the maps provided in the DAR, it appears that both the Nahanni and the Finlayson herds have occurred in the vicinity of the project area during calving, post calving and the fall rut in 2007 and 2008. There is a decreased occurrence of caribou during the late winter. The DAR states that the “movement of caribou (into the project area) continues through June to peak of post-calving in July” (p. 64), and “there is limited use of the project area during the fall rut” (p.65). In addition, the use of the area is “primarily associated with movement to/from other habitats” (p. 69). The DAR also states that drilling will occur on 0-4 drill rigs at any given time, on a 24 hour basis (p. 70), and that helicopter support flights will vary with the number of active exploration drill sites (p. 70). The DAR lists numerous studies that indicate that there area negative effects (potentially including low calf survival) to caribou when they are exposed to disturbance from aircraft, specifically during post calving (p. 71). The DAR also states that some animals are more susceptible to aerial disturbance (including caribou and grizzly bears) than others (such as moose or wolves). The drilling program, as described in the DAR, consists of two categories: exploration drilling and definition drilling. Exploration drilling is helicopter supported, where as definition drilling is largely land supported. The 25 exploration sites are widely dispersed on the landscape (fig. 3 & 4), whereas the 75 definition drilling sites are relatively concentrated into one area.</p> <p>Requests 1. Given that the two caribou herds potentially impacted by this development (Finlayson & Nahanni herds) appear to be in decline, is it possible to restrict the drill program, and associated helicopter support, to exclude periods of times when caribou will likely be in the area and should not be disturbed, such as calving, post-calving and fall rut? 2. What is the estimated number of helicopter flights/drill rig/day for exploration drilling and for definition drilling? 3. In order to decrease the impact of over-flights on animals in the project area; can the proponent restrict helicopter flights to a frequently used, relatively narrow flight path that then branches off towards individual drill sites?</p>	<ul style="list-style-type: none"> • Used as valued component • Information • Potential project effect • Used as valued component • Possible mitigation
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	<p>4. The developer describes the drilling program in the NWT (100 holes total – 25 exploration & 75 definition) in the DAR. What is the drilling program in the Yukon Territory, and what are cumulative impacts (direct & indirect) on caribou of the combined NT & YT drilling programs?</p> <p>5. If caribou do venture into the development area during sensitive time periods, such as calving, post-calving and the fall rut, what is the developers proposed course of action in response? For example, would the presence of caribou trigger a cessation of drilling and other activities? Will this response be different if caribou are present in less sensitive time periods?</p> <p>6. How will caribou be monitored in the development area and in the surrounding area? How would the developer modify their development plan if a large number of animals move through development area? Does the developer have plans to work with Parks Canada, GNWT or the Yukon government to use collar data as a part of their program, as well as a means to monitor caribou?</p> <p>7. How will the developer monitor animal movements in the development area during October and November, when shorter days and fewer daylight hours will restrict visibility?</p> <p>Responses</p> <ol style="list-style-type: none"> 1. The northern limits of both herds extend into the proposed development area. Based on surveys during that season, caribou are not known to calve within the XY Nose or Anniv development areas due primarily to high snow levels that are typical at these elevations in May. Cows with calves have been noted to use these areas after calving (i.e., post-calving) once the snow levels have receded in subalpine and alpine habitats. After calving, caribou continue to move into the area and use habitats of the area, including the development areas, until they migrate to their respective rutting areas in fall. Due to the restrictive snow levels during the winter months, caribou are notably absent from the area between November and April. Similar to caribou, drilling activities generally occur during those months when snow loads and ambient temperatures are not overly restrictive. Selwyn will ensure that pilots operating in the area follow the best practices identified in <i>Flying in Caribou Country: How to Minimize Disturbance from Aircraft</i>². 2. The estimated number of helicopter flights/drill rig/day for exploration drilling is two (at shift change every 12 hours), plus occasional fuel delivery flights (once every few days). For definition drilling, the estimated number of helicopter flights/drill rig/day is zero. 3. Aircraft operating on behalf of Selwyn will operate according to its <i>Standard Operating Procedures for Preserving Wildlife and Wildlife Habitat during Project Activities (September 16, 2008)</i>, and to the best practices guidance document <i>Flying in Caribou Country: How to Minimize Disturbance from Aircraft</i>. Flight corridors between camps and drill sites will be selected on the basis of mitigations to wildlife, safety to crews and pilots, and efficiency of flights lines in terms of time spent and fuel consumption. To the 	<ul style="list-style-type: none"> • Potential project effect • Possible mitigation • Information • Possible mitigation
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		<p>extent possible Selwyn will ensure that aircraft will operate in a responsible and safe manner that minimizes potential impacts to caribou from aircraft over-flights.</p> <p>4. Drilling plans in the Yukon are covered under existing exploration permits issued by the Yukon Government, and are outside the scope of this assessment. The scale of the NWT operations under this review are small relative to work already underway in the Yukon. Adding a this small scale drill program in the NWT will have no significant effect on the cumulative impacts of the combined operation. Based on field experience from these existing operations, the effects to caribou from exploration work is low.</p> <p>²Mining and Petroleum Environmental Research Group (MPERG). 2008. Flying in Caribou Country: How to Minimize Disturbance from Aircraft. Whitehorse, YT. Available at: http://www.geology.gov.yk.ca/pdf/2008_1.pdf.</p> <p>5. Caribou have been documented to use habitats within the XY Nose and Anniv development areas during the post-calving and fall rut periods. As noted in the Selwyn SOP, active work will temporarily cease if caribou are visible from a work area (includes drill sites). This SOP is actively applied regardless of season. Experience from drilling operations directly adjacent in the YT to the XY Nose and Anniv development areas in the NT have shown that caribou will avoid or be temporarily displaced from the immediate area around an active drill site. They have been observed to move back into the area and continue to use the habitat once drilling operations have demobilized from a work area. The area of avoidance is typically small (caribou have been observed to use habitats within several hundred meters of active work areas) and associated timeline are typically short (active drilling on any given site is typically less than 2 to 3 weeks).</p> <p>6. Caribou will be monitored using a two-tiered approach that includes routine reporting wildlife observations, and wildlife survey. Caribou observed in the vicinity of active drill sites or along the flight path of helicopters will be reported to the Site Management and operational modifications applied per Selwyn SOP. When it is reasonably possible to do so, similar to studies that have been undertaken since 2007, Selwyn will continue to survey/monitor caribou in the vicinity of its claims/leases.</p> <p>Selwyn currently has a data sharing agreement with the Yukon Government (YG); and has accessed existing radio collar, composition count and population survey data for the Nahanni and Finlayson caribou herds. This data has been used to inform Selwyn's project planning and development activities since 2007. In addition, Selwyn partnered with the YG in 2007 to conduct fall composition counts for the Finlayson and Nahanni caribou herds; and the northern portion of the Finalyson range in 2008. Selwyn also</p>	<ul style="list-style-type: none"> • Information • Possible mitigation • Used as valued component • Information • Potential project effect • Possible mitigation • Possible mitigation • Information
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		<p>assisted YG in fall 2008 with the capture and collaring program for the Nahanni Caribou Herd. Selwyn is certainly willing to work with other agencies such as Parks Canada or GNWT in a similar manner.</p> <p>7. For the duration that Selwyn is in active operating in the development area, including October and November, routine monitoring will be undertaken by Selwyn. This will involve reporting of all wildlife observation to the Site Management, which will then be documented in Selwyn's Wildlife Log. The Wildlife Log will be reviewed regularly to determine any trends or issues associated with wildlife and the development. Mitigation measures will be adapted as needed to address any adverse trends. When it is reasonably possible to do so, Selwyn will conduct an aerial fall rut survey during the first week of October. Timing is consistent with the fall rut survey period for other northern woodland caribou herds.</p> <p>IR Number: IR0708-001-04 Source: MVEIRB To: Selwyn Resources DAR Section: 10 Issue: Wildlife Species at Risk</p> <p>Preamble Section 79 of the <i>Species at Risk Act</i> (SARA) states that adverse effects on listed species must be identified and assessed and, regardless of significance, mitigated and monitored. In the view of ENR, species listed as endangered, threatened and of special concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) should be treated consistently with those listed on Schedule 1 of SARA.</p> <p>Requests 1. What are the potential adverse impacts on other species at risk that may occur in the development area; these include wolverine and grizzly bears? Please consider both direct and indirect impacts. 2. How will the identified impacts be mitigated and monitored?</p> <p>Response <u>Question 1:</u> As identified in the Developer's Assessment Report, species considered to be of conservation concern in the project area include grizzly bear (page 58), and wolverine (page 60). Grizzly bear</p>	<ul style="list-style-type: none"> • Possible mitigation • Used as valued component • Information • Potential project effect
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	<p>and wolverine are listed as ‘special concern’ under COSEWIC and as sensitive under the NT General Status Ranking program. Grizzly bear is also listed under Appendix II of CITES. A summary of potential direct and indirect impacts for each species is provided in the section below.</p> <p>Grizzly Bear Both direct and indirect impacts to grizzly bear may occur in response to disturbances from the proposed development. Direct impacts may include mortality, in circumstances where grizzly bears pose a threat to personnel operating in the area or property. Indirect impacts may include avoidance or temporary spatial displacement due to noise or visual disturbances associated with drilling or helicopter operations. The duration of the potential effects will be intermittent when operations are occurring.</p> <p>Wolverine Both direct and indirect impacts to wolverine may occur as a result of the proposed development. Direct impacts may include mortality resulting from destruction of wolverine with problem or nuisance behaviours (e.g., destruction of property). Indirect impacts will be primarily associated with visual or noise disturbances from drilling or helicopter operations. Wolverine may temporarily avoid active work areas.</p> <p><u>Question 2:</u> To mitigate impacts to grizzly bears and wolverine, Selwyn will conduct project activities according to its <i>Standard Operating Procedures for Preserving Wildlife and Wildlife</i></p> <p><i>Habitat during Project Activities (version September 16, 2008)</i>. A copy of the standard operating procedures is attached.</p> <p>In addition, to minimize the potential for impacts to grizzly bears, project personnel will conduct activities in a manner consistent with Government of the Northwest Territories (GNWT) guidance document <i>Safety in Grizzly Bear and Black Bear Country</i>³. The general guidance documents <i>Flying in Caribou Country: How to Minimize Disturbance from Aircraft</i>⁴ and <i>Flying in Sheep Country: How to Minimize Disturbance from Aircraft</i>⁵ will be used to minimize potential impacts to wildlife from aircraft operating in the development area. All reasonable measures will be taken by Selwyn to minimize impacts to wildlife and wildlife habitat throughout all aspects of its operations.</p> <p>For the duration of the development period, routine monitoring will be undertaken by Selwyn.</p>	<ul style="list-style-type: none"> • Potential project effect • Potential project effect • Possible mitigation • Possible mitigation • Possible mitigation • Possible mitigation
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		<p>the NWT.</p> <p>In the view of ENR, open burning of waste material is an out-dated and inefficient method of disposing of solid wastes. The low temperature, smoldering nature of open burning tends to result in poor combustion of material, enhancing the emissions and production of toxic substances. Of particular concern is the potential to produce persistent, bioaccumulative and toxic contaminants such as chlorinated organics (e.g. dioxins and furans) and heavy metals (e.g. mercury).</p> <p>Although toxic contaminants are released to the atmosphere, their impacts are often expressed in other ecosystem components through processes of deposition and transfer. The dominant exposure pathways for wildlife are through vegetation and subsequent ingestion of that plant material by animals is the primary mechanism by which dioxins and furans enter the terrestrial food chain. Similarly, deposition onto soil, followed by erosion and runoff into water bodies with subsequent uptake by benthic organisms is the primary mechanism by which dioxins and furans enter the aquatic food chain.</p> <p>Due to the potential to cause adverse environmental impacts, ENR considers the open burning of non-segregated municipal solid wastes (camp waste) as an unacceptable waste management option. The only wastes that are suitable for open burning are paper products, paperboard packaging and untreated wood wastes as described in the document titled <i>Municipal Solid Wastes Suitable for Open Burning</i> available at www.enr.gov.nt.ca/eps/environ under the Waste Management Program heading.</p> <p>Requests</p> <p>1. Please demonstrate how open burning of solid waste at the XY and Don Camps will not result in the transport of toxic contaminants across the territorial border and subsequent deposition on lands and waters in the NWT.</p> <p>Responses</p> <p>1. Burning of solid waste at XY and Don Camps is done within the jurisdiction of the Yukon Territory, and is authorized by permits issued under the Yukon Environment Act, specifically under Yukon Air Emissions Permit 4201-60-023. These facilities are outside the watershed area of the Mackenzie Valley as such not subject the jurisdiction or mandate of the Mackenzie Valley Resource Management Act and the GNWT</p> <p>The subject of MVEIRB's Environmental Assessment #EA708-001 (of which this IR is a part) is Selwyn's application for a Type B Land Use Permit for mineral exploration in</p>	<ul style="list-style-type: none"> • Potential project effect • Potential project effect • Potential project effect • Information • Information
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		<p>the Northwest Territories (the Development) which does not include any authorizations for open burning. The open burning in question is outside the scope of the assessment and outside the jurisdiction and mandate of the Act on which the assessment is based.</p> <p><u>Additional Notes:</u> In the Yukon, open burning of over 5 kg of waste per day triggers the need for an Air Emissions Permit. Burning more than 50kg of waste per day triggers an environmental assessment under the Yukon Environmental and Socio-economic Assessment Act.</p> <p>TO: Employees and Contractors FROM: Justin Himmelright, VP Environment and Community Affairs RE: Selwyn Resources – Standard Operating Procedure for Preserving Wildlife and Wildlife Habitat during Project Activities</p> <p>Crews and equipment working in the project area have the potential to encounter and affect wildlife species, sensitive habitats, and the environment. It is necessary for all personnel conducting work on the Selwyn Project site to maintain a high standard of environmental practice, and performance while undertaking activities on the land base. Wildlife and habitats, which includes species and ecosystems at risk, are protected and managed for at all regulatory levels. To reduce potential effects, Selwyn requires that all personnel working on behalf of the company, including travel to and from the project site, follow the protocols outlined below.</p> <ul style="list-style-type: none"> • Ensure food, garbage or waste products are stored in airtight, reusable food and beverage containers, if available, to reduce the potential for littering. If unavailable, ensure all garbage and food wastes are disposed of properly at designated locations at the camp or work site. • Do not feed wildlife. Feeding wildlife can lead to habituation for some species such as bears, or to dangerous and unsafe human-wildlife conflicts both at the work site and camp. • No personnel shall carry or discharge firearms for the purpose of hunting wildlife. Only company designated personnel, with a permit, may use a firearm for managing dangerous wildlife-human conflicts if required. • Personnel must adhere to posted speed limits on speed controlled roads, travel at reasonable speeds along roads at the project site, and according to road and weather conditions, whichever is applicable. • If wildlife are visible within 500 m of a road while driving a vehicle, stop the 	<ul style="list-style-type: none"> • Information • Potential project effect • Possible mitigation
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		<p>vehicle and turn off the ignition. Wait until the animal has left the area (500 m of the road) before proceeding.</p> <ul style="list-style-type: none"> • Do not purposefully attract (e.g. feed), harass, harm or handle any wildlife encountered at the work site, or camp areas. • Avoid bears whenever possible, and be aware of your surroundings when working in bear country. Try to avoid surprising a bear by making your presence known when working in the field. Additional information is available at camp or from the on-site environmental staff. • Avoid conducting work within ecologically sensitive areas such as wetlands, riparian areas, denning sites, or mineral licks, whenever possible. If sensitive habitats or features are encountered during field operations, stop work and consult the on-site environmental staff for further guidance. • During aerial operations, it is important to recognize, avoid or minimize disturbance to sensitive wildlife and habitats, including sensitive seasons such as caribou calving. For additional guidance, consult the following best practice documents: <ul style="list-style-type: none"> o <i>Flying in Sheep Country: how to minimize disturbance from aircraft.</i> Available at http://www.emr.gov.yk/pdf/flying_in_sheep_country.pdf from onsite Environmental staff o <i>Flying Low? Think again...</i> Available from onsite Environmental staff o <i>Flying in Caribou Country. How to minimize disturbance from an aircraft.</i> Available from onsite Environmental staff <ul style="list-style-type: none"> • Migratory birds are protected in Canada under the <i>Migratory Birds Convention Act</i>. The collection or destruction of birds, their nests, or their eggs is illegal. The disruption of nesting migratory birds is prohibited. All stick nests (including inactive nests) are protected under the <i>NWT Wildlife Act</i>. Destruction of these nests is illegal. • Ensure that environmental safeguards are in place to reduce the potential for hazardous material (e.g. fuel) discharges to the environment, and ecological sensitive areas. This includes ensuring staff are briefed on environmental concerns, that safeguards such as spill kits are available, and adhering to safe handling practices of hazardous materials at site. • If you encounter wildlife or a habitat area and you are unclear on how to proceed, contact Selwyn’s on-site environmental program staff for guidance. 	<ul style="list-style-type: none"> • Used as valued component
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		<p>Site Specific Notes: The following items are of special interest and concern for contractors and employees working on the Selwyn Project.</p> <p><u>Species of interest</u> The following species may be present in the project area. Some are afforded special protection under the <i>Species At Risk Act</i>. These animals are of management interest as species of special concern by the <i>Council on the Status of Endangered Animals in Canada (COSEWIC)</i>.</p> <p>If you observe one of these animals from your work area, cease work immediately and consult onsite environmental specialists:</p> <ul style="list-style-type: none"> • Woodland caribou • Grizzly bear • Wolverine • Peregrine falcon • Rusty blackbird • <p>Work can resume once the animal is no longer visible from the work area. DO NOT ENCOURAGE THE ANIMAL TO LEAVE THE AREA. Be sure to report your sighting to onsite Environmental staff.</p>	<ul style="list-style-type: none"> • Used as valued component • Used as valued component • Possible mitigation
<p>YG Department Community Services</p>	<p>2008-0280-027-1</p>	<p>FireSmart Manager:</p> <ul style="list-style-type: none"> • FireSmart / Protective Services Branch would like the inclusion of a fire protection and response plan. The plan should include preparedness, mitigation, response and recovery for the camp(s) and should be prepared before activity begins and reviewed by Protective Services. • Suggest completing a FireSmart treatment around any structure. Information is available at the FireSmart office at 91790 Alaska Highway or contact the FireSmart Manager through the information below. • During exceptional fire environment conditions fire suppression action will be dedicated to the highest priorities; subject to available resources, prevailing fire environment conditions, and the need to retain such resources for the overall protection of Yukon communities. • If a fire occurs near the area, depending on other priorities at the time, please be aware that there may be limited resources and equipment dispatched to the site if any. • If any burning of slash or other woody debris is required between May 1st and September 30th, a burn permit is required. 	<ul style="list-style-type: none"> • Information • Information

		<p>Fire Marshal's Office: If fuel storage exceeds 4000 liters utilizing a storage tank then storage tank permits required. Fire inspection of camps to be performed by the Fire Marshal's Office prior to use</p> <p>Development Officer: Building / Plumbing Inspector "Prior to the placement or construction of any building or structure on the site, development, building, plumbing, electrical and/or gas permits will be required from the Building Safety Branch. Inquiries can be directed to 867-667-5741."</p> <p>Subdivision/Land Use Planner: No Planning or zoning. No comments</p>	<ul style="list-style-type: none"> • Information
YG Department EMR-Mineral Resources Branch	2008-0280- 027-1	<ul style="list-style-type: none"> • Selwyn Resources Ltd. has been actively exploring mineral claims and leases on the Selwyn Property. This is a 5-year project intended to explore and define the mineral resource. This is required to assess the feasibility of developing a mine at the Selwyn project site. • From 2009 to 2014 will operate two 50-man camps (XY and Don) to support diamond drilling, line cutting, mechanical trenching, trail construction, and camp construction. Reclamation is scheduled on an on-going basis. • In the last three years, Selwyn Resources Ltd. has invested \$50 million. The project will require an on-site work force of 100 persons; With cross-shifts and offsite workers the workforce could reach 230 persons. The local economy benefits through provision of services and supplies to the support the activities. • Other benefits include expanding the skilled work force. Selwyn Resources Ltd. is committed to advancing its employees by providing progressive training and skill acquisition. • Selwyn, as in previous years, continues to use the project to advance research and development opportunities. Currently, the Government of Yukon, Government of Canada, and Simon Fraser University have research projects affiliated with the Selwyn Property. <p><u>Mining Land Use Regulations</u> adequately mitigate any potential negative effects of this exploration project.</p>	<ul style="list-style-type: none"> • Information • Information • Information • Information
YG Department Environment	2008-0280- 027-1	Valued Ecosystem and Socio-economic Components	

	<p>the proponent may not be aware that wildlife can become trapped in trenches if exit ramps are not provided or if the trenches are not immediately backfilled. Therefore, the inclusion of the first mitigation below is in the best interest of the proponent as it assists the proponent in complying with the <i>Yukon Wildlife Act</i>. Trenches should be backfilled when work is complete.</p> <p>Numerous moose and caribou have been observed on the project site, and over-harvesting of wildlife in the project area could be detrimental to these populations. Yukon Environment supports the proponent’s no hunting policy, as indicated in Document #006-1, Standard Operating Procedures: “No personnel shall carry or discharge firearms for the purpose of hunting wildlife. Only company designated personnel, with a permit, may use a firearm for managing dangerous wildlife-human conflicts if required.” Exploration activities and site development will result in habitat loss, both direct and secondary. Direct habitat loss will be associated with the project footprint, including exploration roads and trails, drill pads, and camp facilities. Secondary habitat loss may result from habitat degradation adjacent to site development, usually caused by dust and noise. Animals will avoid these degraded habitats, especially moose and sheep.</p> <p>Although reclamation activities will strive to return this site to pre-existing conditions, certain aspects of site development may result in permanent habitat loss. For example, roads that continue to be used by off-road vehicles after reclamation activities. Another example is permafrost degradation where reclamation activities will likely be futile. Although permafrost degradation is referred to in the Mining Land Use Regulations, specific mitigations to avoid permafrost are not mentioned. The Regulations indicate that permafrost should be avoided, and if damage to permafrost occurs, activities should be relocated. These mitigations are cursory and reactive to damage, which cannot be reversed. A proactive approach should be implemented to avoid permafrost degradation.</p> <p>Currently, Don Valley has a high importance for animal populations moving back and forth between Yukon and the Northwest Territories through the Selwyn Mountains. Increasing development in the valleys of the Selwyn Mountains could have adverse effects on the regional populations of wide-ranging species such as moose, caribou, wolf, grizzly bear, wolverine and lynx as barriers to movement are created by exploration, and potentially, mining activities. Failure to provide a network of viable corridors through this mountain range may significantly contribute to the impairment of the regional ecosystem through the physical and genetic isolation of wildlife populations and the potential risk of population extirpations.</p> <p>Yukon Environment recommends that the proponent implement a “no off-road vehicle” policy for all employees while on site to assist in reducing the project impacts on wildlife and habitat.</p> <p><u>Recommended Mitigation:</u></p>	<ul style="list-style-type: none"> • Potential project effect • Possible mitigation • Possible mitigation • Potential project effect • Possible mitigation • Potential project effect • Possible mitigation
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	<ul style="list-style-type: none"> • Trenches shall be backfilled or sloped at one end to avoid entrapment of wildlife. • In advance of road construction, geotechnical investigations should be performed to ensure the road alignment is not intersecting permafrost. • Where permafrost is unavoidable, measures should be taken to ensure permafrost is maintained. Possible techniques include not stripping the vegetative mat, cover the vegetative mat with a liner and sufficient fill for insulation and remove all materials immediately after activity ceases. • Dust and noise suppression measures should be implemented, where possible. <p><u>Bears and Garbage Management</u></p> <p>Bears commonly utilize valley bottom and stream corridors as travel routes, as well as alpine and sub-alpine areas. Mining exploration activities, including the location of long term seasonal camps, usually are situated in similar settings. Such activities associated with noise from heavy equipment may cause disturbance and avoidance of wildlife to the area; however without threat or danger, wildlife can become accustomed to routine noise.</p> <p>A longer-term mining camp has a higher likelihood of encountering a bear visitation than a short-term camp, regardless of waste management procedures. However, if bears are not adequately deterred from a camp, or if they receive food rewards, the likelihood of encountering bears in the camp increases further. Bears constantly assess risk and reward situations and when adequate deterrent (risk) is applied, bears usually will stay away from camps. Conversely, bears conditioned to seeking food at camps become increasingly bold and often are killed in protection of property or life, resulting in direct wildlife mortality as an adverse effect of the project.</p> <p>The remoteness of a project does not diminish the likelihood of habituating bears to human presence. Bears can become accustomed to human activities in a remote area as easily as in a populated area, such as suburban neighborhoods in the City of Whitehorse. If human activities do not seem threatening, bears are not deterred by routine activities and noise.</p> <p>In order to reduce the potential for bear/human conflicts and/or property damage, all waste must be handled so as not to become accessible to bears. Although the proponent has proposed to incinerate solid wastes or transport non-combustible solid wastes to a permitted Waste Facility site, additional bear deterrents are required at the project site, especially since a sow and cub were destroyed in 2008 due to habituation. Therefore, it is strongly recommended that camp infrastructure be enclosed within an electrified bear fence (including kitchen/dining, sleeping</p>	<ul style="list-style-type: none"> • Possible mitigation • Used as valued component • Potential project effect • Possible mitigation
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	<p>accommodations, daily solid waste storage, the incinerator, and privy/wash house facilities).</p> <p>Bear deterrent devices also should be kept in camp, such as bear pepper spray, air horns (devices emitting loud noises), and rubber bullets commercially manufactured to use with 12 gauge shotguns. Such devices may effectively scare off a bear during its initial contact with human activities, rather than establishing a situation where a habituated bear is killed. The proponent should contact the district Conservation Officer for additional information concerning appropriate garbage handling and bear deterrent devices.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> The proponent shall keep all attractants including kitchen waste in a container that prevents access by bears and other wildlife, until properly disposed (refer to Waste Management, page 6). <p><i>Note: The proponent proposes to “Ensure food, garbage or waste products are stored in airtight, reusable food and beverage containers, if available, to reduce the potential for littering. If unavailable, ensure all garbage and food wastes are disposed of properly at designated locations at the camp or work site.” Although these suggested measures may assist in reducing interactions with problem wildlife, storage containers should also be impenetrable by wildlife.</i></p> <ul style="list-style-type: none"> When burning kitchen waste on site it must be burned regularly to reduce odours that might attract wildlife, and it must be burned to ash by forced air and fuel fired incineration. Camp infrastructure (at each camp location), including but not limited to kitchen/dining facilities, sleeping accommodations, daily solid waste storage, the incinerator, and privy/wash house facilities, will be enclosed in an electrified bear fence. <p><u>Raptor (golden eagle): summer nesting</u></p> <p>Summer nesting sites are key habitat for raptors. Laying of eggs through fledging occurs from approximately April 15 to July 31. Potential nesting habitat overlaps the claim block, as identified on the attached map. Specific nesting sites are not shown due to past concerns with unlawful removal of eggs and chicks. Disturbance during the nesting season can disrupt parental care of their brood, and in some instances can result in nest abandonment. Known gyrfalcon nest sites are also present in the project area, and effort should be made to avoid these nests.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> If aircraft are used for project activities, pilots should avoid flying over raptor nesting sites or if it cannot be avoided, fly at a minimum of 600 m above ground level (agl) where possible. 	<ul style="list-style-type: none"> Possible mitigation Possible mitigation Possible mitigation Used as valued component Potential project effect Possible mitigation
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	<ul style="list-style-type: none"> • No exploration activity within 1 km of a known raptor nest, where possible. <p><u>Thinhorn sheep: rutting grounds, winter range, and lambing range</u></p> <p>Winter range for sheep is characterized by snow free or windblown slopes and is used habitually by sheep year after year. Disturbance and displacement of sheep while on wintering areas can have a negative effect on sheep. Disturbance and displacement effects from helicopter or fixed-wing traffic can decrease important energy reserves through increased vigilance. This can result in distraction from feeding or flight response.</p> <p>Sheep rutting or mating grounds are used in early winter by small groups. The locations and physical characteristics of rutting grounds are not well known, but the behaviour itself is more key than the location. Preventing disturbances of these rutting groups is important to ensure successful reproduction¹.</p> <p>Lambing range is used predictably year after year by ewes in the southeastern portion of the claim block. Any disturbance to ewes and lambs from helicopter flights will have a negative effect on sheep, particularly from the beginning of May through mid-June. Lambing ranges are generally a specific portion of the winter range or in very close proximity of it. Ewes cannot undertake a migration during the final stages of their pregnancy. They need the security of escape terrain at lambing more than any other time of year.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • No project activities or helicopter flights within 1 km of sheep winter range during the winter period of October 1 to May 30 of each year. • No project activities or helicopter flights within 1 km of sheep rutting grounds from November 15 to December 15 of each year. • No project activities or helicopter flights within 1 km of known sheep lambing areas from May 1 to June 15 of each year. <p><u>Caribou: rutting grounds and winter range</u></p> <p>The locations on the Finlayson and South Nahanni caribou herd maps represent collared animal locations (as seen in Appendix III – Natural Features, Document #005-1). Since most caribou were not collared in the project area, the map represents a bias towards areas of caribou use away from the claim block. These point locations cannot be regarded as indicative of where the majority of animals occurred, the point locations simply show where the animals that were collared spent their time while their collars were functioning.</p>	<ul style="list-style-type: none"> • Used as valued component • Potential project effect • Potential project effect • Possible mitigation • Used as valued component • Information
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	<p>Anecdotal evidence suggests the South Nahanni Caribou herd is declining and this herd has become a priority for management objectives in recent years. Project supervisory personnel should emphasize the importance of avoiding caribou disturbance on the project site, where ever possible.</p> <p><u>Finlayson Caribou winter range (November through March):</u> The accompanying map outlines winter range for the Finlayson caribou herd to the SW of Don Camp. Winter range, and in particular late winter range, is known to be key habitat for caribou. Snow conditions become deeper and less favourable for caribou as winter progresses. In response, they move along traditional routes or migration corridors to areas where snow conditions are less severe and where lichens, the primary food, are more readily available. Project activities that may disturb Finlayson caribou on their winter range are limited to potential disturbance by helicopter overflights.</p> <p><u>Finlayson Caribou fall rutting (September through mid October):</u> The attached map identifies Finlayson herd rutting area in close proximity to the project claim block. It is likely, that work crews will encounter caribou in near the identified range throughout summer and fall. Overflights of caribou should be avoided and if concentrations of caribou are observed flight height restrictions should be followed.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • Report any caribou sightings to the Regional Biologist (867-536-3214) to allow for adaptive management in mitigating project effects on caribou. • Avoid helicopter flights over areas where caribou are concentrated on their winter range or during the fall rut. • Where conditions permit, helicopters should remain 600 m above ground level when flying over caribou or other wildlife. <p><u>Mountain goat: year round habitat</u></p> <p>Mountain goats are present year-round in alpine areas north of the claim block.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • Avoid flying over mountain goat range, as identified on the attached key habitat map, where possible. <p><u>Grizzly and Black Bear: habitat loss or direct mortality</u></p>	<ul style="list-style-type: none"> • Information • Potential project effect • Potential project effect • Possible mitigation • Information • Possible mitigation • Used as valued component
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		<p>Bears in roaded areas die disproportionately when compared to bears in roadless habitat. Most illegal kill of bears occurs near roads. Defense of Life and Property (DLP) kills are also often associated with roads. Administrative road restrictions (i.e. signs, gates, regulations) have little impact on reducing bear mortality. Restricted roads are still readily accessible to ATV's, mountain bikes, and horse and foot travel, and often receive unregulated travel by regular vehicle.</p> <p>Further, bears show degrees of avoidance of roads and developments and human activities. Avoidance expresses itself in a variety of ways. Some bears simply avoid an area - they don't or rarely enter it; others don't enter it as often as they would were the disturbance not there; other bears may stay for a shorter period of time than if the disturbance were absent.</p> <p>Roads and developments cause grizzly bears within a 4 km zone of influence to use habitats less productive than average for an area when they typically occupy habitats "substantially" more productive than average. Riparian areas (including the lower reaches of avalanche chutes) contain important and preferred bear habitats but most roads are built in valley bottoms. This results in: a) disruption of foraging within 4 km of the road, and b) displacement of bears up to 3000m of the road for grizzly bears and up to 914 m for black bears.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • The proponent should meet with the Yukon Government Carnivore Biologist prior to commencing project activities to discuss measures to reduce project effects on bears. • Linear access features should enter riparian areas only to cross them, and not parallel them, where possible. Where a road crosses through a riparian area, it should do so as close as possible to a right angle. • Other human use features should not be placed in riparian areas. Placement of camps, facilities and roads should not restrict animal movement on either side of a valley. That is, human use features should not be placed at pinch points or bottle necks in valleys and there should be greater than 1 km of flat and traversable habitat between the edge of the human use feature and the edge of the river at bank-full width. • No activity should take place within denning areas or within 2 km of a den. • All campsites should be well marked with signs which read: "A bear that gets garbage or food shortly becomes a dead bear. You are responsible for your own food and garbage". Signs that remind camp attendees that they are in bear country are available from Conservation Officers Services Branch. 	<ul style="list-style-type: none"> • Potential project effect • Potential project effect • Possible mitigation
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	<ul style="list-style-type: none"> • An assessment of the bear proofing at the camp locations should be conducted by qualified individuals. Environment Yukon can provide a list of names of qualified individuals. <p><u>Wolverine: habitat loss or direct mortality</u></p> <p>Wolverines are present in the project area and are known to occupy large home ranges. Wolverines utilize a variety of habitats, but particularly rely on the alpine environment for movement and foraging opportunities. Project activities may result in the loss of habitat from project activities or direct mortality if individuals are attracted to improperly handled camp wastes and destroyed as a result.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • Cluster disturbances as much as possible (i.e. do not scatter operations across the landscape). • Camps which are used primarily in the summer months should be constructed below tree line. • Disturbance by camp personnel can be minimized by restricting the use of ATV's, restraining dogs, and limiting the number of persons crossing the landscape for recreational purposes. • Block or restrict access by secondary users, such as hunters, snowmobiles, and all-terrain vehicles. <p><u>Access Management</u></p> <p>The project area can currently be accessed from the NWT by an existing all season road and from Yukon by a winter road off the Robert Campbell Highway. The proponent is planning on constructing, at maximum, an additional 15 km of access roads, 40 km of permanent trails and 40 km of temporary trails, while upgrading 30 km of access road and. This is a significant increase in access and density of linear disturbances in the area. Adding to road networks removes wildlife habitat and has been documented to dramatically increase the hunting pressure on wildlife populations. Furthermore, the establishment of these linear disturbances will provide improved access for predators, leading to improved hunting success. The fragmentation of habitat and increased levels of linear disturbance have negative impacts on wildlife populations, as indicated by a growing body of scientific literature.</p> <p>In many cases, as soon as grubbing commences during construction, surface water is visible as the vegetative layer is pulled back. To avoid excessive sedimentation, grubbing should not occur during rain events.</p> <p>After road construction is complete, the ensuing traffic may result in vehicle-wildlife collisions.</p>	<ul style="list-style-type: none"> • Used as valued component • Potential project effect • Possible mitigation • Potential project effect • Potential project effect
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	<p>Salting/sanding of road surfaces may create an artificial mineral lick, thereby attracting wildlife to the road. If salting/sanding is practiced, lithium chloride or other unpalatable salts should be used.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • To mitigate the increased hunting pressure on wildlife populations, the proponent will install gates on access roads at the location where the access road intersects the claim boundary to ensure the closure of the road at the end of each operating season. Signage should indicate that the project roads are 'Private'. The road closure measures will be reviewed regularly and any appropriate changes will be approved by regulators to effectively prevent access by the public. • Where ever possible, road planning should use existing trails and access routes should be designed through steep valleys where re-contouring effectively creates a barrier to access. • Accurate recording of vehicle-wildlife collisions and adaptive management to reduce collision frequency in high collision zones. • To avoid excessive sedimentation during road construction, grubbing should not occur during rain events. • Salting/sanding of road surfaces should use lithium chloride or other unpalatable salts. <p><u>Fish</u></p> <p>Yukon Environment recommends the proponent bolster their no-hunting policy with a similar on-site no fishing policy.</p> <p><u>Water Quality</u></p> <p>To prevent potential contamination of waterways, all contaminants including fuel, lubricants, etc; must be handled in such a way so that they do not enter the drainages and water courses.</p> <p>Contamination of watercourses resulting from ARD and metal loading is a concern due to the potential for toxicity and bio-magnification through the aquatic food web to wildlife and people. The proponent should implement all measures possible to physically reduce ARD and contamination into watercourses.</p> <p>The proponent indicated that some fuel will be transported throughout the claims in 205 litre drums. Proper drum storage techniques should be employed, to ensure the integrity of the drums is maintained and the potential for spills is minimized.</p>	<ul style="list-style-type: none"> • Possible mitigation • Used as valued component • Used as valued component • Potential project effect • Possible mitigation
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	<p>The proponent would require a permit under the <i>Contaminated Sites Regulations</i> before treating contaminated material (soil or water) on site or removing contaminated material off site. Contact Yukon Environment, Environmental Programs Branch for information and application forms.</p> <p>In addition to registering their storage tank with Mining Land Use, the proponent will require a permit under the Storage Tank Regulations for the installation and operation of aboveground petroleum storage tanks with a capacity of more than 4,000L. Contact the Fire Marshal's Office for more information and application forms.</p> <p>When drawing water, Section 30 of the Fisheries Act requires intake screens to be used in fish bearing waters so as to prevent the entrapment and/or mortality of fish.</p> <p>Camps that are serving 50 people or fewer can deposit waste in accordance with the <i>Sewage Disposal System Regulations</i> by having a Sewage Disposal Permit or in accordance with the <i>Waters Act</i> by having a Water Licence to deposit waste.</p> <p><u>Recommended Mitigation:</u></p> <ul style="list-style-type: none"> • Drums in fuel caches shall be stored in an appropriate manner as to maintain the integrity of the fuel drums and minimize fuel spill potential. • All fuel caches should be lined to prevent potential spills from penetrating the soil and groundwater. • Ongoing monitoring of water quality upstream and downstream of project activities. • Monitor wildlife indicators such as benthic organisms and fish to test for metal contamination throughout the duration of exploration activities. <p><u>Water Quantity</u></p> <p>A Schedule 3 Notice for use of less than 300 m³ of water per day must be filed at the Water Board 10 days prior to commencing operations as per Section 4(2) and Schedule 7 of the <i>Waters Regulations</i>. For quantities of more than 300 m³ of water per day and camp sizes of 50 or more people, a water licence will be required.</p> <p><u>Waste Management</u></p> <p>The proponent holds an Air Emissions Permit (60-023) under which they are authorized to open burn solid waste in quantities of more than 5 kg/day. As the proponent had not previously completed a YESAA assessment for this activity, they are restricted to burning less than 50 kg/day. Should the proponent anticipate the need to exceed that threshold in the future, they may</p>	<ul style="list-style-type: none"> • Potential project effect • Possible mitigation • Information
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	<p>wish to consider amending the scope of the current assessment to include that possibility.</p> <p>The proponent notes in their Mining Land Use application that they burn “food wastes, packaging materials, waste paper, wood scraps, sorbent pads and rags” in the burners permitted under their Solid Waste (81-011) and Air Emissions (60-023) Permits. The Spill Response Plan also notes that “hydrocarbon-soaked sorbents can be burned with refuse at dump”. As a point of clarification, sorbent pads and rags may only be burned as solid wastes if they are not saturated with any type of special waste other than waste diesel fuel, for which the proponent has received authorization from the Environmental Programs Branch. Pads or rags saturated with other special wastes (e.g. waste oil, waste brake fluid) should be wrung out and/or drained into appropriate containers (separate containers for each type of waste) until they do not drip, after which they can be disposed of with regular solid waste. The collected waste liquids must be kept separate and handled in accordance with the terms of the Special Waste Permit (43-045).</p> <p>The proponent notes in their Mining Land Use application that “remaining fuel will be burned off and/or salvaged”. As a point of clarification, fuel that is not to be used for its original intended use is considered waste fuel under the Special Waste Regulations and must be disposed of in accordance with a special waste permit. The proponent’s current Special Waste Permit (43-045) does not allow for the open burning of any fuel, and permits only waste oil, waste diesel and waste hydraulic fluid to be incinerated in the waste oil burner. The permit also restricts the proponent from transporting special wastes off-site. Therefore, before special wastes are disposed of other than as allowed for under the current permit, the proponent must obtain an amendment to their permit to allow for the open burning or off-site transport of waste fuels not already addressed. Contact the Environmental Programs Branch for more information and application forms.</p> <p>The proponent may require an amendment to their Special Waste Permit (43-045) to allow for the disposal of drilling wastes in sumps, depending on the chemical analysis of the waste. The proponent would require amendments to their Special Waste Permit to allow for the burning of any of hydrocarbon- snow or soil mixtures, as described in the Spill Response Plan. Contact the Environmental Programs Branch for more information and application forms.</p> <p>The Spill Response Plan states that hydrocarbon-water mixtures should be separated and the hydrocarbon burned with the refuse at the dump (i.e. open burned) or fed into the waste oil burner. As has been noted above, waste diesel is the only hydrocarbon currently approved for burning with the camp refuse, and only waste oil, waste diesel and waste hydraulic fuel may be fed into the waste oil burner.</p> <p>The Spill Response Plan states that hydrocarbon-soil mixtures can be land farmed. A Land Treatment Facility permit is required for the construction and operation of a land farm. Contact</p>	<ul style="list-style-type: none"> • Information • Information • Information • Information
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		<p>the Environmental Programs Branch for more information and an application form.</p> <p>References 1 Hoefs, M. 1996. Habitat protection guidelines for thimhorn sheep. Yukon Department of Environment, Fish and Wildlife Branch. 37 pp.</p>	
YG Department Tourism	2008-0280-027-1	<ul style="list-style-type: none"> • An archaeological overview assessment of the project area has been completed with negative results (Simonsen 2008). Archaeological site density appears to be low in this region. Standard conditions included in all quartz exploration approvals provide sufficient mitigation to address heritage resource concerns. These conditions include: <ul style="list-style-type: none"> • Historic objects and burial grounds: Exploration activities must not be carried out within 30m of a known historic, archaeological or palaeontological site unless the Chief indicates, in writing, that such activities may be carried out. • Any sites containing archaeological objects, palaeontological objects or human remains or burial sites discovered in the course of carrying out an exploration program must be immediately marked and protected from further disturbance and, as soon as practicable, the discovery reported to the Chief. No further activities may be carried out within 30m of the site until the Chief indicates, in writing, that the activities may be resumed. 	<ul style="list-style-type: none"> • Information • Possible mitigation
YFN Government – Liard First Nation – Chief Liard McMillan	2008-0280-028-2	<ul style="list-style-type: none"> • Liard First Nation ("LFN") has numerous concerns about the potential impacts of this project on our Aboriginal rights and title and on the environment that sustains those rights and our communities. The proposed project encompasses 32,000 hectares of our traditional territory and includes huge amounts of drilling in the Upper Pelly watershed as well as road and trail-building. However, due to a complete lack of adequate resources, we are unable to review or respond in any meaningful way to the proposal. • In order for LFN to have a meaningful understanding of what is being proposed, a project of this magnitude requires in-depth substantive discussion, review by technical experts, consultation with our elders and land stewards and other expert involvement. • We understand from previous correspondence with your office that Yukon intends to depend on YESAA processes for meeting both their statutory and constitutional duties of consultation. Let us assure you, this process does not accomplish this. Firstly, YESAA was never intended to meet the needs of consultation and accommodation with First Nations who do not have final agreements and, indeed, it does not do so. Secondly, there are no powers respecting accommodation set out in the YESAA legislation. Genuine consultation requires a real intent to hear and respond meaningfully to a First Nations concerns. The goal of consultation is not to be 	<ul style="list-style-type: none"> • Outside of scope of evaluation

		<p>narrowly interpreted as the mitigation of adverse impacts on Aboriginal or treaty rights but the facilitation of reconciliation.</p> <ul style="list-style-type: none"> • At present, the YESAA program provides enough capacity funding for LFN to maintain an office with a single employee -it does not provide the capacity for us to review and respond meaningfully to the concerns that, in a perfect world, YESAB should consider and be responsive to. • Further, Selwyn is but one of several mines in our Kaska traditional territories that have moved into advanced stages over the last few years. Where is the cumulative effects assessment of the impacts of these mines on our rights and on our people? Where are the assessments of the social impacts on our communities? As Kaska, the experience of Faro has left us all wary of the impacts that such mines and their attendant population changes can have on our communities. Is YESAB assessing this likely impact of further development? • It is true that LFN has had a couple of meetings with Selwyn to discuss a potential SEPA, but we are very concerned with the timing whereby Yukon seeks to approve this project without themselves having undertaken any form of meaningful consultation with LFN and when no SEPA has yet been signed. LFN expects to be adequately informed and consulted about the potential social and environmental impacts of this program and we have seen no efforts from Yukon or Canada to undertake such consultation. The fact that we have opened a negotiation table with Selwyn does not erase the constitutional duty of the Yukon and Canada to consult with us prior to taking steps that may infringe our Aboriginal rights. • We will be considering very carefully our options respecting any regulatory or statutory approvals where non-First Nation governments have not met their constitutional duties. • In conclusion, we request appropriate capacity funding to consider and respond to the proposed project. 	
Environment Canada	2008-0280-029-1	<p>Environment Canada has taken the opportunity to review the above-mentioned project information as provided on the YESAB Public Registry. The comments below address potential impacts from the proposed activities on the migratory birds, their habitat and other related issues.</p> <p><u>Migratory Birds</u></p>	<ul style="list-style-type: none"> • Used as valued component

	<p>Environment Canada's Canadian Wildlife Service (CWS) is responsible for the conservation and protection of migratory birds as populations and individuals, and their habitats in Canada under the Canada/US <i>Migratory Birds Convention</i> (see Appendix 1), overall responsibility for species at risk, under the federal <i>Species at Risk Act</i>, as well as ensuring that Canada's commitments are met under the international <i>Convention on Biological Diversity</i>.</p> <p>As a participant in this environmental assessment review, CWS will assess and provide comments on the project proposal, including potential impacts to migratory bird populations. CWS cannot, however, provide a written opinion that this project will not result in contravention of the Migratory Birds Regulations (MBR). Project proponents are encouraged to ensure that they practice due diligence with regard to the requirements of the MBR. A favourable decision under this environmental assessment review does not exempt the proponent from the MBR.</p> <p>CWS recommends that no vegetation clearing (such as line cutting, pad construction, trail and road upgrading) occurs during the main migratory bird breeding season of May 1 to July 31 to reduce the impact on nesting birds and their young. Some activities may be scheduled to commence in late spring, during which time it may be possible that early nesting bird species will be encountered. If clearing does occur during their breeding period, CWS recommends that preclearing surveys be conducted for nesting birds. If active nests are located, including nesting cavities, a 10-metre vegetation buffer zone should be maintained around nests, and minimal activity occur in the immediate area until nesting is complete and chicks have fledged. If possible, we recommend the use of biodegradable flagging tape.</p> <p>We note in the application that a bird species list was created. CWS would appreciate receiving copies of any migratory bird observations from the project to help increase our knowledge of bird distribution in the territory.</p> <p><u>Species at Risk</u> The project proposal mentions the potential for Species at Risk to be encountered at the projects site. We support the approach the proponent has described in their SOP (If you observe one of these animals from your work area, cease work immediately and consult onsite environmental specialists.)</p> <p><u>Bird Species of Conservation Concern Potentially in the Proposed Development Area</u></p> <p>(See Appendix 2 for information related to COSEWIC and SARA) Short-eared Owl (<i>Asio flammeus</i>) - SARA Special Concern</p>	<ul style="list-style-type: none"> • Information • Possible mitigation • Information • Used as valued component • Possible mitigation
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	<p>Common Nighthawk (<i>Chordeiles minor</i>) - COSEWIC Threatened Olive-sided Flycatcher (<i>Contopus cooperi</i>) - COSEWIC Threatened Peregrine Falcon (<i>Falco peregrinus anatum/tundrius</i>) - COSEWIC Special Concern Rusty Blackbird (<i>Euphagus carolinus</i>) - SARA Special Concern</p> <p><u>Fisheries Act</u> The mining exploration work and related activities associated with this project will take place adjacent to a number streams and water bodies flowing to the Pelly River as well as to the Nahanni River drainages. Pursuant to Section 36(3) of the Fisheries Act (administered and enforced by Environment Canada), the discharge of a deleterious substance into fish-bearing water is prohibited. We recommend that the use and storage of equipment, fuel and other materials near open water should be conducted in such a manner that hydrocarbons, chemicals and or waste materials are prevented from entering fish bearing waters either directly or indirectly. All spills into water or at risk of entering water should be reported immediately to the appropriate 24 hour spill reporting number (in the Yukon it is 867-667-7244; in the NWT it is 867-920-8130).</p> <p>Spills to water reported to the Yukon 24 Hour Spill Reporting Number will be directed to the appropriate Yukon Spills Committee agency. In this case it will be to Environment Canada – Environmental Emergencies contact person at 667-3405 (and not the Department of Fisheries and Oceans as stated on Page 16 of the “Spill Contingency Plan (Yukon)”).</p> <p><u>Other General Comments</u> Based on first hand observations made by Environment Canada staff during a site visit in mid August, 2007, the following species of animals that are not currently included in the species list for the project area were encountered:</p> <p><u>River Otter</u> – on two occasions while conducting aquatic biomonitoring along Don Creek, 2 adult River Otters’ were observed; one in a small tributary along the left bank (approximately 5.5 km downstream of the Don Valley Camp) and again in Don Creek (approximately 7.5 km downstream of the Don Valley Camp).</p> <p><u>Common Loon</u> – a group of 5 individuals was observed at Wise Lake located about 5km NE of the Anniv Camp. Although this lake is outside the Yukon, the Common Loon may be found at some of the other smaller waterbodies within the Don Creek drainage such as Bob Lake and others located near the confluence with the Upper Pelly River or those lakes located to the northwest within the claim block held by the Selwyn Project.</p>	<ul style="list-style-type: none"> • Information • Used as valued component • Information
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