2008 McGregor Lake Campsite
Detailed Project Description

Prepared for:

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1.0 PROJECT DESCRIPTION

This section includes basic information about the location of the project, contact information, acts, regulations and guidelines that apply and the permits and licenses that are required for the proposed activities.

1.1 Name and Location of Proposed Project

5050 Nunavut Limited (5050 Nunavut), presently holds a Kitikmeot Inuit Association (KIA) Land Use License KTL306C016 permitting a camp (with airstrip), staking & prospecting, exploration (geophys-grd/air) drilling and bulk fuel storage at McGregor Lake. The purpose of the camp is to support exploration activities associated with their Mackenzie Igneous Event (MIE) and Bear Valley Uranium exploration projects in the area. The KIA Land Use License is valid until July 15, 2008. This document is in support of the Amendment and Renewal of KTL306C016.

1.2 Contact Information for Proponent(s) and Other Project Contacts

5050 Nunavut Limited (subsidiary of Adriana Resources Inc.)
Gordon Addie, President (5050 Nunavut)
Suite 1818 – 701 West Georgia Street
Vancouver, BC
Canada V7Y 1C6
Phone: 604 629 0250 Fax: 604 629 0923

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308 – 1080 Mainland St.
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Attn: Carlos da Ponte
Phone: 604 632 9941 Fax: 604 632 9941

Diamond Drilling: Major Drilling – Winnipeg, MB – Tel 204-885-7532 – winnepeg@majordrilling.com

Fixed wing aircraft will be contracted from any of the following (depending on which contractor is available):

Air Tindi – Yellowknife NT, (888) 545-6794 **Adlair**

Aviation – Yellowknife NT, (867) 873-5161 **Air**

Thelon – Yellowknife NT, (867) 920-7110 **Arctic**

Air – Yellowknife NT, (867) 873-1210

Arctic Sunwest Charters – Yellowknife NT, (867) 873-4464

Buffalo Airways – Yellowknife NT, (867) 873-6112

1.2.1 Acts, regulations and guidelines

The following list is a list of acts, regulations and guidelines (both federal and territorial) that apply to the activities at the McGregor Lake Campsite.

- Article 13 – Nunavut Land Claims Agreement
- NWB – Water Licensing in Nunavut – Interim Procedures and Information Guide for Applicants
- NWB – Interim Rules of Practice and Procedure for Public Hearings
- NWTWB – Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- NWTWB – Guidelines for Contingency Planning
- DFO – Freshwater Intake End of Pipe Fish Screen Guideline
- Fisheries Act – s.35
- RWED – Environment Protection- Spill Contingency Regulations
- Canadian Drinking Water Quality Guidelines
- Public Health Act Camp Sanitation Regulations
- Public Health Act Water Supply Regulations
- Territorial Land Use Act and Regulations

1.3 Permits and Licenses

The following list is a list of the permits and licenses that are required (and in place) for the McGregor Lake Campsite.

- KIA Land Use License: KTL104C033 (amended July 15th 2006 as KTL306C016)
- KIA Land Use License: KTL306CO16 (will expire July 15th, 2008)
- Nunavut Water Board Water License 2BE-MCG0608
- Mineral Claims: GA1- GA45, M1 – M11
- IOL parcel numbers: CO52, C053, C060, C061, C062

A permit application for a one-way, single use winter trail from Kugluktuk to the McGregor Lake Campsite has been submitted to INAC, KIA, and NIRB for approval.

2.0 GENERAL PROECT INFORMATION

General project information includes information regarding the history of the site, figures for the project location and the camp infrastructure, the mineral resources under exploration, the purpose of the project, alternatives to the project and the type of exploration activity.

2.1 History of the Site

The Muskox Intrusion was first discovered in 1956 by INCO. They spent three years exploring and drilling for nickel-copper mineralization. Numerous companies examined the intrusion between 1969 to present, but no significant deposits were outlined. Studies undertaken on the area include:

- Geophysical and geochemical surveys and geological mapping of the Marginal Series near McGregor Lake;
- Property-wide geophysical including: VLF, magnetics, gravity, UTEM, and HLEM;
- Controlled Source Audiomagnetotelluric; and
- Numerous, highly anomalous grab samples were collected from the Pyrrhotite Lake.
- An inspector from NWB visited the McGregor Lake Campsite on Aug 11, 2007, collected water samples, results not available.
- A Phase I/II Environmental Site Assessment of the existing McGregor Lake Campsite was conducted in 2004 by Golder and Associates on behalf of INAC. This report provides an inventory of the historical activities conducted at the camp.

2.2 Project Location and Infrastructure Map

Please refer to Figure 1-1, 1-2, and 1-3 for an outline of the intended project area and camp layout.

2.3 Mineral Resource Under Exploration

The minerals under exploration include Copper, Nickel, Platinum, Palladium, and Uranium.

2.4 Project Need and Purpose

A campsite is required at McGregor Lake to support the staking, prospecting, and exploration work of KIA Land Use License KTL306C016, as well as the drilling program currently being applied for. 5050 Nunavut is requesting an amendment and renewal of KTL306C016 to conduct an expanded drilling program on their MIE and Bear Valley property and intends to use the existing McGregor Lake Campsite to support these activities.

5050 Nunavut considers the base of the Muskox Intrusion and adjoining basement and sedimentary rocks to represent a corridor of opportunity for accumulations of Uranium and sulphides containing Copper, Nickel, Platinum and Palladium. The MIE and BVU project has been designed to effectively explore the area for economically viable mineral deposits within the 5050 Nunavut mineral claims.

2.5 Alternatives to the Project and Alternatives to Project Components

KIA License KTL306C016 was originally proposed to establish a new camp at Iceberg Creek along the southwest shore of McGregor Lake, however, as an alternative to setting up a new camp, the KIA suggested 5050 Nunavut use an abandoned exploration camp (now known as the McGregor Lake Campsite) along the north shore of McGregor Lake. This alternative location was used historically by other mining companies (Figure 1-1 & 1-2).

2.6 Type of Exploration Activity

The exploration activity includes: airborne geophysics surveys, ground geophysical surveys, and prospecting covered under KIA Land Use License KTL104C033, as well as exploration drilling (10000m).

3.0 PROJECT ACTIVITIES

Project activities include the camp use and construction, a discussion of the campsite, the equipment at camp, staking and prospecting, drilling, transportation, water use on site, fuel transport and storage, geophysical work, transportation, the camp site, equipment, water, wastes, fuel and other products, chemicals and hazardous materials. Each of these topics is discussed below.

3.1 Camp Use and/or Construction

5050 Nunavut proposes to utilize the existing camp located on the north shore of McGregor Lake 100m from the high water mark. Figure 1-3 outlines the existing structures and those structures that will be added to expand the camp capacity. One existing building is located within the lake's high water mark. This building will not be used.

3.2 Camp Site

The following sections describe the campsite in further detail.

3.2.1 Type of Camp

It will be a seasonal camp consisting of tent and plywood structures. Procedures to be followed during temporary closure of the camp and final abandonment are described in the McGregor Lake Campsite Abandonment and Restoration Plan, 2008 (attached).

3.2.2 Camp Structures and Infrastructure

The following table summarizes the buildings that currently exist on site and the buildings 5050 Nunavut intends to place at the campsite (new). The camp will be heated with oil stoves.

Structure Type	New or Existing Structure	Approximate Dimensions	Number
Core Shack	New	20ft x 30ft	1
Geologist's Office w/ existing core shack	Existing	34ft x 20ft	1
Drill Foreman Office	Existing	14ft x 16ft	1
Kitchen	Existing	30ft x 16ft	1
First Aid	Existing	14ft x 16ft	1
Generator Room	Existing	10ft x 10ft	1
Dry	Existing	34ft x 20ft	1
Sleeper (insulated tent accommodation)	Existing New	16ft x 20ft 14ft x 16ft	6 5
Outhouse	Existing	9ft x 9ft	1
Pacto Toilets	New	9ft x 9ft	2

3.2.3 Maximum number of people on site

The maximum people on camp would be 30. The number of people staying at the camp will vary throughout the operating period from 1 – 30 people. The campsite and exploration activities will be shutdown from October to March. During the winter shut-down, the camp will either be winterized or, if warranted, one or two people will remain on site as caretakers and to watch the camp.

3.2.4 Camp power source

The power source would be from onsite diesel-powered generators.

3.3 Equipment

The following table is a summary of the equipment that will be on site.

Equipment Type	Number	Size/Ground Pressure	Use
Caterpillar D6M with Low-ground pressure tracks (LGP)	1	15,000kg /4.71 psi	Site maintenance & ice airstrip construction
Sled	1	2,300kg/ 5cm ground indent	Site maintenance & ice airstrip construction
Bobcat	1	Negligible	Site maintenance & ice airstrip construction
Snowmobiles	15	Various/minimal	Transportation
Hydracore 2000 diamond drill	2	Maximum depth of 800m with BTW	Drilling
Helicopter (AStar B2)	1	-	Pick and drop of crew and equipment (support)

The equipment will be transported to the Project by fixed wing aircraft from either Yellowknife or Kugluktuk. The planes are normally Twin Otters and would land on McGregor Lake. On property transportation is by helicopter. Snowmobiles are used while the tundra is frozen. The proposed winter trail would bring a D6M Caterpillar, a Bobcat, sled, two snowmobiles, and 3-man crew from Kugluktuk to the McGregor Lake Campsite. This equipment will be used at the Campsite to assist in site preparation and the construction of the ice airstrip.

3.4 Staking, Prospecting and Exploration

Airborne geophysical surveys, snowmobile geophysical surveys, geology and drilling. They exploration methods are discussed separately below in Sections 3.5 and 3.6.

3.5 Geophysical

Two forms of geophysical investigation will be completed: ground geophysical coverage and airborne geophysics. Each method is discussed below.

3.5.1 Ground Geophysical Coverage

Please refer to the Figure 1-2. This figure outlines the project area. Ground geophysical work will occur within the boundary of 5050 Nunavut mineral claims and some IOL.

3.5.2 Airborne Geophysical Coverage

Flights within the boundaries of the MIE project area will be at altitudes below 300m for the purpose of conducting airborne geophysical surveys. 5050 Nunavut will inform the helicopter pilots of the general locations of the muskox herds and will either bypass them or increase altitude to minimize the noise level on the ground.

3.6 Drilling

The drilling program will include approximately 40 boreholes for a total of 10,000m of drilling. See Figure 1-2 for approximate borehole locations. For further details regarding the proposed Uranium, please refer to the attached Uranium Exploration Plan (2007) submitted to the Nunavut Water Board in May 2007 by 5050 Nunavut Ltd. / Adriana Resources Inc.

3.6.1 Mobilization of Drill Equipment

The initial mobilization of the drilling equipment to the project area will be by fixed wing aircraft. Mobilization within the project area will be by helicopter.

3.6.2 Drill Additives

With the presence of permafrost the addition of calcium chloride (salt) in preheated water may be required to keep the holes from freezing, preventing the loss of drill rods. The additives are only added when problems are noted in the water circulation. The additives are either Poly Drill OBX or Poly Drill133X/1330 or other similar substances which are non-toxic and biodegradable.

3.6.3 Drill Cores and Cuttings

All drill cores are collected and will be stored within the drill-core area of the camp. Water used during the drilling will be disposed of in natural depressions, 30m – 100m from the high water mark of any water body. All drill cuttings will be retained in a natural depression, 30m to 100m from the high water mark of any water body.

3.6.4 Drill Water

If drill water is of a poor quality (as according to regulations) it will be disposed of in a properly constructed sump, or an appropriate natural depression located at least 30m to 100m above the high water mark of water bodies.

3.6.5 Abandonment of Drill Holes

All drill sites are cleaned and maintained on a daily basis. Waste materials, garbage and any empty drums or propane cylinders are routinely returned to camp for incineration or removal to Kugluktuk and/or Yellowknife. Upon completion of an individual drill hole the drill rig and supplies are moved to a new site and the drill set up is cleaned of any debris and the area returned, as close as possible, to a pre-disturbed state. For final restoration all old drill sites, sumps and cuttings will be re-inspected to ensure that all areas have been restored as close as possible to a pre-disturbed state.

3.6.6 Radiation Protection Measures

The uranium exploration program will be conducted under the same guidelines used by Hornby Bay Exploration Limited (HBE) for their uranium exploration project. In the chance of encountering Uranium in the drill cores, a Waste Generator Number has been obtained to document hazardous waste that may occasionally be transported from the Project Area for proper disposal. The same individual in charge of documenting the hazardous wastes will have completed a course in the Transportation of Dangerous Goods specifically designed to train geologists in the safe transport of nuclear substances.

For the long term storage of drill core, radiation levels will be reduced to less than 1.0 µSv measured at 1.0 meter from the surface and in no instance will the level be allowed to exceed 2.5 µSv. In practice, it is anticipated that major uranium intersections will be transported to the Saskatchewan Research Council for testing and storage at their nuclear materials storage facility.

3.7 Transport

Transportation is discussed in two sections; transport to the project site and the airstrip.

3.7.1 Transport to Project Site

Material and personnel will be transported to the Campsite by fixed wing aircraft from either Yellowknife or Kugluktuk. The planes are normally Twin Otters and will land on McGregor Lake. On property transportation will be by helicopter. Snowmobiles are used while the tundra is frozen for local transport of goods in the area of the camp and for safety. The proposed winter trail will bring a D6M Caterpillar, a Bobcat, sled, two snowmobiles, and 3 man crew from Kugluktuk to the McGregor Lake Campsite. This equipment would be used at the Campsite to assist in site preparation and the construction of the ice airstrip.

3.7.2 Airstrip

5050 Nunavut would like to construct an ice airstrip immediately west of the McGregor Lake Campsite for use during the winter months. The exact location will depend on local ice conditions at the time. The airstrip will be approximately 1 mile long by 300ft wide (approximately 14.5 hectares). In the summer months no airstrip will be used as the float planes will make use of the lake for flight activities.

3.8 Water

Water for the camp will be pumped from McGregor Lake using a hose & float system.

Assuming occupancy of 30 people; approximately 3000 L/d would be consumed.

The water intake will be suspended from a float located on the lake. During periods of freeze-up, the water will be pumped from a hole drilled on the northern section of McGregor Lake. The intake end of the pipe for both pumping scenarios will be equipped with a screen to avoid fish entrapment. The screen size will be determined following the calculations outlined in DFO's *Freshwater Intake End-of-Pipe Fish Screen Guidelines.*

3.9 Waste (Grey water, Sewage, Other)

Wastes generated at the site are anticipated to include human sewage, grey water, combustible solid wastes, non-combustible solid wastes, waste oil and hazardous wastes and empty barrels and fuel drums. Each waste stream is addressed separately below.

3.9.1 Sewage

All sewage will be collected with the waterless Pacto toilet system. The resultant encapsulated waste will be burned in the incinerator.

3.9.2 Grey Water

All camp discharge water; estimated for 15 people at 3.0 cubic metres per day of wash water, shower water and kitchen water, will be biologically treated in a sump. The Sump will be located 100m from the high water mark (please refer to Figure 1-3). The sump is self-draining, with all waste water passing through a gravel filter.

3.9.3 Combustible Solid Waste

Volumes of solid waste will vary with the daily population of the camp and project activities.

All combustible solid waste will be burned daily in an incinerator.

3.9.4 Non-combustible Solid Waste

The non-combustible solid waste will be packaged up and flown out to Kugluktuk and/or Yellowknife on the return flight that brought in supplies.

3.9.5 Waste Oil & Hazardous Waste

Waste oil volumes from the camp and related activities will be less than 0.04 cubic metres per week. Waste oil will be incinerated or used for heating purposes. Uranium may also be encountered in the drill cores.

5050 Nunavut currently holds Nunavut Waste Generator # NUG 100022 (attached in the appendices). All such waste will be documented and transported from the Project area for proper disposal. The same individual in charge of documenting the hazardous wastes will have completed a course in the Transportation of Dangerous Goods specifically designed to train geologists in the safe transport of nuclear substances.
For the long term storage of drill core, radiation levels will be reduced to less than 1.0 µSv measured at 1.0 meter from the surface and in no instance will the level be allowed to exceed 2.5 µSv. In practice, it is anticipated that major uranium intersections will be transported to the Saskatchewan Research Council for testing and storage at their nuclear materials storage facility

Please refer to the attached Uranium Exploration Plan for further details regarding the Uranium exploration project.

3.9.6 Empty Barrels & Fuel Drums

The empty barrels/fuel drums will be flown out to Yellowknife or Kugluktuk on the return flight that brought in supplies.

3.10 Fuel

Fuels will be used at the McGregor Lake Camp for heating and equipment operation. The following sections discuss fuel transport and storage, the quantity of fuel present at the camp, secondary containment and fuel transfer.

3.10.1 Fuel transport and Storage

Fuel will be transported to site by float and ski planes. Refer to Spill Contingency Plan section for more information.

Please refer to McGregor Lake Campsite Spill and Contingency Plan for complete details regarding fuel storage, use, transfer, and spill response.

3.10.2 Quantity of Fuel and Storage

See attached Spill and Contingency plan for fuel handling techniques.

Monthly Quantities of Fuel and Oil to be Stored at the Campsite

Fuel Type	Container Type	Number of Containers	Container Capacity (litre)	Total Volume to be Stored On-Site
Diesel (P-50)	Barrels	100	170L	17,000L
Gasoline	Barrels	10	170L	1,700L
Jet B	Barrels	300	170L	51,000L
Propane	Barrels	10	100 lb tank	1000 lbs
Lubricants & Oils	Plastic Jugs	25	20L	500L

The appropriate Material Safety Data Sheets are attached in Appendix B of this Plan.

The types of fuel and lubricants that will be stored on the camp site will consist of P-50 diesel motive, JET-B, Gasoline, Propane and an assortment of hydraulic oils and motor oils. The P-50 diesel motive will be used for heating and powering the generators, pumps, and other related heavy equipment. The JET-B will be used for helicopter refuelling and heating. Gasoline will be used for re-fuelling ski-doo's. Oils and lubricants will be used on the equipment

3.10.3 Secondary Containment

All fuel on the camp site will be stored in 170L structurally sound steel drums with secondary containment in accordance with Section 3.9 of the *CCME Environmental Code of Practice for Aboveground and Underground storage Tank Systems Containing Petroleum and Allied Products* (2003), and located 100m from the high water mark of McGregor Lake.

Upon arrival at the camp all drums are factory sealed and clearly marked. All drums will be inspected daily by 5050 Nunavut personnel for container and bung soundness. Prior to re-fuelling, all drum rubber seals are replaced. Any drum(s) noted to be leaking or showing signs of weakness and fatigue will immediately have all product transferred to a new drum(s). The emptied drum will be hauled off site with the next backhaul shipment to Kugluktuk and/or Yellowknife.

To encourage progressive reclamation, no more than 20% of the fuel drums will be empty at any one time. Any empties that are deemed not worthy of holding fuel are back hauled to landfill sites by and/or flown out in the summer months by plane for proper disposal in approved facilities in to Kugluktuk and/or Yellowknife.

Spill kits will be available at all fuelling storage sites and fuel transfer areas as well as the campsite generator shack and drill rig.

3.10.4 Fuel Transfer

The helicopter will be fuelled directly from the Jet B drums by an electric pump powered by the aircraft's battery. There will be a spill kit and 170 L plastic tray at the site of the refuelling to mitigate any spillage of fuel during the process.

The drill rigs will be refuelled from drums of P-50 that are slung to the site by helicopter. The diesel will be pumped directly into the drill's fuel tank from the drums by an electric pump powered by the drill's battery. There will be a spill kit and 170 L plastic tray on site to mitigate any

spillage of fuel during the process.

The camp stoves and generator will be refuelled directly from the drums of P-50 using a small portable electric pump. A spill kit and 170 L plastic tray will be kept on hand during the procedure.

The small engines (snowmobiles, geophysics generators, and the water pump) will be refuelled with gasoline from 5 gallon jerry cans with a spill kit on hand.

3.11 Products, Chemicals, and Hazardous Materials

The types of materials and the transfer of these materials is discussed below.

3.11.1 Types and Storage

Types and quantities of products and chemicals will be determined once the Drill Contractor has been hired.

The chemicals required for drilling will most likely include: motor oil and grease for the drill; bags of calcium chloride (contained in double lined 50 lb plastic bags that would be stored in large canvas transport sacks until they are moved to the drill); Poly Drill OBX or similar non-toxic product (contained in 50 lb pails).

Household type cleaning products will be used in the kitchen, bathrooms and dry good storage area as well. These products will be stored in the kitchen building.

See above description for the treatment of hazardous wastes.

3.11.2 Transfer

The above materials are transported to the drill by helicopter as needed.

4.0 PUBLIC INVOLVEMENT / TRADITIONAL KNOWLEDGE

5050 Nunavut recognizes the need for and importance of public involvement and the benefits that traditional knowledge brings to the effective management and implementation of exploration projects. These items are discussed below.

4.1 Opportunities for training and employment of local Inuit beneficiaries

For the purposes of the campsite and the associated exploration activities, 5050 Nunavut will hire up to 9 local workers as McGregor Lake Campsite employees through Kikiak Construction in Kugluktuk. Additional individuals may be hired as cleaning and cooking staff for the campsite.

4.2 Workforce Mobilization and Schedule

Three members of the crew will mobilize via Cat Train (per the 5050 Nunavut 2008 Winter Trail Permit Application) while the other 6 members will be flown to the McGregor Lake campsite via helicopter.

4.3 Specific Hiring Policies for Inuit Beneficiaries

The activities associated with the MIE and BVU exploration projects (e.g. the campsite and exploration activities) will employ Nunavut residents when possible.

4.4 Communities, Groups and Organizations Affected

The project will contribute to the economic well-being of Kugluktuk community by creating employment opportunities for skilled and unskilled members of the community.

4.5 Description of any Consultation with Interested Parties

A town meeting was held in Kugluktuk on August 2nd, 2007 to discuss 5050 Nunavut's activities in the McGregor Lake area. The table below summarizes other consultation and communication that has occurred with interested Parties.

Community	Name	Organization	Date Contacted
Kugluktuk	Stanley Anablak	Kitikmeot Inuit Association	Since January 2007 Ongoing communications regarding: -5050 Nunavut's MIE project permits renewal for McGregor Lake campsite and proposed cat train -5050 Nunavut's cleanup efforts at the McGregor Lake Camp
Kugluktuk	Community members	General community	August 2007, A community meeting was conducted regarding the history of McGregor Lake Camp, 5050 Nunavut's MIE and BVU exploration projects, and 5050 Nunavut's efforts to clean up the waste left by previous operators

Community	Name	Organization	Date Contacted
Iqaluit	Jeffrey Holwell	DIAND	Since Nov 13 Ongoing communications regarding 5050 Nunavut MIE project permits: cat train and renewal of McGregor Lake campsite land use permit
Gjoa Haven	Phyllis Beaulieu	NWB	Since Nov 13 Ongoing communications regarding 5050 Nunavut MIE project permits: cat train and renewal of McGregor Lake campsite
Kugluktuk	Jimmy Ross Miyok	KIA Employment and Training Officer	Since January 2007 to get resumes of local people available for hire

4.6 Summary of Public Involvement

Sixty community members attended the community meeting at the Kugluktuk Arena. An interpreter was in attendance during the meeting to field questions. The presentation portion included description of the camp, location clean up, health and safety, and the future of the project. The community members were impressed with the amount of clean up 5050 Nunavut would be doing. Community elders were concerned with whether their people would be involved in the future of the project. Gordon Addie, President of 5050 Nunavut Ltd, explained that future activities cannot proceed without the involvement of community members. Mr. Addie stressed the importance of traditional knowledge in the future of the project and that 5050 Nunavut is committed to not reproducing the negative impacts previous mining companies have made in the McGregor Lake area. If the project continues on to mine construction intense meetings will be held at that time to determine the scope of a benefit package**.** Meanwhile the activities associated with the MIE project (e.g. the Cat Train) will continue to employ residents when possible.

4.7 Description of how traditional knowledge was obtained, integrated into the project

The local people working in the camp are the major source of traditional knowledge. They help in the camp setup, field activities and personnel safety in the camp based on their knowledge of the terrain, weather and wildlife.

4.8 Discussion of future consultation plans.

Future public consultations will occur as the MIE and BVU exploration projects progress.

5.0 DESCRIPTION OF EXISTING ENVIRONMENT

Discussion of the existing environment is divided into the physical and biological environment, and the socioeconomic environment.

5.1 Physical Environment and Biological Environment

The MIE Project is situated on one of the world's largest continental-type magmatic events, the Mackenzie Igneous Event. This event deposited a huge lava volume – an estimated 5 to 10 million cubic kilometres – across Northern Canada. High-grade occurrences of copper, nickel and rich platinum group element (PGE) have been sampled along both walls of the Muskox magma chamber, suggesting that metals have accumulated at the bottom of the chamber.

The McGregor Lake area is characterized by a sub arctic climate with temperature extremes of minus 40° C in the winter to plus 30° C in the summer. The microclimate is very unpredictable and daily temperatures can change rapidly. The biggest single difficulty in the summer is the common occurrence of fog banks forming in the morning and persisting until noon.

The terrain and vegetation surrounding the project site is very typical of the tundra; consisting of a subdued topography with small valleys and gently rolling/sloping hills separated by lakes. The project is located north of the tree line and consists of continuous permafrost extending to an average depth of 300m.

There are numerous animal species that inhabit the area, including caribou, musk ox, grizzly bears, wolves, wolverines, foxes, arctic hare, weasels, field mice, ground squirrels and a few moose.

The Bluenose caribou herd calves to the northwest of Kugluktuk and scattered members of the herd can be expected to be spotted during the summer in the Project area.

The few birds that live in the area include Peregrine falcons, ptarmigan, and eagles. Ravens and seagulls occasionally come in from the coast. A variety of small birds migrate into the area in the summer as well as ducks, loons and swans.

Fish in the lakes are dominantly yellow – fin lake trout. In the rivers the red – fin lake trout predominate with common grayling, and very rare pike, as well as arctic Char seen in the Coppermine River and Melville creek.

5.2 Socioeconomic Environment

Archaeological studies have not been conducted in the area. The project site is very remote and not visited very often. The land use within the area consists of occasional subsistence harvesting.

6.0 IDENTIFICATION OF IMPACTS AND MITIGATION MEASURES

This section identifies the impacts of this project and outlines the mitigation measures being used.

6.1 Impacts

Minimal environmental impact is anticipated from the construction of the camp

6.2 Potential socioeconomic impacts

Expected socioeconomic impacts include a small increase in the jobs available to the local communities. No general human health impacts are expected to result from the proposed activities.

6.3 Potential for transboundary effects related to the project

Transboundary effects are not applicable to this project.

6.4 Adverse Effects to Species Listed Under the Species at Risk Act

This project proposal will not result in any adverse effects to species listed under the Species at Risk Act (SARA) including their critical habitats and residences as there are no known occurrences in the general project area.

6.5 Mitigation Measures

The proposed camp layout and location are such that very little to no vegetation is disturbed and minimal surface disturbance occurs. The mitigation of impacts to permafrost will vary by activity. The shutdown period during ice-break up is timed to protect the permafrost by allowing the lake to thaw so that it may be used instead of the ice-airstrip for plane traffic. During the summer movement about the camp is restricted to prepared surfaces. After the thaw all movement outside of the camp will be by helicopter, with localized movement around drill locations. Camp structures are built so as to minimize the impact on the permafrost.

Food will be stored inside closed buildings and garbage will be incinerated daily to avoid attracting animals. When the camp is no longer required all imported materials will be burned or removed from the site. Any pits or earthworks will be backfill and re-contoured.

Fuel will be stored in 170 litre steel drums in approved containment according to regulations, and will be located 100m from the high water mark. Storage areas will be monitored regularly to detect and manage any leaks. Empty drums will be removed from the site. Spill kits will be maintained in all fuel storage and transfer areas and all staff will be trained regarding the spill contingency plan.

Camp domestic water will be drawn the mouth of Iceberg Creek, on the south west corner of McGregor Lake, in volumes that will not affect lake or creek habitats. All grey water will undergo biological treatment in a sump located 100m from the high water mark.

The drill rigs will be flown to the drill locations to limit ground disturbance. Based on the type of mineral being explored, the drill activities will be conducted a minimum distance of 30 to 100m from any water body. 5050 Nunavut will inform the helicopter pilots of the general

7.0 CUMULATIVE EFFECTS

Exploration around McGregor Lake has been active since 1950, thus leaving the impact of abandoned camps and old drill holes. The project that 5050 Nunavut is proposing is of minimal environmental impact. The campsite is situated in an area of little to no vegetation, and will require no further land disturbances in the area. 5050 Nunavut will return the project areas as close as possible to their natural state once as outlined in their 2008 McGregor Lake Campsite Abandonment and Restoration Plan. As well airborne and snowmobile geophysical surveys are non-intrusive and the drilling that is planned is of low impact.