# APPENDIX I.1 DE BEERS CANADA MINING INC. COMPLIANCE REPORT

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## 1.0 DE BEERS CANADA MINING COMPLIANCE REPORT

#### 1.1 Introduction

De Beers Canada Corporation has been actively exploring for diamonds in Canada for almost 30 years. In Canada, exploration programs are currently underway in the Northwest Territories (NWT), Nunavut, Saskatchewan, Manitoba, Ontario, and Quebec. The current exploration focus is on the Slave Craton of the NWT and Nunavut, and the Superior Craton covering parts of Manitoba, Ontario, and Quebec. More than 20 projects are currently underway ranging from grassroots exploration in targeted areas, detailed followup and initial kimberlite delineation drilling programs, to evaluation and bulk sampling. Due to the nature of the bulk sampling methods, the Snap Lake Advanced Exploration Program (AEP) is the only project in Canada that could be considered a mining operation. The remainder of the activities are considered at the exploration stage.

The Snap Lake AEP, located approximately 220-kilometres (km) northeast of Yellowknife, was discovered by a junior exploration company, Winspear Resources Ltd., in 1998. Three regulatory instruments were required for the Snap Lake Advanced Exploration Program (AEP) to become operational. These were: a Type A Water Licence, pursuant to the *NWT Waters Act*; a Class B Land Use Permit, pursuant to the *NWT Land Use Regulations*; and a Fisheries Authorization, pursuant to the *Fisheries Act*. A fully permitted AEP began in January 2000. These regulatory instruments each have some element of compliance and/or inspection.

A Type B Water Licence (N1L2-1735) was issued by the NWT Water Board on December 17, 1999. The water licence expires on December 31, 2003. Upon its establishment, this licence was transferred to the administration of the Mackenzie Valley Land and Water Board (MVLWB).

A Class A Land Use Permit (N1999C0081), was issued by the federal department of Indian and Northern Affairs Canada (INAC) on December 19, 1999, with an amendment granted January 4, 2000. The licence was transferred to the administration of the MVLWB upon its establishment. The land use permit expired on December 19, 2001 and on October 19, 2001, an extension was granted until December 19, 2002.

Quarry Permit 1999QP0095 was issued by INAC on December 19, 1999 for the removal of 25.000 m<sup>3</sup> of sand from an esker located south of the AEP site.

On January 24, 2000, a section 35(2) Fisheries Authorization was issued by Fisheries and Oceans Canada (DFO). This authorized the alteration, disruption, or destruction of fish

habitat arising from the loss of Inland Lake 1, which became the processed kimberlite containment (PKC) area.

After purchase of Winspear Diamonds Inc. by De Beers Canada Corporation, the water licences and land use permit and fisheries authorization were assigned to De Beers Canada Mining Inc. (De Beers).

In addition to the inspection related to the above regulatory instruments, regular inspections pursuant to the *Mine Health and Safety Act* are conducted by the Inspector of Mines and administered by the Workers Compensation Board (WCB).

Section 2.1 provides a background to the reporting requirements undertaken by De Beers for the Snap Lake AEP. Section 2.2 summarizes the water licence inspection results; Sections 2.3 and 2.4 represent the land use permit and land quarry permit inspection results respectively; and Section 2.5 summarizes the status of the fish habitat enhancement required under the fisheries authorization. Finally, the documented incidents related to spill reports and accidents are presented in Section 2.5. A review of the inspection reports related to environment and safety is contained in Appendix A.

## 2.0 SNAP LAKE ADVANCED EXPLORATION PROGRAM COMPLIANCE RECORD

## 2.1 Background

Under the land use permit and water licence, specific information must be reported to the MVLWB on a monthly and annual basis. Non-routine reporting is required in the event of an unusual occurrence, such a spill of a controlled product, or to the WCB in the case of an accident.

The monthly water licence reporting and land use permit reporting requirements are combined in one document. This is submitted to the MVLWB, and to the INAC Water Resource Officer (WRO) and Resource Management Officer (RMO), who are the designated water and land inspectors, respectively. The monthly report addresses site-specific information on water quality and usage, geotechnical data, plant operations, and mining activities. It also provides a progress report on any land use issues. These monthly reports are available on the public registry at the MVLWB's office. In addition, an annual water licence report must be submitted, which is also available on the Mackenzie Valley Environmental Impact Review Board's (MVEIRB) public registry. The monthly and annual reports have been submitted on time, as required by the water licence.

Spills of controlled product are reported directly to the NWT Territorial Spill Line, as required in the land use permit and water licence, to both INAC inspectors, and the MVLWB. Communication of these events typically occurs by phone and fax but can also include electronic mail. The detailed followup report is submitted in hard copy, along with any available photos as required in the licence and permit.

Injuries to workers are documented in-house unless the injury is such that the worker cannot work on either a permanent or temporary basis. This determination is made by a medical practitioner and is automatically reported to the WCB.

There have been no incidents of significant non-compliance related to any regulatory instrument, or to the requirements under the *Mine Health and Safety Act*.

#### 2.2 Water Licence N1L2-1735

A number of conditions need to be met to maintain compliance with the water licence, in addition to the need to meet the water use volumes and the water quality criteria as set out in the water licence. These include the following:

- a \$150,000 security deposit to be held against the successful completion of the final Abandonment and Restoration Plan was deposited with the Receiver General, as required by the water licence;
- the Surveillance Network Program signs were erected on the Snap Lake site within 90 days of the licence issuance, as required by the water licence;
- weekly inspections of the dams for the PKC area are carried out. An annual inspection is conducted by a geotechnical engineer, as required by the water licence. A report must be submitted within 60 days of this annual inspection. As-built drawings of the PKC, prepared and signed by the geotechnical engineer responsible for its design and construction, were submitted on October 23, 2000, approximately 120 days after completion of the PKC construction. The water licence required submission within 90 days of completion of the construction;
- an Acid/Alkaline Rock Drainage Generating Potential Monitoring Plan was submitted on time on March 31, 2000, for approval by the MVLWB;
- a contingency plan was submitted in mid-February 2000, for approval by the MVLWB. The water licence required submission by February 1, 2000. An update to this plan was submitted on June 1, 2001;
- an Abandonment and Restoration Plan was submitted in December 2000 for approval by the MVLWB. The licence required submission by February 1, 2000;
- a Quality Assurance/Quality Control Plan for sampling and analysis was submitted on time on March 31, 2000 for approval by the MVLWB; and,
- a water fee must be paid annually in advance on the anniversary of the licence issuance. Payments are up-to-date for the December 2001 to December 2002 time period.

All reports can be found on the MVLWB's public registry.

On April 5, 2001, the MVLWB approved a written request by De Beers to discharge 150,000 m<sup>3</sup> of water from the PKC into Snap Lake. This approval was subject to a number of conditions, including: completion of the discharge by June 10, 2001; daily and weekly monitoring of a number of water quality parameters; submission of a revised contingency plan, and submission of a detailed report concerning all aspects of the discharge, water quality and quantity upon completion of the discharge. De Beers met all conditions of the discharge approval. No logistical or environmental issues were encountered, and the report can be found on the MVLWB's public registry.

Between January 2000 and September 2001, there have been five water licence compliance inspections. These have occurred on March 21, 2000, April 7, 2000, October 13, 2000, January 30, 2001 and March 28, 2001. Five issues of non-compliance were noted on three of these inspections.

Of the five non-compliance issues, three related to the sewage treatment effluent water quality. This occurred on three separate occasions: March 28, 2001, January 30, 2001, and April 7, 2000. The quality of the effluent became an on-going issue and was fully discussed with the Water Resources Inspector, and fully documented with the MVLWB. Many methods were employed to try to correct this situation, including consultation with other users of the rotating biological contactor (RBC) unit in northern situations, removal of anti-bacterial soap from site, special attention to the disposal of kitchen grease, and running of water during low camp load periods. In addition, a consultant was hired to provide technical advice on the operation and maintenance of the RBC unit and to provide advice on possible corrective actions. As requested by the MVLWB, a Sewage Treatment Management Action Plan was developed, which identified steps that would be taken to bring the effluent quality into compliance. All the tasks in the Action Plan were completed. Despite the actions taken, in November 2000 De Beers decided to replace the RBC unit with a sequencing batch reactor (SBR). The installation of the SBR unit, which became operational on May 21, 2001, resulted in compliance with discharge criteria for water licence after an initial start-up period.

The fourth issue of non-compliance occurred in March 2000 and related to the lack of formal notification to the MVLWB of the start of construction of the SBR unit. Although De Beers informed the MVLWB in the November 2000 monthly report that the RBC unit would be replaced with an SBR unit, this was not interpreted to be formal notification by the Water Resources Inspector. Formal notification, by way of a separate letter, was sent to the MVLWB on March 1, 2001; however, construction of the pad for the SBR had already begun. In the future, De Beers will not rely on the monthly reports to act as formal notification to the MVLWB for modification notice, but will send a separate letter.

The last issue of non-compliance related to the late submission of a detailed followup report for two brine spills that occurred in February 2001. The water licence requires a detailed followup report to be submitted within 30 days of the occurrence of the spill. This non-compliance issue was brought to De Beers' attention in March 2001. Followup reports were promptly submitted to the MVLWB. To ensure this situation does not occur again, the spill contingency plan has been updated and it is now the on-scene coordinator's responsibility to ensure that any followup documentation requirements are complete.

A detailed summary of each water licence inspection report for the Snap Lake AEP is found in Appendix A. All inspection reports can be found on the MVLWB's public registry.

#### 2.3 Land Use Permit N1999C0081

Between January 2000 and September 2001, there have been ten inspections carried out under the land use permit. These have occurred on February 4, 2000, February 28, 2000, March 21, 2000, April 7, 2000, May 3, 2000, August 15, 2000, October 13, 2000, January 30, 2001, March 6, 2001, and March 28, 2001. Six items received an unacceptable rating over the ten inspections carried out.

During the February 4, 2000 inspection, the late submission of the Spill Contingency Plan was noted, and received an unacceptable rating. The land use permit required submission by February 1, 2000. The plan was subsequently submitted by mid-February 2000.

The second unacceptable rating was identified on the February 28, 2000 inspection. This related to the interim storage of four, 205-litre drums of fuel on the ice near the camp. A condition of the land use permit is to ensure fuel storage is a minimum of 30 metres from the normal high-water mark. The tanks were subsequently removed for proper storage. All personnel were instructed on the conditions of the land use permit.

The third unacceptable rating was identified during the January 30, 2001 inspection. It was noted that a chemical dye marker was being used as a centreline marker on the airstrip without proper notification of the RMO as required in the land use permit. A notification of the use of this product was promptly sent to the RMO.

On the March 6, 2001 inspection, there were three unacceptable ratings identified. It was noted that a portable camp was set up on ice, which contravened two conditions of the land use permit. As well, grey water and sewage were deposited directly onto the ice, contravening one condition of the land use permit. These items related to the winter road contractor, who was subsequently reminded of the terms and conditions of the land use permit, which they were operating under. The items were removed and cleaned up to the inspector's satisfaction by March 8, 2001.

The exploration camp, referred to as SnapEx, was operated by Winspear under land use permit N1998C935, and expired in early 2001. This land use permit was assigned to De Beers. The SnapEx permit was recommended for closure by the inspector on September 18, 2001. Final clean up is currently being undertaken under the Snap Lake AEP permit N1999C008, as acknowledged in writing by the inspector. Official closure will occur in the summer of 2002, once a final inspection can be completed under snow-free conditions.

A detailed summary of each land use permit inspection report for the Snap Lake AEP is found in Appendix A. A detailed summary of the close-out inspection report for SnapEx under land use permit N1998C935 is also provided. All inspection reports can be found on the MVLWB's public registry.

#### 2.4 Quarry Permit 1999QP0095

There was one inspection of the quarry permit on March 21, 2000. There were no unacceptable ratings. A summary of this inspection is found in Appendix A.

#### 2.5 Fisheries and Oceans Canada Letter of Authorization

On January 24, 2000, a fisheries authorization was obtained for the use of inland lake 1 (IL1) as a PKC area. By the terms of the fisheries authorization, compensation for the loss of fish habitat is to be accomplished by the construction of two reefs in Snap Lake which will enhance the productivity of Snap Lake. The specific design, construction schedule, precise location, and post construction monitoring were detailed in documents prepared on behalf of Winspear Resources (now De Beers Canada Mining), and approved by DFO.

The reefs were constructed during the winter of 2000. The first year of post construction monitoring is underway, and includes confirmation of reef configuration by a remote-operated video camera, installation of egg traps, and a subsequent spawning inventory. The report of the results of the first year of post construction is in preparation.

The conditions of the fisheries authorization have been met by De Beers. Where an alteration to an approved plan has occurred, prior approval has been sought and received from DFO as required in the terms of the authorization.

Copies of reports related to the fisheries authorization are available upon request from De Beers.

## 2.6 Inspections Under the Mine Health and Safety Act

The WCB Mines Inspection Branch conducts routine inspections on site with respect to the health and safety of all workers (De Beers' and contractor's staff).

Between start-up and September 2001, there have been nine separate inspection reports completed for eight individual site visits. These occurred in February, March, June, August and November of 2000, and March, May and August of 2001. The March 2000 visit included two reports: one issued for ancillary construction and exploration activities

such as the airport and surface infrastructure away from the mine proper, while the second report concerned the area in and around the process plant, the adit and surface areas.

Five of the reports (four inspections) occurred prior to De Beers' purchase of the property and are not reflected in this summary. However, details of the reports are included in Appendix A for reference. The remaining four inspection reports pertain to inspections made under De Beers' ownership.

The May 2001 and November 2000 inspections constructed under De Beers' ownership found no contravention of the *Mine Health and Safety Act* and no orders were issued. The remaining two inspections noted a total of 13 conditions in contravention of the *Mine Health and Safety Act* with eight orders issued in August of 2001 and five issued in March 2001.

In August of 2001, the inspector found four underground related contraventions relating to the transportation of explosives and caps, the lack of the proper identification of blasting cable, the location of a fire extinguisher in the electrical-transformer and the need for proper identification of electrical switchgear. The remaining four issues related to a guard rail replacement, signage in the process plant, a cracked windshield and the need for personal flotation devices to be worn by personal working on the PKC. All deficiencies were corrected to the satisfaction of the inspector.

In March of 2001, the inspector noted five issues of contravention. They include: the proper venting of an exhaust pipe in the diamond drill shack; the need to inspect fire extinguishers; the need to cover holes created by the removal of electrical switches (on one piece of electrical equipment); and, overloading of shelves and load rating with signage on shelving. All deficiencies were corrected to the satisfaction of the inspector.

Methods to prevent incidents involving occupational safety include daily morning meetings where specific task requirements are reviewed to highlight potential safety concerns, and to consider the potential for losses, damage or environmental concerns. At these meetings, the manager, supervisor, and the employee (or contractor) has the opportunity to discuss any possible danger or loss potential concerns, along with potential alternatives and/or means to prevent such a loss.

The Joint Occupational Health and Safety Committee, which is required under the *Mine Health and Safety Act*, also addresses health and safety issues on site. The Committee is co-chaired by employee and management representatives. It reviews new procedures, accident/incident reports, and looks at any incident where a lost time accident or substantial damage to property occurs. Monthly meetings are held to discuss changes to

operational procedures, incident occurrences, accident frequencies, and near misses. A report is submitted monthly to the mine's inspector for review. Operational changes that are approved by management and employees are submitted in writing, to the inspector for review.

#### 2.7 Documented Environmental and Safety Incidents

Table I.1-1 identifies the documented environmental and safety incidents at the Snap Lake site between January 2000 and September 2001. Lost time accidents statistics relate to any worker on site, regardless of the employer. Contractors and consultants working on site, if injured and lose time from work, would be included in the lost time accident statistics. Up to September 2001, the site achieved a Lost Time Severity rating of 110.0, with 78 workdays attributable to diamond drillers and 22 workdays attributable to underground workers. All incidents of lost time accidents are reported to the WCB.

Table I.1-1
Summary of Documented Environmental and Safety Incidents, Snap Lake Advanced Exploration Program, January 2000 to September 2001

Month of Incident	Incident Type	Date Report Closed	Incident Description
January 2000	n/a	n/a	None.
February 2000	spill	April 9, 2000	Contractor spilled 30 litres of diesel and hydraulic fluid on the shoreline of Snap Lake as a water truck rolled onto its side on the access ramp; snow was collected and backhauled to Yellowknife for disposal
			Contractor spilled 20 litres of Jet B when a snow cat ran over two full barrels buried under snow; barrels were removed and remaining fuel salvaged; snow was collected and backhauled to Yellowknife for disposal
			Contractor spilled a small amount of oil on the ice; snow was scraped up and placed in drums and backhauled to Yellowknife for disposal
March 2000	n/a	n/a	None
April 2000	lost time	n/a	A worker fell off a ladder resulting in a sprained wrist
			A worker suffered a sore back as a result of a lifting injury
May 2000	n/a	n/a	None
June 2000	n/a	n/a	None
July 2000	Spill	Recommended for closure September 18, 2001	Diesel spill of 240 litres in the exploration camp during the refuelling of a genset; diesel soaked peat and soil was collected for burning onsite but was subsequently shipped off-site for disposal due to physical requirements
July 2000	lost time	n/a	Lost time accident on underground mining contract relating to a fall from a scissor lift, resulting in broken bones
August 2000	lost time	n/a	Lost time accident relating to contractors employee due to laceration over the eye resulting from being hit by a cable
September 2000	lost time	n/a	Lost time accident relating to a maintenance contract due to the laceration of a finger when a door slammed due to high winds
October 2000	n/a	n/a	None
November 2000	lost time	n/a	A sore back resulting from lifting

Table I.1-1
Summary of Documented Environmental and Safety Incidents, Snap Lake Advanced Exploration Program, January 2000 to September 2001 (continued)

	1	T.		
			A finger infection when the original cut was not reported and treated	
December 2000	spill	Recommended for closure September 18, 2001	P-50 fuel spill of 80 litres resulting from a cracked fuel filter in a haul truck in the ProCon yard of the exploration site; the area was dyked with clean snow and contaminated snow was removed to the burn pit area for burning	
	lost time	n/a	Lost time accident of a De Beers employee due to a sprained ankle, which occurred when walking at the airstrip	
January 2001	n/a	n/a	None	
February 2001	n/a	n/a	None	
March 2001	spill	Recommended for closure September 18, 2001	Heating fuel spill of 150 litres at airport storage building due to defective line; line replaced immediately by supplier; contaminated soil removed and backhauled to Yellowknife for disposal; gravel material in affected area was replaced	
		Recommended for closure September 18, 2001	11.9 m <sup>3</sup> brine spilled within the PKC drainage basin around a number of drill holes due to poor communication within drilling crew; communication procedures immediately reviewed; contaminated snow relocated inside the PKC basin and snow berms constructed around contaminated sites to increase dilution at freshet	
	lost time	n/a	Lost time accident relating to a contractor's employee who slipped and fell in a scoop bucket, striking their arm on the bucket edge	
April 2001	lost time	n/a	Lost time accident relating to a contractor's employee due to use of improper tools, resulting in a broken bone in the left hand	
May 2001	lost time	n/a	Lost time on a drilling contract due to a complaint of a sore back	
June 2001	n/a	n/a	None	
July 2001	lost time	n/a	Lost time on underground mining contract due to the laceration of a finger when moving stoping equipment	
August 2001	n/a	n/a	None	
September 2001	n/a	n/a	None	

Note: n/a = not available.

#### 2.8 Conclusion

At all industrial sites, the goal is to achieve no accidents and/or environmental incidents. However, in actual operating scenarios, these events must be planned for and the management of these events is to be addressed in a professional, clear, open, and concise manner. A review of an incident response and the effectiveness of remedial measures taken during an incident, along with the basic underlying cause of those events, is undertaken to improve incident management skills as well as to increase awareness in the prevention of these occurrences. The ongoing daily and monthly interaction between management, employees and contractors underscores the commitment to developing sound communication, a focused direction and an awareness of the working environment, for the safety and protection of personnel and the environment.

A review of the inspection reports related to environment and safety (Appendix A) demonstrates the care and consideration that has been consistently applied towards all aspects of the environment and safety during the operation of the Snap Lake AEP.

## 3.0 LIST OF ACRONYMS

AEP advanced exploration program

DFO Department of Fisheries and Oceans

DMS dense media separation

IL inland lake

INAC Indian and Northern Affairs Canada

MVEIRB Mackenzie Valley Environmental Impact Review Board

MVLWB Mackenzie Valley Land and Water Board

NWT Northwest Territories

OEM original equipment manufacturer

PKC processed kimberlite containment (area)

RBC rotating biological contactor

RMO resource management officer

SBR sequencing batch reactor

SNP surveillance network program

WCB Workers Compensation Board

WRO water resource officer

## **APPENDIX A**

## SUMMARY OF WATER LICENCE, LAND USE PERMIT, QUARRY PERMIT AND HEALTH AND SAFETY INSPECTION REPORTS

**SNAP LAKE ADVANCED EXPLORATION PROGRAM** 

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## 1.0 SNAP LAKE ADVANCED EXPLORATION PROGRAM WATER LICENCE N1L2-1735, 2001

#### 1.1 March 21, 2000 Inspection

## **General Inspection Statement**

The inspector concluded his report with, "...Overall activities on-site appear to be conducted in an organized fashion. Please ensure that all Licence conditions are being met."

#### **Environmental Issues**

"Ensure that sewage effluent above Licence limits is prevented from entering Snap Lake". Steps were taken to store non-compliance effluent in tanks for later disposal.

#### **Administrative Issues**

- "Submit the acid Acid/Alkaline Rock Drainage Generating Potential Monitoring Plan".
- "Submit the Quality Assurance/Quality Control Plan". Both submitted Mar 31/00.
- "Provide confirmation that the security deposit in the amount of \$150,000.00 is in place." (Confirmed with F Jackson, through MVLWB October /01).

#### **Inspection Summary**

## Water Supply

All seven of the applicable conditions inspected received an acceptable rating. "There were no concerns with the water intake or the water purification system. These facilities were under construction, and are new and state-of-the-art."

#### Waste Disposal and Spills/Sewage Treatment Equipment

Two of the four conditions inspected received an acceptable rating with the remaining conditions referred to comments. These comments related to sewage discharge quality and to material spills on site. "A sample collected on March 21<sup>st</sup> from the discharge pipe (SNP1735-10) indicated high concentrations of BOD, and Total and Faecal Coliforms. The effluent discharge was estimated at 4-6 litres per minute." Also, "...Winspear was

instructed to either excavate a sump near the discharge point or redirect the effluent back to the RBC until effluent levels come within Licence limits. Winspear has indicated that sampling at this site will be increased from monthly to bimonthly until the system becomes totally effective in reducing effluent limits to regulated concentrations."

#### Fuel and Chemical Storage and Spills

Three spills; 00-32, 00-34, and 00-35 have been cleaned up but disposal of all contaminated materials is continuing.

#### **General Conditions**

Two of the six conditions inspected received an Acceptable rating with the remaining conditions referred to comments. Two of the referred conditions related to the submission of timely reports and records while the other two referred conditions related to the surveillance network program (SNP), which had not yet been totally initiated as the site was still in construction and not all signage had yet been erected. See below for additional detail.

## **Record and Reporting Issues**

- "An Acid/Alkaline Rock Drainage Generating Potential Monitoring Plan (Part D; Item 8)" and "A Quality Assurance/Quality Control Plan (Part B; Item 10, of the Surveillance Network Program)" were yet to be submitted. They subsequently were submitted by Mar 31/00.
- Also the inspector was "... unaware if the security deposit in the amount of one hundred fifty thousand (\$150,000.00) required under Part B; Item 2, is in place." This security is in place and had been confirmed Oct/01.
- <u>Posting Signage</u> the inspector noted that; "... since most of the facilities are either still under construction or have yet to be constructed, the exact location for the monitoring site cannot be determined at this point in time." As per Part B; Item 7 of the Surveillance Network Program.
- <u>Abandonment and Restoration Plan & Contingency Plan</u> the inspector noted that these reports were pending, and have since been submitted.
- <u>Surveillance Network Program</u> the inspector acknowledged that there has been no SNP report as yet and that "... the first report as per Part D; Item 1 of the Surveillance Network Program is expected by the end of March."

## Water Act, Licence, or Compliance Issues

The inspector acknowledged that SNP 1735-10 were above licence limits, but "... measures are being taken to ensure that the effluent is either re-routed back to the RBC or retained until concentrations are reduced to within licence limits."

#### **Indian and Northern Affairs Canada Inspector**

W. Puznicki, WRO.

### 1.2 April 7, 2000 Inspection

## **General Inspection Statement**

"Overall activities on site appear to be conducted in an organized fashion. Please ensure that all Licence conditions are being met."

#### Administrative Issues

- Continue sampling effluent quality at SNP #1735-10 on a biweekly basis.
- Submit the monthly SNP report to the MVLWB.
- Provide confirmation that the security deposit in the amount of \$150,000 is in place (outstanding).

## **Inspection Summary**

#### Water Supply

Water supply areas were not inspected as commissioning was not complete, fresh water was being trucked for camp use.

#### Waste Disposal and Spills/Sewage Treatment Equipment

Waste disposal areas were inspected and it was noted that the RBC had problems and that "concerns were raised with the manufacturer and alternative options for improving the system to meet licence limits are being investigated."

## Fuel and Chemical Storage and Spills

"There were no concerns with the fuel storage area."

There are no new spills to report since the last inspection. Spill #'s 00-024 and 00-025 (previously noted incorrectly as being #'d 00-034 and 00-035) have been recommended for closure by Mr. K. Dahl, RMO, INAC.

#### Processed Kimberlite Containment Area

The PKC was inspected and given an acceptable rating and Mr. J Cassie of BGC Engineering was carrying out construction monitoring of the dyke structures.

## Surveillance Network Program

The signage was very professional and more than satisfactory.

## **Record and Reporting Issues**

- Acid/alkaline Rock Drainage Generating Potential Monitoring Plan, as per part D, Item 8 had been received and is awaiting the Board's approval.
- Quality assurance/quality control plan, as per the SN Program Part B, Item 10 had been received and is awaiting the Board's approval.
- Confirmation that the security deposit of \$150,000, required under Part B, Item 2, is in place remained outstanding.
- The first SNP report was received by fax, along with the monthly Land use report. The SNP report is to be submitted to the MVLWB, and should include analytical data from SNP stations.
- The closure plan (A and R) and the contingency plan have been submitted and are pending Board approval.

## Water Act, Licence, or Compliance Issues

Effluent quality at 1735-10 was in non-compliance with respect to Part D, Item 5 parameters, however "...concentrations have decreased."

## **Indian and Northern Affairs Canada Inspector**

W. Puznicki, WRO.

## 1.3 October 13, 2000 Inspection

#### **General Inspection Statement**

General conditions, overall the site received an acceptable rating in all areas viewed with notable items listed below. The inspector concludes that, "in general, the site is well kept and the Winspear personnel have been very cooperative in dealing with Licence issues."

#### **Environmental Issues**

- Ensure daily maximum for water use is complied with. Permission to exceed limits set out in the Licence requires authorization from the Board.
- Continue efforts to reduce total suspended solids (TSS) concentration in SNP #1735-10.
- Ensure runoff that does not complete discharge criteria as per Part D, Item 7 of the Licence is directed to the processed kimberlite containment area.

#### **Administrative Issues**

For Spill #00-191, and as per Part F, Item 3(c) the Licensee is to submit a detailed report regarding spills to include reporting procedures followed, followup action taken and plan/map showing location of spill. Recommended for closure September 18, 2001.

Ensure reports are submitted within the time stipulated in the Licence.

The inspection report acknowledged the change in the project owners with the recent purchase by De Beers Canada Corporation.

#### **Inspection Summary**

#### Waste Disposal and Spills/Sewage Treatment Equipment

• Waste disposal areas were inspected and received acceptable rating.

- Sewage treatment equipment was inspected and acknowledged the difficulties associated with this equipment to date and the fact that samples collected March 21, 2000 exceeded MAC of biological parameters of the Licence.
- Due to these problems the inspector recommended biweekly sampling of the effluent for this unit while the Licensee voluntarily "...collected samples on weekly basis."
- After consultation and correspondence with the Original Equipment Manufacturer (OEM) the Licensee requested an exemption from the Board to re-establish feed protocols. The Board required an Action Plan, and a 'sewage' working plan, by July 31. The Action Plan was submitted June 12, and accepted by the MVLWB June 26/00.

## Fuel and Chemical Storage and Spills

This section addressed concerns with Spill #00-191 regarding 60 gallons of diesel spilled on July 24/00 while refuelling a Genset. The file is to remain open until there is no longer a diesel odour present in the aerated soil and contaminated material has been removed from site for disposal. This file was recommended for closure September 18, 2001.

#### Dams and Dykes

Dyke inspection was carried on #1 and #2 dykes within the PKC. There was surficial cracking noted on the downstream face of dyke #1 but were noted to be of "...likely no concern." From the inspector's review it appeared that "...the engineer's (geotechnical) recommendations had been complied with."

#### Processed Kimberlite Containment Area

The PKC was inspected with no serious concerns raised.

#### Test Cell Area

The test cell area was inspected with no serious concerns raised.

#### **Record and Reporting Issues**

• The annual geotechnical inspection report, due 60 days after the inspection is performed by the geotechnical engineer, as per Part D, Item 2(g), was due October 10th and was not submitted to the Board until October 26/00.

- As built drawings, stamped by the a geotechnical engineer are due, to be submitted to the Board, 90 days after construction is completed as per Part D, Item 2(h) of the Licence. The inspector is unaware of the Board receiving these drawings. These drawings were submitted Oct 23, 2001.
- Acid/Alkaline Rock Drainage Generating Potential Monitoring Plan, as per part D, Item 8 had been received and acknowledged by the Board as per a letter dated May 18, 2000 however; the inspector is unaware if the Plan has received the Board's approval. This document is under Board review as of December 6, 2000 and January 22, 2002.
- Contingency plan, as per Part G, Item 1 had been received and acknowledged by the Board; however, the inspector is unaware if the plan has received the Board's approval. Under Board review as of December 6, 2000 and January 22, 2002.
- Abandonment and restoration and contingency plan, as per Part G, Item 1 had been received and acknowledged by the Board however; the inspector is unaware if the plan has received the Board's approval. This document is under Board review as of December 6, 2000 and January 22, 2002.
- Quality assurance/quality control plan, as per the SN Program Part B, Item 10 had been received and acknowledged by the Board as per a letter dated May 18, 2000 however; the inspector is unaware if the Plan has received the Board's approval.
- The file is to remain open regarding 60 gallons of diesel spilled on July 24/00 while refuelling a Genset (Spill #00-191) until there is no longer a diesel odour present in the aerated soil and contaminated material has been removed from site for disposal. The followup report remained outstanding as per Part F, Item 3(c). Recommended for closure September 18, 2001.

#### Water Act, Licence, or Compliance Issues

- It was noted in the August SNP report that on two days (August 30 and 31) water usage had exceeded the Daily permitted maximum. Although he acknowledged that on average the monthly consumption was less than permitted, the inspector advised that the Daily Limit must be complied with unless authorization from the Board is obtained for to exceed the current limit.
- The pH of waters discharging at 1735-7 were lower than permissible (<5.0) during the months of May, June and July and as per Part D, Item 7 this water is to be

directed to the PKC unless it meets specific criteria. It was noted that there were no measures in place to direct runoff from ore stockpiled at the DMS plant to the PKC.

• The Licensee had "...complied with the Board's request." And the inspector goes on to state "It appears from the data collected from SNP #1735-10 that the waste water treatment plant has improved considerably in effectively reducing effluent concentrations, particularly faecal coliforms, to acceptable effluent quality." Further to this the inspector states he is "...satisfied with Winspear's efforts in addressing the problems associated with the Waste Water Treatment Plant since its commissioning."

## Indian and Northern Affairs Canada Inspector(s)

W. Puznicki, WRO.

## 1.4 January 30, 2001 Inspection

## **General Inspection Statement**

In closing the inspector comments, "In general, the site is well kept and the Winspear personnel have been very cooperative in dealing with Licence issues."

#### **Environmental Issues**

Continue efforts to improve effluent quality at SNP #1735-10 until such time that the SBR is commissioned. Notification of plans to commission the SBR requires board approval.

#### Administrative Issues

- The 2000 Annual Report is due no later than March 31, 2001.
- The cover letter and data sheet header of monthly SNP report do not reflect the month being reported.

#### **Inspection Summary**

#### Water Supply

Water supply areas were not inspected and were functioning well in past inspection.

## Waste Disposal and Spills/Sewage Treatment Equipment

Waste disposal areas was not inspected and it was noted that the RBC has continued to under-perform. Rather than modify the RBC it was acknowledged that De Beers had "…elected to replace the treatment plant with a Sequencing Batch Reactor system". It was also acknowledged that the unit was, "…expected to be delivered to the site via the winter road."

## Fuel and Chemical Storage and Spills

An inspection was not undertaken.

## Dams and Dykes

Dams and dykes were inspected with no seepage detected below the dams.

#### Processed Kimberlite Containment Area

The PKC was inspected and given an acceptable rating and, "There were no concerns with the PKC."

#### Ore and Waste Rock

"There were no concerns at the time."

#### **General Conditions**

Overall the site received an acceptable rating.

#### **Record and Reporting Issues**

- Four documents submitted under the Licence, as per (Part D, Item 8), (Part F, Item 1), (Part G, Item 1) and (Part D, Item 2(h)) are pending MVLWB approval.
- The QA/QC Plan as per Part B, Item 10 received approval by the Analyst, November 29, 2000. The Annual Water Report is due March 31, 2001 as per part B, Item 3 of the licence.
- Mine-water Discharge, "All water not used underground reports to the PKC."

• Surveillance Network Program (SNP) report in the reference and report headings had the wrong month listed.

## Water Act, Licence, or Compliance Issues

Effluent quality at 1735-10 was in non-compliance with respect to Part D, Item 5 parameters. "Efforts to improve effluent quality should continue until such time that the Sequencing Batch Reactor is commissioned."

#### **Indian and Northern Affairs Canada Inspector(s)**

W. Puznicki, WRO.

## 1.5 March 28, 2001 Inspection

## **General Inspection Statement**

No statement made.

#### **Environmental Issues**

- Continue efforts to improve effluent quality at SNP #1735-10 until such time that the SBR is commissioned.
- Manage the PKC such that a contingency exists, should the PKC become unable to operate as a total containment system (Part F, Item 1 (a) and if excess mine water cannot be contained by the PKC (Part F, Item 1 [b]).

#### Administrative Issues

- Submit detailed spill reports, Part F, Item 3 (c) for Spill #'s 01-060 and 01-086, with plan showing location. Spill details provided April 28, 2001.
- All modifications require the provision of 30 days notice to the Board prior to the start of modification work, as per Part E. Notification provided March 1/2001.

#### **Inspection Summary**

## Water Supply

Water supply areas were inspected and given an acceptable rating. "There were no concerns identified with the water intake or water treatment facilities.

## Waste Disposal and Spills/Sewage Treatment Equipment

Waste Disposal Areas were inspected and it was noted that the RBC has not performed satisfactorily and that notification of the replacement of the RBC with the SBR was provided to the Board in the November SNP report. However, the formal notification criterion for modification to a system was not followed and construction work began on the SBR site prior March 1, 2001 (date of notification). Therefore, "De Beers is in non-compliance with respect to Part E, Item 1 of the Licence."

## Fuel and Chemical Storage and Spills

"There were no concerns with the Fuel Storage."

#### Dams and Dykes

Dams and dykes were inspected with no seepage detected.

#### Freeboard

Freeboard notes were raised with respect to the contained water elevation of 450.76 m and the design height of 452.0 m, with no further direction from the Board the water level remains in compliance. However, water was being staged with snow berms above the pond elevation but within the PKC drainage area.

#### Processed Kimberlite Containment Area

The PKC was inspected and given an acceptable rating with no serious concerns raised notwithstanding the note about pipe work being undertaken, in preparation of decanting approval.

#### Ore and Waste Rock

Nothing of note.

## **General Conditions**

Overall the site received an acceptable rating.

#### **Record and Reporting Issues**

- Spill #01-060: The detailed report on this spill was not received within 30 days from initial report as per Part F, Item 3 (c). Details provided April 28, 2001.
- Spill #01-086: The detailed report on this spill was not received within 30 days from initial report as per Part F, Item 3 (c). Details provided April 28, 2001.
- Four documents submitted under the Licence (as per [Part D, Item 8], [Part F, Item 1], [Part G, Item 1] and [Part D, Item 2(h)]) are pending MVLWB approval. Annual Water Report is currently under review.
- Mine-water Discharge, although not undertaken, approval is outstanding and preparations in anticipation of this approval have begun with respect to pipeline construction and fusion.
- Surveillance Network Program; "There have been no concerns with the monthly SNP reports."

## Water Act, Licence, or Compliance Issues

- Waste disposal areas were inspected and it was noted that the RBC has not performed satisfactorily and that notification of the replacement of the RBC with the SBR was provided to the Board in the November SNP report. However, the formal notification criterion for modification to a system was not followed and construction work began on the SBR site prior March 1, 2001 (date of notification). Therefore, "De Beers is in non-compliance with respect to Part E, Item 1 of the Licence."
- Effluent quality at 1735-10 was in non-compliance with respect to Part D, Item 5 parameters of BOD and Oil and Grease. "It is anticipated that the SBR System will be capable treating sewage effluent to within acceptable concentrations...."
- Modifications, to the water treatment system began without proper notification as per Part E, Item 1 (a) and as such were in non-compliance with the Licence.
- Submission of detailed Spill reports (01-060 and 01-086) not completed as per Part F, Item 3(c), and therefore is in non-compliance with the Licence.

## **Indian and Northern Affairs Canada Inspector(s)**

W. Puznicki, WRO.

## 2.0 LAND USE PERMIT N1999C0081 AND N1998C0935 AND QUARRY PERMIT 1999QP0095

## 2.1 February 4, 2000 Inspection

#### **General Inspection Statement**

The inspector wrote "Most conditions were satisfactory during the inspection but there is a need for improving reporting efficiency to this office as outlined in the Inspection Report." The inspector went on to say that he understands however, "...the camp is still in its early stages for the season and is still being fine tuned."

#### **Administrative Issues**

• The inspector recommends the submission of a written request that LUP #N1998C0935 is closed to avoid administrative overlap between the current permit and the older one. "All activities that are permitted under N1998C0935 are covered under N1999C0081 including your upcoming diamond drill program." A letter was submitted to the MVLWB in August 29, 2001, requesting closure and the inspector recommended that this file be closed in his Report dated September 18, 2001.

#### **Inspection Summary**

## Fuel and Chemical Storage and Spills

- Chemical and waste storage condition was inspected at the Winspear Camp and received an acceptable rating with a rider attached to it under Condition 37, Reporting Chemical and Petroleum Spills. There were a number of spills from drums that had been otherwise contained and cleaned up but unreported. This incident was reported as Spill # 00-034.
- Fuels storage was inspected at the Winspear Camp and received an acceptable rating with a rider attached under Condition 33. An overturned Delta water truck was observed leaking fuel and Dextron oil onto adsorbent pads. Although reportedly, during the initial assessment there was no fuel leakage the inspector advises close monitoring and reporting of such incidents to the spill line. Contaminated snow had been collected into two 45-gallon drums for future disposal, but was not reported to the spill line. This incident was reported as Spill #00-035.

## **Record and Reporting Issues**

- There was one unacceptable rating under the Winspear Camp aspect of the inspection as per Condition 50 of the LUP, (*i.e.*, the Spill Contingency Plan), where the inspector's office had yet to receive this document, which was due February 1, 2000. Document was submitted in February 2000 and resubmitted in June 2001.
- The Winspear Camp had received an acceptable rating but with 3 riders attached. Timing as permitted had a rider attached under Condition 8 of the LUP regarding Progress Reports. Required progress reports must be followed which is a monthly requirement.

## Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

## 2.2 February 28, 2000 Inspection

## **General Inspection Statement**

The inspector wrote in his letter, "The site has undergone many changes since the last inspection on February 4, 2000 and I am pleased to report that most activities are being conducted within permit conditions."

#### **Environmental Issues**

- Approval was given for the burning of wooden packing products on either a rock or ice pad within the PKC and that all non-combustibles be removed for disposal.
- The inspector requests minimal application of traction sand on winter roads and limited usage within 30 metres of shoreline to prevent sediment entering the waterbody. Any sanding close to the shoreline will require removal prior to breakup.

#### **Inspection Summary**

#### Fuel and Chemical Storage and Spills

Unacceptable rating with regards to Condition 41, Fuel by Stream, where four 45-gallon drums were stored on lake ice. The inspector requested that material storage on ice be minimized and that all spills be cleaned up as they occur.

## **Record and Reporting Issues**

• The Spill Contingency Plan was received February 17, 2000 and was under review at that time.

#### **Permit or Compliance Issues**

• Spill files 00-024,00-025 and 00-032 (erroneously recorded as 00-034, 00-035, and 00-032) appear to have been cleaned up and the contaminated snow removed in six 45-gallon drums. The drums are stored near the PKC for spring burning and the files will remain open until wastes have been satisfactorily addressed.

## Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

#### 2.3 March 21, 2000 Inspection

## **General Inspection Statement**

No statement made.

#### **Environmental Issues**

- "ensure preliminary collection of spilled petroleum on ice, at drill sites, is conducted prior to grading".
- "store all non-combustible waste in secure containers for off-site disposal".
- "ensure ice surfaces affected by activities are inspected and cleaned prior to breakup".
- "control spillage of granular spillage on ice surfaces".
- "removal of gravel from portage approaches prior to spring breakup".

## **Inspection Summary**

## **Drill Site Aspect**

- Conditions inspected; 10 received an Acceptable rating and the balance (7) were Not Applicable.
- The Drill Site Aspect received an Acceptable rating on all conditions, The inspector noted the following; "The scraped up drill sites were in good condition and very clean. The most recently completed drill sites still required the removal of contaminated snow and timbers, etc."

## Winspear Camp Aspect

- Conditions inspected; 9 received an Acceptable rating, 1 received an unacceptable rating and the balance (7) were Not Applicable to the site.
- The Winspear Camp Aspect received an unacceptable rating of the Condition 'Equipment as Approved', LUP #14 Garbage Containers. "...an additional waste incineration site had been established on the mine rock pad within the IL-1 drainage. However, this site was only approved for wooden pallets, crating materials, and the like. An assortment of pallets, household garbage and other non-combustibles was noted on the rock pad during the inspection contrary to condition #14 of your Land Use Permit. Please ensure.." that all "... garbage is properly separated, stored and disposed of as discussed with John Wright via telephone on March 24, 2000. All non-combustible waste must be stored in a secure container and disposed of off site at this stage of the program."

## Peninsula Activities Aspect

- Conditions inspected; 11 received an Acceptable rating and the balance (6) were Not Applicable to the site.
- The Peninsula Activities Aspect received an Acceptable rating on all conditions, The inspector noted the following; "The pumping of IL-1 is continuing slowly in conjunction with correspondence with the Water Resources Officer. The ice surface was generally quite clean with the exception of a small gravel spill near the potable water intake line. The gasoline drums noted in the last inspection were removed from the ice."

#### **Quarry Esker Aspect**

- Conditions inspected; 10 received an Acceptable rating (1 was Conditional) and the balance (7) were Not Applicable to the site.
- The Quarry esker and Access Route Aspect received an Acceptable rating on all conditions. The inspector noted the following; "The haul road was in good condition with no apparent rutting or overflow conflicts. At least 3 areas were identified on the Snap lake ice surface that appeared to have some spillage of granular material that require removal as it does not constitute acceptable ice bridge material. The gravel on a few of the portage approaches will also have to be removed before spring breakup occurs as discussed earlier to prevent discharge into any watercourse."

## Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

## 2.4 April 7, 2000 Inspection

## **General Inspection Statement**

The inspector wrote in his letter that "Development appears to be progressing rapidly but within the conditions of your Land Use Permit."

#### **Environmental Issues**

See Inspection Summary.

#### **Administrative Issues**

• The inspector advised that Spill Report files #00-024 and 00-032 are closed and that 00-025 would remain open until a satisfactory snow free inspection could be conducted.

#### **Inspection Summary**

#### Site Aspects

All aspects inspected received an acceptable rating.

#### Sumps and Drills

- "A sump has been excavated below the end of the discharge pipe to provide additional retention as directed by Wayne Puznicki but the effluent seems to be penetrating the ground almost instantly and no surface flow was noted during the inspection."
- The land-based sumps for the diamond drill were adequately sized to handle drill cuttings and ice scrapings from drill hole cleanup.
- The inspector wrote that, "The drills were operating cleanly and within the conditions of your Land Use Permit."

## Fuel and Chemical Storage and Spills

- The inspector was, "...now satisfied that spills 00-024 and 0-032 have been cleaned up satisfactorily and have recommended closure of these spills to the Spill Line."
- The waste material on the rock pad had "been cleaned up satisfactorily."
- The inspector also noted that with regards to Spill 00-025, "....all the contaminated snow that was collected has been removed and disposed of."

#### Processed Kimberlite Containment Area

The inspector recommends removal of the few trees within the PKC.

#### Ground Conditions/Drainage

The inspector duly noted that "...the contractor left the original face of the esker next to the lake intact and has directed the finish grade on top of the esker towards a land sump rather than towards the surrounding water bodies."

#### Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

# 2.5 May 3, 2000 Inspection

# **General Inspection Statement**

The inspector wrote in his letter that he was "...pleased to see how the project is developing and the diligence exercised by site personnel to meet the conditions of your Land Use Permit and to address concerns expressed by inspectors."

# **Inspection Summary**

# Site Aspects

All aspects inspected were acceptable with item F Erosion receiving a rider with respect to Condition 29 of the LUP regarding Erosion and Sediment Control. The snow ramps off the north peninsula required additional scraping to recover traction sand, to onland depression, prior to breakup.

# Fuel and Chemical Storage and Spills

- Small spill stains identified on the drill storage area and 45-gallon drum storage area needs to be collected and remediated as per site discussions.
- Additional cleanup identified around contractors camp and storage areas.

# Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

### 2.6 August 15, 2000 Inspection

### **General Inspection Statement**

The inspector noted he was "...Once again I was pleased to see how well the Snap Lake project was developing while operating within the conditions of your permit. The site was very orderly...".

### **Administrative Issues**

One of the Activities (#8 of LUP) that had received a conditional approval was the submission of a monthly progress report for July but was outstanding pending SNP

results. The other activity (#43 of the LUP) that had received a conditional approval was Fuel Storage under Fuel Containment.

# **Inspection Summary**

# Sumps and Drills

"The drill waste sumps from both the 1999 and 2000 winter drill programs were inspected and found to have provided adequate containment of drill cuttings and were largely revegetated."

# **Drill Site Aspect**

- Of the 17 conditions inspected under the drill sites Aspect, 10 received an Acceptable rating while the balance were Not Applicable.
- Drill Site activities: "The completed holes were found to be clean with the exception
  of minor amounts of rod grease at some of the holes. It appears as though all drill
  cuttings were satisfactorily dealt with by being deposited in natural depressions well
  away from any water course, drill casings were removed and fuel handling methods
  were adequate."

# Peninsula Activities Aspect

- Of the 17 conditions inspected under the Peninsula Activities Aspect, 10 received an Acceptable rating (2 conditional) while the balance were Not Applicable.
- Northwest peninsula activities, "The entire site was clean and orderly." Waste containers are being assembled and filled with waste material for removal offsite on the winter road. Both Dams 1 & 2 had been completed since the last Inspection and had received cosmetic repairs to the granular surface as recommended by the Geotechnical Engineer. The PKC has only received water from runoff and precipitation, as there has been no wastewater generated. The DMS plant has been completed and had a test run with water, discharge reporting to the PKC near the base of Dam 1. The airstrip is in excellent condition and dust control "... has been limited by licence limits supplied from Snap Lake. The airstrip does appear to impede surface runoff from adjacent lands."

# Fuel and Chemical Storage and Spills

Spill 00-191: The majority of the diesel fuel appears to have been absorbed by the peat and was removed by hand into 45-gallon drums, for offsite disposal. "The exposed soil below the peat moss had only a minor diesel odour but should be left exposed for further aeration." The inspector recommended the file remain open on this spill until the contaminated peat is disposed of and the excavation is backfilled.

The inspector recommended this file be closed in his September 18, 2001 report.

# Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

# 2.7 October 13, 2000 Inspection

# **General Inspection Statement**

The inspector wrote in his letter that the site is very clean and orderly. And went on to add, "Thank you for your continual efforts to adhere to the operating conditions of your permit."

### **Inspection Summary**

# Site Aspects

All aspects inspected were acceptable and the inspector commented in the report that, "The entire site was clean and orderly."

### Fuel and Chemical Storage and Spills

Spill 00-191 was inspected and noted that the soil below the peat moss still had an odour of diesel and recommended leaving he area exposed for further aeration and inspection in the spring of 2001. The inspector recommended this file be closed in his September 18, 2001 report.

### Processed Kimberlite Containment Area

The inspector recommended the removal of trees from the PKC, as previously recommended in earlier reports, prior to encroachment of stored waters.

# Indian and Northern Affairs Canada Inspector(s)

C. Ambrose, RMO.

# 2.8 January 30, 2001 Inspection

# **General Inspection Statement**

The inspector noted he was "... pleased to report that the site is very clean and orderly."

# **Inspection Summary**

# Peninsula Aspect

Of the 17 conditions inspected under the Peninsula Activities Aspect; 1 received an unacceptable rating, 9 received an Acceptable rating (1 conditional) while the balance were Not Applicable.

### **Permit or Compliance Issues**

- The 1 unacceptable rating related to the following conditions within the Land Use Permit; #32 "The Permittee shall not use chemicals in connection with the land use operation without prior approval." There was nothing submitted to the inspector or the MVLWB to advise them of the use of this dye. An MSDS and letter were submitted March 1/2001 for the Sulphicide Blue dye used.
- The one activity that had received a conditional approval was a result of excavator activity removing surface soils for the development of a vent raise on the east side of the peninsula. The inspector determined that there was no notification provided for this work, and requested that "Coordinates be given to the inspector/Board and in future, please refrain from activities of this nature unless the inspector or the Board is made aware of your intentions prior to the activity."

### Indian and Northern Affairs Canada Inspector(s)

C. Ambrose, RMO.

# 2.9 March 6, 2001 Inspection

# **General Inspection Statement**

The inspection was completed on a portion of the Snap Lake winter access road. Of the 17 conditions inspected under the Winter Road Aspect; 3 received an unacceptable rating, 6 received an Acceptable rating while the balance were Not Applicable. The 3 unacceptable ratings related to the following conditions within the Land Use Permit: #3 Camp Location, #19 Storage on Ice and #21 Sumps from Water. The inspector acknowledged his revisit to the site on March 8, 2001 and noted that the "... camp had been moved off of the ice surface and the grey water and sewage had been scraped up. Thank you for responding to our concerns and in future, camps are not to be established on the ice surface and any waste generated must be deposited into a sump or else containerized for removal."

# Inspection Summary

# Waste Disposal and Spills/Sewage Treatment Equipment

- The inspection noted that waste was being deposited on the ice in contravention of conditions annexed to the Land Use Permit. The inspector noted that the section of winter road near Warburton Bay was complete and work was being carried out on the portage.
- Grey water and sewage was being deposited directly onto the ice surface. "This is in contravention of Condition #21 of your Land Use Permit; the Permittee shall not locate any sump within 30 metres of the normal high water mark, a holding tank or means of disposal must be negotiated as deposition on the ice is unacceptable.

### Fuel and Chemical Storage and Spills

The inspector noted a small spill of hydraulic oil near the first portage on Warburton Bay and recommended this area be cleaned up.

### Portable Camp

It was noted from site discussions that the portable camp was set up on the ice for a couple of days in contravention of Conditions #3 and #19, where, "the Permittee shall locate all camps on gravel, sand or other durable land as outlined in the accepted application and the Permittee shall not store material other than that required for immediate use on the ice surface. As stated above, the camp had been located on the ice

for at least two days and this is unacceptable." The inspector noted that it would have been in our best interest "to contact the inspector prior to the establishment of the camp."

# Indian and Northern Affairs Canada Inspector(s)

C. Ambrose, RMO.

# 2.10 March 28, 2001 Inspection

### **General Inspection Statement**

The inspection was completed on Snap Lake Advanced Exploration Program site. Overall the inspection dealt with past spills and reporting and the need for the MVLWB to approve the use of the SBR to treat raw sewage. The inspector was pleased with the efforts made to remove waste from the site while the winter road was open.

Inspections included the northwest peninsula of the project on which the SBR is located. The inspector gave his permission for the use of this equipment under Condition 12 of the land use permit; however, at the time of inspection the MVLWB approval remained outstanding as per Condition 33 of the LUP. This aspect received an Acceptable rating with a rider attached to it regarding Board approval.

### **Inspection Summary**

# Fuel and Chemical Storage and Spills

- Chemical waste storage on the northwest peninsula received an acceptance rating with a rider attached for the MVLWB's approval regarding the SBR, Condition 33.
- Fuel storage inspection on the northwest peninsula also received an acceptance rating
  with a rider attached regarding Condition 43, Fuel Containment. This seems to be in
  regards to Spill 01-060, fuel oil spill at the airport, where the terminal building was
  inspected.
- Spill 01-060, at the time of the inspection some odour was evident, soil excavation was apparent and removal from site via the winter road was completed using 45-gallon drums.
- Spill 01-086, the inspector acknowledged that, "All reasonable efforts have been made to rectify the spill sites for the time being..." and that "...upon recognition of the problem, the Permittee made immediate steps to correct the situation."

# **Drill Cuttings**

Inspection of diamond drilling activities on Snap Lake also noted cleanup required of drill cuttings from ice surface as intended in addition to those tasks performed (Condition 38 – Drill Waste Disposal).

# Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

# 2.11 September 18, 2001 Inspection

# **General Inspection Statement**

The inspection was conducted on Snap Lake Project site. The inspector wrote in his letter that he was accompanied by C. Ambrose, RMO and L. Cordell of the MVLWB. The RMO enclosed a number of copies of Spill Files recommended for closure and noted that he was"...very pleased with the overall cleanliness and appearance of the site." All conditions of the aspects inspected were either Acceptable or Not Applicable.

# **Inspection Summary**

### General Condition in the Northwest Peninsula Area

"the working area was very clean and well organized" the underground workings have been flooded with water from the PKC and the "...PKC should now have capacity to receive the flows from the 2002 spring freshet without breeching". Two sinkholes (<1-m dia) on dyke 1 were backfilled recently but there was no flows observed outside the dyke at the time of the Inspection. The SBR was functioning and the RBC was removed to the laydown, by the crush stockpiles. "The point of effluent discharge has been adjusted slightly with the SBR but it is well within the same overland containment area. Effluent has apparently met all licence requirement in August." Aseptic sewage in the enviro tank has been processed through the SBR but 20,000 litres remains to be treated the following summer.

### Waste Disposal and Spills/Sewage Treatment Equipment

"Waste materials stored in sea and assorted surplus oversize items have been neatly stored in the laydown area for demobilization on the next winter road or as space is available on air charter back hauls. Some of the exploration camp infrastructure is also being staged on the laydown for later removal."

# Fuel and Chemical Storage and Spills

- Spill 00-025; "The site had been satisfactorily cleaned up and I have recommended to the NWT Spill Line that this file be closed."
- Spill 00-191; "No sign of fuel was visible at the site ..." and "I have recommended to the NWT Spill Line that this file be closed."
- Spill 00-321; The spill site was inspected and found "... to be in acceptable condition with no evidence of fuel. I have recommended to the NWT Spill Line that this file be closed."
- Spill 01-060; The site was inspected and no signs of fuel were evident, the fuel supply line had been repaired when reported and "...I have recommended closure of this spill file."
- Spill 01-086; The 3 brine spill sites were inspected, it was noted that local vegetation had been burned off but "... there were signs of new growth encroaching on the sites" and "... the undersigned has recommended that this spill file be closed." And "... dilution from natural precipitation will assist with reclamation of the spill sites."

### All Weather Road

"The all weather access road to the vent raise had been completed as requested. The majority of the road crossed barren rock outcropping and has caused minimal disturbance to the site."

### The Exploration Camp

The exploration camp was broken down as reported, woodpiles have been tarped and waste items had been containerized. The dock had been located to the Snap Lake fresh water intake area and the site would have to be re-inspected in spring under snow free conditions.

### **Permit or Compliance Issues**

The RMO noted the following modification approvals; "The permit was amended on June 1, 2001 to replace the RBC with a SBR for the treatment of sewage." And that "The construction of an all weather access road to the underground workings vent raise was authorized July 3, 2001 by the RMO".

# Indian and Northern Affairs Canada Inspector(s)

K. Dahl, RMO.

### 2.12 September 18, 2001 Inspection SnapEx N1998C0935

# **General Inspection Statement**

The inspection was conducted on SnapEx Project site. The inspector wrote in his letter that he was accompanied by C. Ambrose, RMO and L. Cordell of the MVLWB. The RMO enclosed a copy of Spill File 99-024 and noted in it that "...There was no indication of fuel or damage to vegetation at the Spill Site." All conditions of the aspects inspected were either Acceptable or Not Applicable. The inspection was favourable with the following comments.

# **Inspection Summary**

# Fuel and Chemical Storage and Spills

Spill 99-024 was the only spill associated with this permit and there was no sign of fuel residues or damage to the vegetation cover. The RMO noted here also that he recommended closure of this file.

# **Exploration Camp**

The exploration camp was broken down as reported, woodpiles have been tarped and waste items had been containerized. The dock had been located to the Snap Lake fresh water intake area and the site would have to be re-inspected in spring under snow-free conditions but the remaining cleanup can be carried out under N1999C0081.

### RTL Campsite

The RTL campsite infrastructure and waste materials have been removed and the sump had been backfilled and no further restoration is required.

### **Permit or Compliance Issues**

Other comments included, "The final plan submitted August 29, 2001 is an accurate representation of activities conducted under this permit. *I recommend to the Mackenzie Valley Land and Water Board that this permit be closed.*" (Italics included as per inspection report).

# **Indian and Northern Affairs Canada Inspector(s)**

K. Dahl, RMO.

# 3.0 SNAP LAKE SITE INSPECTIONS, UNDER THE MINE HEALTH AND SAFETY ACT, SECTION 26(2)

# 3.1 February 2000 Inspection

# **General Inspection Statement**

Areas inspected with no infractions included the esker road, the decline cut, the road cut and the Nuna site.

### **Administrative Issues**

 An OH and S Committee is being formed in preparation of the first inspection in March.

# **Inspection Summary**

- Training records of all employees and contractors are to be kept up to date and available upon the request of an inspector.
- Snowmobile travel will require the establishment of trail and road crossings across the property.
- The blasting procedure observed covers all parties involved in the blast areas. This may have to be changed as contract activities increase.
- The roads to the explosive storage be complete in two weeks, no more explosives "... may be received on site until the designated site is ready."
- The ladders, in RTL quarry, meet Regulation 1.98 (b).

Response completed March 15, 2000 which addressed the above.

# Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher.

# 3.2 March 2000 Inspection A

### **General Inspection Statement**

Areas inspected with no infractions included the Three Diamond Drill setups, the Nuna Shop, the Ledcor construction area, the fuel storage area, and the pumping station.

# **Inspection Summary**

# Ramp

- The blasting cable and telephone lines were the same colour and type. Regulation 14.44 compliance required by May 30, 2000.
- Safety bays in the ramp, as per the chief inspector this "... is a company decision to put them in or not...", Regulations 1.110 and 1.111.

# **Procon Shop**

There was a heater set up but not running inside the shop that was not vented to the outside. Regulation 10.103.

### Crusher

- The emergency stop cord did not stop crusher conveyor when pulled but the switch worked ok. Regulation 10.118.
- Guards inadequate in and around plant and crusher areas. Regulations 1.90, 19.1, and 10.118.

# Surface

Propane tanks in the back of a Nuna pickup unsecured in dolly, with gauges in place. Regulation 10.135 (2)e.

Response completed March 25, 2000 which addressed the above.

### Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher.

# 3.3 March 2000 Inspection B

# **General Inspection Statement**

Areas inspected with no infractions included the Two diamond drill setups, the Runway construction, the Ramp area, and the Explosive Magazine.

# **Inspection Summary**

# Nuna Shop

Two stationary engines running inside building that were not vented outside, garbage piled throughout the shop, cords and hoses creating tripping hazards with no fire extinguishers in site. "This shop/work area was in unacceptable condition and must be cleaned up..." as per Regulations 1.44, 1.45, 1.46, 9.08, 9.11, 12.14, 12.15, 12.16, 12.17, etc.

# Crushing Site

- There were high volumes of 'wind' airborne dust. People inside equipment were ok, but people were also sent to work on a generator in a high dust area. "If the dust cannot be controlled then the plant must be shutdown if people are required to work in an area where the dust is blowing. Regulations 9.02, 9.03 9.05.
- Propane bottles are still a problem; they "... must be secured when standing."

Response completed March 25, 2000 which addressed the above.

### Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher.

# 3.4 June 2000 Inspection

### **General Inspection Statement**

No statement made.

# **Inspection Summary**

# Underground

- In the detonator cutout on the side of the ramp the bench was overloaded. Regulation 14.12.
- Two underground vehicles found with seat belts cut out. Regulation 10.48.

### Surface

- The grinder in the Procon shop was not set up properly; the Nuna shop had a hand grinder that had no guard on it. Regulation 10.122.
- Oxygen and acetylene tanks were stored together in the Procon shop, in the Nuna shop two propane cylinders were standing upright without support. Propane is not to be stored in a building and gas is to be stored as per Regulation 10.1.36.
- Procon and Ledcor operators stated they checked equipment before starting but there was no record of these checks. As per Regulation 10.04.
- Nuna Violations of the Regulations; 10.55, 10.56, 13.04, 8.47, 1.91, 13.04, 13.08 and 13.09. (details provided but not summarized here).

Response completed July 14, 2000 which addressed the above.

# Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher.

### 3.5 August 2000 Inspection

# **General Inspection Statement**

No statement made.

# **Inspection Summary**

# Cold Storage

The cold storage is being set up and requires cleanup.

# The Nuna Shop

The Nuna shop has been in violation of a string of Sections of the Regulations as follows; 1.157, 1.159 (1(b and j)), 5.07 (f), 5.08 (a), 9.04 (b), 9.11, 10.18 12.17 (1)(2) and (3), and 13.04 (a –d). Nuna had been given 2 opportunities to clean up and this appears to have been the final one, (see above), the report reads, "This shop will be cleaned up and will remain that way. If it is found in this shape then our procedure is to suspend supervisory certification etc." The report highlighted Sections violated under previous inspections as well.

Response completed September 7, 2000 which addressed the above.

# Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher.

# 3.6 November 2000 Inspection

# **General Inspection Statement**

Observations noted included the following; "This was a very good tour as there were only a few minor housekeeping items that were discussed. The operation is in very good shape and everyone is to be congratulated, with a special note to the people involved in the obvious improvements in the Nuna shop. Keep up the good work!"

# **Inspection Summary**

There were no orders issued from the inspector's report. No items to address.

### Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher.

### 3.7 March 2001 Inspection

### **General Inspection Statement**

Observations noted in comments section included the following, "As the mill was shutdown and sealed I did not inspect it. The rest of the property continues to show excellent workmanship and attention to safety. Keep up the good work!"

The following items appeared in the Orders aspect of the report and Section(s) and subsection(s) were deficient in the inspector's report.

# **Inspection Summary**

- Section 10.59 (2)(a) Exhaust pipe to vent outside building of diamond drill shack. Completion Required March 24, 2001.
- Section 12.16 (2) Diamond drill fire extinguishers to be inspected monthly. Completion Required March 30, 2001.
- Section 13.01 (4)) Camp generator; requires voids created in panels by removal of switches be covered with metal plugs. Completion Required March 30, 2001.
- Section 9.04 (b) Cold storage shelving housekeeping required. Completion Required April 22, 2001.
- Section 9.04 (c) Cold storage building shelves to be load rated. Completion Required April 22, 2001.

Response completed April 3, 2001 which addressed the above.

# Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher (Ref No. 2001-HWM-00694).

# 3.8 May 2001 Inspection

### **General Inspection Statement**

Observations noted in comments section included the following; "We inspected the water treatment plant, Nuna Shop, Procon Shop, generator plant, core shack, pumping stations, powder mags, airport garage, waste dump site, and underground. Everything was in order and no infractions noted. This is due to a site wide effort and a well functioning O.H. and S. Committee. Keep up the good work!"

### **Inspection Summary**

There were no items to appear in the Orders aspect of the inspector's report. No items to address.

# Mine Inspection Services – Workers Compensation Board Inspector(s)

H. McKercher (Ref No. 2001-HWM-02031).

### 3.9 August 2001 Inspection

# **General Inspection Statement**

No observations noted in the comments section but the following items appeared in the Orders aspect of the report Section(s) and subsection(s) were deficient in the inspectors report.

# **Inspection Summary**

- Section 14.33 (b), U/G Explosive transportation. Completion Required August 31, 2001.
- Section 14.44 ((c)(iii)), Blasting cable placement. Completion Required August 31, 2001.
- Section 12.15(2), U/G Transformer sta. Location of Fire Extinguishers. Completion Required August 31, 2001.
- Section 13.01 (2), U/G Switchgear Identification. Completion Required August 31, 2001.
- Section 8.14, Flotation device warning sign, PKC area. Completion Required August 31, 2001.
- Section 9.08(1) (a), Signage not visible, Process Plant. Completion Required August 31, 2001.
- Section 9.04 (a), Housekeeping, crusher windshield cracked. Completion Required -August 30, 2001.
- Section 1.91 (a), Guard rail replaced immediately, recovery plant crusher area. Completion Required August 23, 2001.

Response completed August 29, 2001 which addressed the above.

# Mine Inspection Services – Workers Compensation Board Inspector(s)

T. Cameron (Ref No. 2001-TWC-02630).