# **Indicator Minerals Inc.**

# ABANDONMENT AND RESTORATION PLAN

For: Nanuq North Project\*, Kivalliq Region, Nunavut

NWB License No. Pending INAC Land Use Permit No. N2009C005 (pending) NIRB File No. 09EN011

Distributed to: NWB, NIRB, KIA, INAC, NPC

**Created by: Indicator Minerals Inc.** 

First Edition: March 2009

\*Project Name Currently Under Review



## **Table of Contents**

		Page
1.	Preface	3
2.	Introduction	3
3.	Schedule	3
4.	Infrastructure	3
5.	Seasonal Shutdowns	4
6.	Final Abandonment and Restoration	5
7.	Emergency Contact Information	6
8.	Appendix I: Maps, Figures, Photos	7



# Nanuq North Exploration Program Abandonment and Restoration Plan

#### 1. Preface

This Abandonment and Restoration (A&R) Plan is in effect as of April 1, 2009, and applies specifically to the Nanuq North Project. A property map and photos are included in Appendix I. Indicator Minerals Inc. endeavours to take every reasonable precaution toward ensuring the protection and conservation of the natural environment and the safety and health of all employees and contractors from any potential harmful effects of stored materials and operations. All plans, licences and permits will be reviewed with employees and contractors when hired. Copies of the plans will be available in a common area for all personnel on site for reference. This A&R Plan (as of March 2009) forecasts the usage of Peregrine Diamonds Ltd. 100% owned Nanuq Camp for the purpose of the joint ventured Nanuq North exploration program. Written permission from Peregrine Diamonds Ltd. to use this camp and operate under its applicable licenses and permits is currently in progress.

#### 2. Introduction

The work proposed for this project consists of prospecting, staking, geological mapping, rock and soil/till sampling, airborne geophysics, ground geophysics, drilling, fuel transport (via fixed wing aircraft and helicopter, overland), and establishment of fuel caches.

#### 3. Schedule

All work under the Abandonment and Restoration Plan will be completed prior to the date of expiry of the land use permits and water licence unless a renewal is applied for. Empty fuel drums brought on site by Indicator Minerals Inc. will be removed from site regularly. Once a fuel cache is retired, a thorough inspection will be conducted. Any contamination will be cleaned up according to the Spill Contingency Plan and debris brought to site by Indicator Minerals Inc. will be removed from the site.

#### 4. Infrastructure

No infrastructure is planned for this project application.

A fuel cache may be established in the field near the drill at its given location. The maximum number of drums to be stored at the drill will be no more than:

- 5 drums of diesel
- 19 drums of Jet fuel
- 1 drum of gasoline
- 2 propane tanks

The fuel will be stored in neat, orderly rows with enough space between rows to allow for inspections. Bungs will face 3 and 9 o-clock. The fuel cache will be inspected daily and a spill kit will be located at the fuel cache.



## 5. Seasonal Shutdowns (applying to drill sites only)

#### Drill Sites

The drill will be dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. The drill will be flown out by the drilling contractor or as the contract describes.

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location. Grey water and sludge sumps will be filled and leveled.

Indicator Minerals Inc. plans to employ progressive reclamation of drill sites; as much as possible, drill sites will be restored immediately after the drill has been moved to the next site.

## Water System

Pumps and hoses will be drained and dismantled. Pumps and hoses will be removed from site for servicing and storage.

## Fuel caches and Chemical Storage

An inventory will be conducted prior to leaving at the end of the field season. A thorough inspection of all fuel caches will be completed and empty fuel drums will be removed from site. Partially full fuel drums will be placed on an angle to ensure that snow and water do not enter the drum and no leakage from the drum occurs. Full fuel drums will be stored on their sides with the bungs in the 3 and 9 o-clock position.

Chemicals will not be stored on site or over winter. All chemicals, including cleaning products, will be removed from site for storage and/or disposal.

#### Waste

Combustible Waste: All combustible waste will be incinerated at the camp.

## Contamination Clean Up

As per the above, any soil around the drill sites that has become contaminated and gone unnoticed will be treated as per the Spill Contingency Plan. Before and after photos will be taken to document the contamination and the clean up. These photos will make up part of the final report to be submitted to the Water Resource Inspector following any spill and will also be attached as part of the Annual Report submitted to the Nunavut Water Board and the Kivalliq Inuit Association.



### Inspection and Documentation

A complete inspection will be conducted of all areas prior to seasonal closure. Photos will be taken to document the conditions prior to leaving the site for the winter. A full inventory will be conducted.

#### 6. Final Abandonment and Restoration

## Equipment

All equipment, including pumps, will be dismantled and removed from the project area.

## Fuel caches and Chemical Storage

All fuel drums brought to site by Indicator Minerals Inc. will be removed. All areas where there have been fuel caches will be thoroughly inspected. Any contamination will be cleaned up as well as any debris removed. Contaminated soil will be handled as per the Spill Contingency Plan. Final photos will be taken of all fuel caches for inclusion in the final report.

#### Sumps

All sumps (if created via drilling) will be inspected to ensure that there is no leaching or run-off. Sumps will be back-filled and leveled as required. Final photos will be taken.

#### Drill Sites

The drill will be dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. The drill will be flown out by the drilling contractor or as the contract describes.

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location. Grey water and sludge sumps will be filled and leveled.

An inspection will be conducted to ensure that all drill sites are/have been restored and sumps have been covered and leveled.

## Contamination Clean Up

Any contamination will be treated as per the Spill Contingency Plan. Before and after photos will be taken to document the contamination and the clean up. These photos will make up part of the final report to be submitted to the Water Resource Inspector following any spill and will also be attached as part of the Annual Report submitted to the Nunavut Water Board and the Kivalliq Inuit Association.



## Inspection and Documentation

A complete inspection will be conducted of all areas prior to closure. Photos will be taken to document the conditions prior to leaving the site for use in the final plan. All appropriate agencies will be contacted and notified once the final clean up has been conducted. The photos will make up part of the final closure reports to be submitted to DIAND, the Nunavut Water Board, and the Kivalliq Inuit Association.

# 7. Emergency Contact Information

Contact	Telephone Number	
Indicator Minerals Inc. Project Geologist (Andrea Maynes)	604-331-4605	
Indicator Minerals Inc. V.P. Exploration (24-hr contact)	403-949-4417	
	403-830-4711	
DIAND Water Resource Officer, Iqaluit	867-975-4295	
Environment Canada	867-975-4644	
	24-hr pager: 867-766-3737	
Nunavut Department of Environment	867-975-5910	
Kivalliq Inuit Association . Land Use Inspector	867-645-2800	
Department of Fisheries and Oceans	867-979-8007	
Indicator Minerals Inc. President	604-331-4605	
Unaalik Aviation (Rankin Inlet, NU office)	867-645-2535	
Yellowknife Fire Department	867-873-2222	
Repulse Bay RCMP	867-462-0123	
Chesterfield Inlet RCMP	867-898-0123	
Stanton Regional Hospital, Yellowknife, NT	867-920-4111	
Repulse Bay Health Centre	867-462-9916	
Kajuqjuk Health Centre (Chesterfield Inlet)	867-898-9968	
Discovery Mining Servcies	867-920-4600	



Appendix I