

## **APPENDIX 10**

### **RECORD OF DEBRIS PLACED INTO THE RECLAMATION LANDFILL**

**POLARIS MINE**  
**RECLAMATION LANDFILL**  
**RECORD OF DISPOSAL**

Prepared by: B. Donald, Teck Cominco Limited  
September 30, 2003



# **RECLAMATION LANDFILL**

## **OVERVIEW OF DOCUMENT**

The purpose of this report is to document the use of the Reclamation Landfill (aka Subsidence Landfill) at the Polaris Mine. This landfill was initiated in 1997 with two goals in mind:

- To initiate clean up of the mine site by disposing of obsolete equipment, and non-hazardous materials and supplies, and
- To make use of the fill being placed into the 'subsidence area' of the mine to provide a thick cover over the debris.

The Reclamation Landfill is located directly over some of the original underground stopes that were initially mined after the mine opened. The location of the Reclamation Landfill is indicated on the site plan provided in Appendix 1.

A number of areas around the site had obsolete equipment stored along with other types of obsolete materials and supplies. Cleanup of these areas once it was confirmed that the equipment/materials had no further useful life is consistent with responsible site management practices and with the concept of progressive reclamation. In 1997, an Operating Superintendent at the site was assigned the responsibility to manage the cleanup. When operating personnel could be spared from their regular operating duties, they were assigned the task of site cleanup. To ensure the Reclamation Landfill was only used for disposal of benign materials, procedures were established directing that no hazardous or special waste materials were deposited in the landfill, and that equipment designated for disposal was properly prepared first. The equipment was prepared by removing their batteries (to be shipped south for proper disposal) and all oils, greases and fuels were removed (refer to email from J. Knapp attached in Appendix 2). Once the equipment was ready for disposal, the mechanic completing work signed a form confirming that the equipment had been properly prepared. Copies of the completed forms (electronically scanned) are included in Appendix 3.

Photographs were taken on a regular basis through the process of placing materials in the Reclamation Landfill. These photographs are included in Appendix 3 and are grouped by month and/or year.

Initially after closure of the mine, it was believed that the information collected had been inadvertently lost during the demolition of the administration offices. However, it was later discovered that these records had been removed and placed into temporary storage and have now been retrieved. The records have been digitized and this document is the result to ensure there are electronic copies for safe keeping.

## **APPENDIX 1**

### **LOCATION PLAN OF RECLAMATION LANDFILL**



**APPENDIX 2**

**NOTE FROM  
J. KNAPP, MANAGER POLARIS OPERATIONS  
REGARDING  
THE DISPOSAL OF MATERIAL IN THE  
RECLAMATION LANDFILL**

SIMMS PAUL (P.) POL  
From: KNAPP JOHN (J.B.) POL  
Sent: Friday, February 09, 2001 10:46 AM  
To: 'edenholm@gartnerlee.com'  
Cc: SIMMS PAUL (P.) POL  
Subject: RE: Closure Plan

Hello Eric,

Sorry it has taken forever to respond but I have a multitude of excuses. Regardless, we don't have a documented procedure that will help very much.

We use a checklist for all disposed mobile equipment. The checklist records the equipment number and description (ie 692 Toyota) and then the following check:

Drain all oils/fluids/fuel

Remove All Filters

Remove all residual oil/grease

It is signed by the tradesman doing the work, and then endorsed by his supervisor.

This record is then maintained in a binder which is also used to keep photographic documentation of materials that are placed in the sinkhole.

No hazardous materials are to be disposed of in any landfill

The Surface Supervisor is involved in the placement of material, as their crew is responsible for moving scrap to the sinkhole. The Operating Superintendent, who has overall responsibility for the Surface Crew and Mill Crew is involved in maintained the records and photographic log.

Let me know of any other questions and I'll try to be more timely.

Best regards,

John

-----Original Message-----

From: Eric Denholm [SMTP:edenholm@ssimicro.com]  
Sent: Friday, January 19, 2001 10:08 AM  
To: john.knapp@cominco.com  
Subject: Closure Plan

Hi John:

We have been working on the changes to the landfill design as discussed at the meeting in Calgary. When we get a design thickness of the single layer cover that incorporates effects of pore water salinity, we will give you a call.

Regarding the reclamation landfill in the subsidence area, we have a question for you. I understand from Tony that you have a documented procedure for approving and inventorying all materials placed in this landfill. We suspect that this information may be necessary to back up the intended bulk fill (non-engineered) cover planned for this landfill.

Is this info. in a format that you could send to me so that we are up-to-date on your procedures should the question arise? We discussed making such info. an appendix to the landfill report.

I never gave you my card when we were in Calgary and some programs have trouble opening the attacehd card file ...

Eric Denholm  
Geological / Environmental Engineering  
P.O. Box 98  
4909-50th Ave.  
Yellowknife, NT X1A 2N1  
ph (867) 873-5808  
fax (867) 873-4453  
home (867) 669-7855  
cell (867) 444-1256

Thanks,

Eric D. << File: Card for Eric Denholm >>



### **APPENDIX 3**

## **MOBILE EQUIPMENT PREPARATION RECORDS**

## **LIST OF ITEMS BURIED IN THE SINKHOLE**

**ROYARY BATH DRUM,GEARS AND GUARDS.  
ELECTRICAL CABLE TRAYS.  
JUMBO BOOM.  
SCALFING.  
USED GRIZZLY.  
WOODEN PALLETS.  
WAREHOUSE SCALFING.  
SEVERAL PUMP BOXES.  
DUMP TRUCK BOXES.  
SCOOP BUCKETS,CANOPY,and MAIN FRAME.  
FLOTATION ROTORS.  
STEEL PUMP CASINGS.  
20 AND 40 FOOT CONTAINRES  
STEEL PLATES DIFF SIZES,THICKNESS  
VENT TUBING  
SPLIT SETS  
SULLAIR COMPRESSORS  
COVERTS  
JEEP PARTS  
PIPE RACKES  
OLD GANG PLANK  
FLOTATION LAUNDER  
TIRES DIFF SIZES,JEEP ,LOADERS SCOOPS  
RIMS,DIFFERENT SIZES  
DIFFERENT SIZES CHAINS  
ELECTRIAL MOTOR DIFFERENT SIZES  
WOODEN CRATES  
STABILIZER BARS  
DIAMOND DRILL SLUDGE TANK  
DOCK BOLLARD  
DRUM TILTER  
CONVEYOR PULLEYS  
VEHICLES**



Toyota

# 662

# 659

have had all liquor  
remove and have  
been scraped after  
being stripped of  
usable parts + sent  
to sink hole

Mech. Cord Dehaca  
completed May 30/02

Serge Jumper  
May 30/02

Job Description		Originator		Materials and specifications		
Limits and tolerance unless specified will be		Fractional + 1/64 -	Decimal + .005 -	Angular + 1/2° -	Specified	Scale
Machine finish required	As cast:	Rough	Medium	Fine	Other	
Remarks:						

Date \_\_\_\_\_, 19\_\_

Name (please print) \_\_\_\_\_

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: 10 y. old Equipment #: 604

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>      </u>
Remove all filters	<u>✓</u>	<u>      </u>
Remove all residual oil/grease	<u>✓</u>	<u>      </u>

Tradesman Signature: 2 Popo

Supervisor's Signature Serge

TKK  
June/98

TO BE GIVEN TO JOHN KNAPP FOR FILING

## POLARIS RECLAMATION PROJECT

### OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: 124072

Equipment #: 161

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>      </u>
Remove all filters	<u>✓</u>	<u>      </u>
Remove all residual oil/grease	<u>✓</u>	<u>      </u>

Tradesman Signature: J Pope

Supervisor's Signature Serge

TTSK  
June/98

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POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: 15 P 1

Equipment #: 67

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>/</u>	<u>      </u>
Remove all filters	<u>      </u>	<u>      </u>
Remove all residual oil/grease	<u>      </u>	<u>      </u>

Tradesman Signature: 

Supervisor's Signature 

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Done

Task  
Rec'd  
Sunkhwa  
June 24/98

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

*Paus Mancarrier.*

Equipment Description: \_\_\_\_\_ Equipment #: \_\_\_\_\_

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	_____
Remove all filters	<u>✓</u>	_____
Remove all residual oil/grease	_____	_____

Tradesman Signature: \_\_\_\_\_

Supervisor's Signature *Serge* \_\_\_\_\_

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*gts/c  
In 29/08.  
Sink H2O*

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: Toyota Equipment #: 749

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	
Remove all filters	<u>✓</u>	
Remove all residual oil/grease	<u>✓</u>	

Tradesman Signature: Jim Demers

Supervisor's Signature \_\_\_\_\_

TSK  
JLK  
2/28

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POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: toyota

Equipment #: 695

Yes

No

Drain all oils/fluids/fuel

✓

Remove all filters

✓

Remove all residual oil/grease

✓

Tradesman Signature:

Jon. B...

Supervisor's Signature

Serge

attk 2/20  
Intk

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John Knapp

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: TOYOTA

Equipment #: 738

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel		
Remove all filters	<u>✓</u>	
Remove all residual oil/grease		

Tradesman Signature: *Hawkins*

Supervisor's Signature *Serge*

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*HTS/K  
July 10/98*

John Knapp

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: Dux BARBAR Equipment #: 153

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>-</u>
Remove all filters	<u>✓</u>	
Remove all residual oil/grease	<u>✓</u>	

Tradesman Signature: JB DV

Supervisor's Signature [Signature]

TTSK  
Jul 21/20

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### OBSOLETE EQUIPMENT TO BE BURIED

Yes

No



Shelton

He

2/2/98

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: ST 8 A  
Rear frame

Equipment #: 102

Drain all oils/fluids/fuel

Yes

No

☒

Remove all filters

☒

Remove all residual oil/grease

☒

Tradesman Signature: \_\_\_\_\_

Supervisor's Signature

[Signature]

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ITS/K.  
Rec'd 2/19/98

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

John Knapp

Equipment Description: Ford F250

Equipment #: 733

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>      </u>
Remove all filters	<u>✓</u>	<u>      </u>
Remove all residual oil/grease	<u>✓</u>	<u>      </u>

Tradesman Signature: *[Signature]*

Supervisor's Signature *[Signature]*

TO BE GIVEN TO JOHN KNAPP FOR FILING

*TSK  
Rec'd Aug 19/98*

POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: PJ 75

Equipment #: 661

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>      </u>
Remove all filters	<u>✓</u>	<u>      </u>
Remove all residual oil/grease	<u>✓</u>	<u>      </u>

Tradesman Signature: Joseph Kontos

Supervisor's Signature Serge Gingras

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Rec'd  
PJL  
Nov 14/98

POLARIS RECLAMATION PROJECT  
OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: TOYOTA PZ-95 Equipment #: 767

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>      </u>
Remove all filters	<u>✓</u>	<u>      </u>
Remove all residual oil/grease	<u>✓</u>	<u>      </u>

Tradesman Signature: *[Signature]*

Supervisor's Signature *Serge*  
6/3/99.

TO BE GIVEN TO JOHN KNAPP FOR FILING

*Rec'd.*  
*Test*  
*MAR 6/99*




POLARIS RECLAMATION PROJECT

OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: INGERSOL-RAND DRILL. Equipment #: 160

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>      </u>	<u>      </u>
Remove all filters	<u>✓</u>	<u>      </u>
Remove all residual oil/grease	<u>✓</u>	<u>      </u>

Tradesman Signature:  H. H. H.

Supervisor's Signature 

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POLARIS RECLAMATION PROJECT  
OBSOLETE EQUIPMENT TO BE BURIED

Equipment Description: 704D7A Equipment #: 650

	<u>Yes</u>	<u>No</u>
Drain all oils/fluids/fuel	<u>✓</u>	<u>  </u>
Remove all filters	<u>✓</u>	<u>  </u>
Remove all residual oil/grease	<u>✓</u>	<u>  </u>

Tradesman Signature: JBJ

Supervisor's Signature Berge

TO BE GIVEN TO JOHN KNAPP FOR FILING

Advised by Ron Matthews that this will be  
disposed of July/Aug in 850-172 via Ramp

ITSK

Aug 1/97