

#1-4905 48<sup>th</sup> Street, Yellowknife, NT X1A 3S3 Tel: 867-765-4592 Fax: 867-765-4593 www.wiwb.ca

to

Application for:	
<b>New Land Use Permit</b>	

Amendment

1. Applicant's name and mailing address: Dominion Diamond Ekati Corporation	Fax number: 867-669-9293	
1102 4920-52nd St. Yellowknife, NT X1A 3T1	Telephone number: 867-669-6100	
2. Head office address:	Fax number:	
Field supervisor: Radiotelephone:		
Radiotelephone.	Telephone number:	
3. Other personnel (subcontractor, contractors, company staff	etc.)	
115 approximate personnel at the Misery Camp		
TOTAL: (Number of persons on site) Approximately 80	00 people may be at the Ekati site at any given time	
4. Eligibility: (Refer to section 18 of the Mackenzie Valley Land Use Regulat	ions)	
a)(i) a)(ii) a)(iii) b)(i) b)(ii)		
<b>5.</b> a) Summary of operation (Describe purpose, nature and loc The purpose of this Land Use Permit is to support development an including the extraction of waste rock and kimberlite from the the site is located 310 km northeast of Yellowknife (Figure 1.3-1 in th	d mining activities for the Jay and Cardinal kimberlite pipe two open pits using open pit mining methods. The Ekati mine	
The extraction of ore from the Jay and Cardinal pipes will involve the use of a number of existing components of the Ekati mine, including:		
<ul> <li>Misery mining infrastructure (e.g., fuel facility, explosive magazines);</li> <li>primary roads and transportation infrastructure (e.g., Ekati airstrip);</li> </ul>		
<ul> <li>Ekati camp and supporting infrastructure;</li> <li>processing plant; and</li> </ul>		
<ul> <li>processing plant, and</li> <li>fine processed kimberlite management facilities (e.g., mined-out Panda and Koala open pits supported by the Long Lake Containment Facility.</li> </ul>		
In addition to the existing mine components, the Jay-Cardinal Proj • a new access road to the Jay-Cardinal site;	ject will require:	
• an aggregate quarry (i.e., borrow source) to obtain construction material;		
<ul> <li>construction of roads, pads, and incidental support buildings;</li> <li>construction of three dikes and a water diversion structure to isolate the portion of Lac du Sauvage overlying the pipes;</li> </ul>		
<ul> <li>fish removal from the isolate portion of Lac du Sauvage;</li> </ul>		
<ul> <li>drawdown of the water level in the isolated portion of La</li> <li>the North Arm Water Management Area; and,</li> </ul>	ac du Sauvage;	
<ul> <li>excavation of the Jay and Cardinal open pits.</li> <li>For additional details please refer to the accompanying Project</li> </ul>	ct Description	

b) Please indicate if a camp is to be set up. (Please provide details on a separate page, if necessary.) A permanent camp will not be set up at the Project site, instead, the existing Ekati facilities at the Ekati camp will be used. Employees will be transported to the mining area on a daily basis. Emergency shelter will be provided as part of the field office complex.

6. Summary of potential environmental and resource impacts (describe the effects of the proposed land-use operation on land, water, flora & fauna and related socio-economic impacts). Use separate page if necessary.)

Many components and activities of the proposed Project have already been subject to environmental assessment. New processing facilities, and camp facilities are not required as part of the Project. There are no new mining methods proposed for this Project and the socio-economic benefits of the EKATI mine will be maintained with Project approval.

A number of valued components (VCs) have been identified for the Project; please refer to Section 6.0 of the accompanying Project Description.

Existing plans and monitoring programs for the Ekati mine include:

- Waste Rock and Ore Storage Management Plan
- Air Quality Monitoring Program (AQMP),
- Aquatic Effects Monitoring Program (AEMP),
- Wildlife Effects Monitoring Program (WEMP), and,
- Interim Closure and Reclamation Plan (ICRP).

Additional details on potential environmental and socio-economic impacts and mitigation measures are provided in Section 6 of the accompanying Project Description.

An Engagement Record is provided as Appendix 5A of the accompanying Project Description.

### 7. Proposed restoration plan (please use a separate page if necessary).

Ekati is required under the Water Licence and the Environmental Agreement to have a closure plan and update this plan on a regular basis and/or when there are any significant changes made to the mine plan that need to be encompassed by the plan. A Final Closure and Reclamation Plan will be required for approval two years prior to mine closure.

The mine components for the Jay-Cardinal Project are included, in Version 2.4 of the Interim Closure and Reclamation Plan (ICRP). Revisions or updates required to the ICRP to specifically address reclamation activities at the Jay-Cardinal Site will be completed. The general reclamation objectives and goals of the ICRP by mine component are briefly described below. Version 2.4 of the ICRP was approved by the Wek'eezhii Land and Water Board (WLWB) in November 2011 and, an annual reclamation update report is provided to the WLWB.

The overall goal of the plan is to return the Ekati site, as practical, to a viable, and wherever practicable, self-sustaining ecosystem that is compatible with a healthy environment, human activities, and the surrounding environment. The success of the plan will be measured through setting closure criteria and performance based standards.

The general reclamation objectives and goals of the ICRP by mine component are briefly described in Section 4.9 of the accompanying Project Description.

#### 8. Other rights, licences or permits related to this permit application (mineral rights, timber permits, water licences, etc.)

All licences and approvals required to undertake the proposed Jay-Cardinal Project are currently in place with the exception of:

- Amendment to Class A Water Licence #W2012L2-001;
- New Land Use Permit for the mining area and access road;
- Fisheries Authorization under Section 35 of the Fisheries Act for activities in Lac du Sauvage; and

• Exemption under Section 23 of the Navigable Waters Protection Act for dewatering of the main body of Lac du Sauvage

**Roads:** 1.008 km access road Is this to be a pioneered road? Yes Has the route been laid out or ground truthed? Yes

#### 9. Proposed disposal methods.

To complete this section of the application form, a Waste Management Plan for the proposed activities is to be developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan* (accessible at <u>www.mvlwb.com</u>) and submitted as an attachment to the application form. A template for this Plan is provided in the *Guidelines*.

The Ekati operation is required under the current Water Licence and the Environmental Agreement to have a Waste Management Plan. Waste at the Ekati operation is currently managed under this plan.

### a) Garbage:

Inert waste will be returned to the existing landfill site at the main Ekati site for disposal. Food wastes will be collected separately and returned to the main Ekati site for incineration. Hazardous waste such as oily rags, used oil and other hydrocarbons, batteries, etc. will be returned to the Waste Management Building for further processing, disposal and/or recycling.

## b) Sewage (Sanitary & Grey Water):

Sewage will be collected from washroom and lunchroom facilities and stored on-site. As required, sewage from the storage tanks will be transported to the main Ekati site for treatment. Sewage at Ekati is treated using an activated sludge system with the effluent pumped to the Long Lake Containment Facility.

# c) Brush & trees:

N/A

# d) Overburden (Organic soils, waste material, etc.):

Overburden materials removed to facilitate mining of the kimberlite ore (including some lake bottom sediments) will be stored at designated areas. The Waste Rock and Ore Management Plan developed as part of the Operating Environmental Management Plan for the Ekati site will be updated prior to the undertaking of waste handling activities at the Jay-Cardinal site. Waste rock storage is discussed further in the accompanying Project Description.

## 10. Equipment (includes drills, pumps, etc.) (Please use separate page if necessary.

Type & number	Size	Proposed use	
2 x Driltech D90KS drill	27 cm dia.	Production drilling	
1 x Ingersoll Rand DM45 drill	16.5 cm dia.	Presplit drilling	
2 x Pit Shovel	10-12 m <sup>3</sup>	Ore & waste loading	
1 x CAT 992 loader	15 m <sup>3</sup>	Ore & waste loading	
1 x CAT D10R track dozer	570 HP	Pit & dump dozing	
1 x CAT 834 wheel dozer	450 HP	Site services	
6x CAT 777 haul Truck	90t	Ore & waste haruling	
6 x CAT 777 haul truck	218 t	Ore & waste hauling	
13 x CAT 793 haul truck	225 t	Waste hauling for the Jay Pit	
1 x CAT 777 water truck	100 t	Dust suppression	
1 x CAT 375 shovel	4 m <sup>3</sup>	Site services	
1 x CAT 16H grader	275 HP	Road grading	
1 x CAT IT 28 tool carrier	125 HP	Blasthole stemming	
1 x CAT fuel/lube truck	10 t	Fuel/lube supply	
1 x Triple Threat truck	14 t	Explosives supply	
2 x Flygt dewatering pump	125 HP	Pit dewatering	
2 x Flygt dewatering pump	90 HP	Pit dewatering	
6 x Haulmax Trucks	80 t	Misery Hail Road	

11. Fuels	()	Number of containers	Capacity of containers	Location
Diesel				
Gasoline				
Aviation fuel				
Propane				
Other				

### 12. Containment fuel spill contingency plans. (Please attach separate contingency plan if necessary).

A spill contingency plan for the proposed activities is to be developed in accordance with INAC's *Guidelines for Spill Contingency Planning, April 2007* (click here to access). The Ekati Spill Contingency Plan 7.0 is attachment to this application form.

A Spill Contingency Plan has been approved by the Wek'eezhii Land and Water Board for the Ekati Diamond Project [Attachment 1]. Version 8.0 will be submitted to WLWB by October 31, 2013. The Emergency Response Plan will also be updated to include the Jay-Cardinal site.

### 13. Methods of fuel transfer (to other tanks, vehicles, etc.)

Mobile equipment will refuel at a dispensing station associated with the bulk diesel storage tanks. Equipment that is less mobile, such as drills, large loaders, and the hydraulic shovel will be refueled from a mobile fuelling truck. All refueling will be conducted following standard practices. Mobile fuel trucks will carry dedicated spill response equipment.

#### 14. Period of operation (includes time to cover all phases of project work applied for, including restoration)

It is anticipated that the Project will start when regulatory approvals and mine engineering designs have been completed. The first construction under this land use permit would be the roads in 2016. This start date will provide for the integration of the Jay-Cardinal Project into the on-going Misery site activities in a manner that optimizes overall efficiency and value for the Ekati Mine, while providing workforce stability for emplyees. The Project is anticipated to provide an additional 10 to 20 years of life to the Ekati mine.

### 15. Period of permit (up to five years, with maximum of two years of extension).

Five years

16. Location of activities by map co-ordinates (attached maps and sketches)

Eric Denholm - Superintendent Traditional Knowledge and Permitting

Type A - \$150.00 \*\*

Please refer to Figure 1

Minimum latitude (degrees, minutes, seconds)	Maximum latitude (degrees, minutes,seconds)
64° 33'	64° 42'
<b>Minimum longitude (degrees, minutes, seconds)</b>	<b>Maximum longitude (degrees, minutes,seconds)</b>
110° 17'	109° 58'

NAD <u>83</u>

Print name in full

Map Sheet no. 76D9

Signature

Date: October 18, 2013

18.	Fees
Ref	undable**)

17. Applicant

Type B - \$150.00 \*\* (\*\*Application Fees are Non-

Land use fee:421 hectares @ \$50.00/hectare Assignment fee \$50.00	\$21,050 \$50.00
Total application and land use fees	\$21,250.00_
Please make all cheques payable to "Receiver Genera	l of Canada"

List of Figures

Please refer to accompanying Project Description for all referenced figures.

Figure 1.3-1 Location of Ekati Claim Block

Figure 1.3-4 Location of Jay-Cardinal Pipes

Attachments: Ekati Spill Contingency Plan 7.0