GNWT ECC - North Slave Region

December 6th 2024

Arctic Canadian Diamond Company
900 606 4th St. SW
Calgary AB, X2P 1T1

Water Licence W2022L2-0001

Attn: William Liu – Manager Environment and Permitting

Re: October-November 2024 Water Licence Inspection

Dear Mr. Liu,

On October 23-24th and November 20-21st 2024, Water Licence Inspections were conducted at the Ekati Diamond Mine by Jamie Steele, Manager Diamond Resource Management.

As per the noted Land Use Permit granted in accordance with the Mackenzie Valley Resource Management Act, please be advised that the attached Inspection Report is part of the Public Registry and is intended to keep all interested parties informed of the manner in which Permit requirements are being met. This report provides comments based on general observations and highlights any concerns or items that should be addressed by the Permittee.

The following areas were inspected, and the details of the findings are included in the attached report:

- Point Lake Project
- Misery Camp
- Landfill
- Coarse Processed Kimberlite Dump
- Incinerator Building
- Zone S
- PDC Culverts
- Refueling Stations
- Sable Development and Sable Haul Road
- Process Plant Laydown

The Inspector has no concerns resulting from this inspection. The details of the findings are in the attached report. If you have any questions or concerns, please contact the undersigned at (867) 767-9187 extension 24188. Thank you for your continued cooperation.

Sincerely,

Jamie Steele
Manager-Diamond Resource Management
GNWT- Environment and Climate Change
North Slave Region
Jamie_Steele@gov.nt.ca

cc: Ms. Rhiana Bams – Regulatory Specialist, Wek'èezhı̨i Land and Water Board
Mr. Marc Casas – Executive Director, Independent Environmental Monitoring Agency

Government of Northwest Territories | Gouvernement des Territoires du Nord-Ouest

INDUSTRIAL WATER USE INSPECTION REPORT

INSPECTION DATES: October 23-24 2024

COMPANY REP : William Liu

LICENSEE:

LICENCE #: W2022L2-0001 (Water Licence)

Arctic Canadian Diamond Company (Burgundy)
900 606 4th St. SW
Calgary AB, X2P 1T1

WATER SUPPLY

Source:	Grizzly Lake Falcon Lake Lac de Gras	Quantity Used:	Total cubic meters utilized through Sept. 2024 125550m^3	Meter Rdg:	N/I

Indicate: A - Acceptable U - Unacceptable N/A - Not Applicable N/I - Not Inspected

Intake Facilities	A	Storage	A	Treatment	A	Recycling	A
Flow Meas.	A	Conveyance Lines	A	Pumping Stations	N/I	Modifications	N/A

WASTE DISPOSAL

Tailings:	Tailings Pond	N/A	Natural Lake	N/A	Underground	A		
Sewage:	Sewage	A	Tailings pond	N/A	Natural Water	N/A		
	Continuous	N/A	Inter.	N/A	CSCF	A		
Solid Waste:	Open Dump	N/A	Landfill	A	Burn & Bury	A	Underground	N/A

Indicate: A - Acceptable U - Unacceptable N/A - Not Applicable N/I - Not Inspected

Discharge Quality	A		A	Disch. Meas. Dev.	A	Freeboard	A
Decant Structures	A	Pond Treatment	N/A	Dams, Dykes	A	Seepages	A
Dyke Inspections	A	Runoff Diversion	A	Erosion	A	Spills	A

GENERAL CONDITIONS

Indicate: A - Acceptable U - Unacceptable N/A - Not Applicable N/I - Not Inspected

Ore & Waste Rock	A	Records & Reporting	A	Surv. Net. Prog.	A
Geotechnical Inspection	A	Posting, Signage	A	Contingency Plan	A
Reclamation Activities	A	New Construction	A	Fuel Storage	A
Mine Water Discharge	A	Chemical Storage	A	Annual Report	A

Licensee Representative's: Mr. William Liu – Superintendent Environment

Licensee Representative's Signature: Inspection issues discussed with Dominion Diamond Mine Personnel on site.

Inspector's Name: Jamie Steele

Inspector's Signature

Dated November 21st 2024

Comments Section on Specific Aspects Inspected

Point Lake Project

Point Lake construction is well underway. A perimeter ditch is being constructed around the waste rock pile to catch any problematic runoff that may occur. The ditch is lined to prevent seepage. Any runoff will be collected and pumped into the Lynx Pit, or the King Pond Settling Facility (Photos 1 through 4).

A heated tool shed is installed along the Point Lake Road. The building is being used for storage and emergency shelter. Garbage is being collected and segregated properly in the building; however, there are no labelled containers. The Inspector recommends using labelled containers as per the approved Waste Management Plan (Photo 5).

Misery Equipment Parking

Equipment parked around the Misery Development area was utilizing drip trays to catch any potential leaks or drips. No leaks or spills were observed under any of the equipment inspected (Photo 6).

Misery Refuelling Station

The Misery refuelling area was clean and well maintained with no indication of any hydrocarbon leaks or spills. Spill response equipment was fully stocked and easily accessible. The containment sump at the refuelling area was full of water/ice during the October inspection. A follow up inspection in November showed that the sump has been chipped out and the containment capacity restored (Photos 7 through 9).

NT Spill #2024360 occurred on September 19 2024 when a lube truck was overfilled due to a failure of the max level sensor. The refuelling area containment sump was filled to capacity, and the remaining product flowed on the ground adjacent to the pad. The Inspector has verified that the area has been cleaned up and the spill report has been filed (Photo 10).

Misery Waste Management

Waste bins are placed in common areas around Misery. The waste bins inspected did not contain any misdirected waste and were properly labeled and easily accessible (Photos 11 through 14).

Misery Laydowns

Laydowns were clean and well organized with no indication of hydrocarbon leaks or spills (Photo 15).

Landfill

The Ekati Landfill is the designated disposal area for inert solid waste that is not incinerated or sent off site for recycling. The landfill receives wastes such as rubber, plastics, wood, and metal. A recent change in landfill operation has dumping restricted to approved operators only. This is an effort to reduce noncompliant waste being sent to the landfill. Operators now need to call in to the Environment Department to arrange for waste drop off. The landfill had been recently covered with coarse processed Kimberlite and appeared to be well maintained with no indication of any misdirected waste (Photo 16).

The Burn Bin located at the landfill is an enclosed truck box that is used as the disposal location for cardboard and explosive waste products. The bin is enclosed and locked to prevent misuse or animals from entering. There was no indication of misdirected waste in the Burn Bin (Photos 17 and 18).

Incinerator Ash is disposed of in a designated area of the landfill near the burn bin. The ash disposal area of the landfill shows no indication of misdirected waste (Photos 19 and 20).

Coarse Processed Kimberlite Dump

Coarse processed kimberlite is being disposed of on the Panda/Koala Waste Rock Pile as per the approved Wastewater Processed Kimberlite Management Plan. Coarse Kimberlite is also used to cover the landfill to contain the waste and prevent it from becoming wind blown (Photo 21). No issues were observed at the dumping location.

Incinerator Building

Food waste and other combustible waste collected around camp is directed to the incinerators and the composter for final disposal. Waste is sorted inside the building by Ekati staff, and suitable organic material is sent to the composter, the remaining waste is incinerated. The incinerators have wet scrubbers to clean incinerator stack gas before venting to the atmosphere. Scrubber water is collected in a storage tank and disposed of in the Long Lake Containment Facility. Incinerator ash is collected in bins and disposed of in the landfill (Photos 22 through 24).

Burner tuning and stack testing was scheduled for the summer of 2024; however, the testing wasn't completed due to some maintenance issues. The testing will need to be rescheduled.

Zone S

Zone S located on top of the Panda/Koala Waste Rock Pile is the designated disposal area for sewage sludge and hydrocarbon contaminated mine rock. Zone S has plenty of capacity and there is no indication of any non-compliant or misdirected waste (Photo 25).

PDC Culverts

The culverts along the PDC are beginning to fill in with snow. Normally Ekati staff will cover these culverts to prevent them from becoming packed with snow. A packed culvert will potentially create a flooding situation in the spring. Culverts along the PDC and the Airstrip are of particular concern. Arctic should cover these culverts as soon as possible (Photo 26).

Main Camp Refuelling Station

The Main Camp refuelling area was clean and well maintained with no indication of any hydrocarbon leaks or spills. Spill response equipment was fully stocked and easily accessible. Containment sumps were dry and had plenty of capacity to contain any potential spills (Photo 27).

Koala Refuelling Station

The Koala Refuelling Station was clean and well organized with no indication of any leaks or spills. Spill response equipment is fully stocked and easily accessible. Containment sumps were dry and had plenty of capacity to contain any potential spills (Photo 28).

Sable Haul Road

NT Spill #2024424 occurred on November 18, 2024. A Road Train hauling kimberlite ore went off the road and spilled some ore onto the ground. The Inspector attended the site, but the clean-up was still under way. The spill consisted of Kimberlite ore and some minor hydrocarbon staining in the snow from the hydraulic hoses disconnecting (Photo 29).

Sable Waste Management

Waste at the Sable Development is segregated into labelled bins. The waste bins were well maintained with no indication of spills or misdirected waste (Photo 30).

Sable Refuelling Station

The Sable refuelling area was clean and well maintained with no indication of any hydrocarbon leaks or spills. Spill response equipment was fully stocked and easily accessible (Photo 31).

Sable Drilling

Drilling in the Sable Pit was ongoing throughout the summer in order to improve resource delineation. Drilling has been completed for the season, and the drills and equipment are stored in a laydown near the pit. Equipment storage is neat and well organized and there is no indication of any leaks or spills (Photos 32 and 33).

Process Plant Laydown

The Process Plant laydown has been cleaned up and the broken bags have been removed. The laydown is clean and well organized (Photo 34).

Photo 1 – Point Lake Project – Waste rock is being placed in the Point Lake WRSA

Photo 2 – Point Lake Project – WRSA Perimeter trench construction is continuing. The trench is lined and graded toward a collection sump.

Photo 3 – Point Lake Project – Collection sump is designed to catch any runoff from the Point Lake WRSA. Water is then intended to be pumped into King Pond or the Lynx Pit.

Photo 4 – Point Lake Project – Liner material is being staged along the Point Lake road.

Photo 5 – Point Lake Project – A heated tool shed is placed along the Point Lake Road. Garbage is being collected and segregated properly; however, there are no labelled containers. The Inspector recommends using labelled containers as per the approved Waste Management Plan.

Photo 6 – Misery Equipment Parking – Drip trays are installed under parked equipment in the Misery area.

Photo 7 – Misery Refuelling Station – The refuelling station was clean and well organized with no indication of any leaks or spills. Spill response equipment was fully stocked and easily accessible.

Photo 8 – Misery Refuelling Station – The containment sump at the Misery refuelling station was iced over. This will need to be cleaned out in order to provide spill containment capacity.

Photo 9 – Misery Refuelling Station – The containment sump at the Misery Refuelling station has been chipped out and is free of ice. The sump is functional and should contain any future spills.

Photo 10 – Misery Refuelling Station – NT Spill #2024360 occurred on September 19 2024 when a lube truck was overfilled due to a failure of the max level sensor. The refuelling area containment sump was filled to capacity, and the remaining product flowed on the ground adjacent to the pad. The Inspector verified that the area has been cleaned up and the spill report has been filed.

Photo 11 – Misery Waste Bins – Waste bins are placed in common areas around Misery. Bins were properly labeled and easily accessible.

Photo 12 – Misery Waste Bins – Waste bins did not contain any misdirected waste.

Photo 13 – Misery Waste Bins – Waste bins staged outside the Misery truck shop were labelled, organized and did not contain any misdirected waste.

Photo 14 – Misery Waste Management – Waste bins were labelled with their contents as per the Waste Management Plan.

Photo 15 – Misery Laydown – Laydowns were clean and well organized with no indication of hydrocarbon leaks or spills.

Photo 16 – Landfill – The Landfill has been recently covered by coarse processed kimberlite.

Photo 17 – Landfill – The landfill Burn Bin is the designated disposal area for some inert combustible waste such as explosives waste packaging.

Photo 18 – Landfill – The Burn Bin is an enclosed truck box and is used as the disposal location for cardboard and explosive waste products. The bin is caged in and locked to prevent misuse and animals from entering. There was no indication of misdirected waste in the Burn Bin.

Photo 19 – Landfill – Incinerator Ash is disposed of in a designated area of the landfill near the burn bin.

Photo 20 – Landfill – The ash disposal of the landfill shows no indication of misdirected waste.

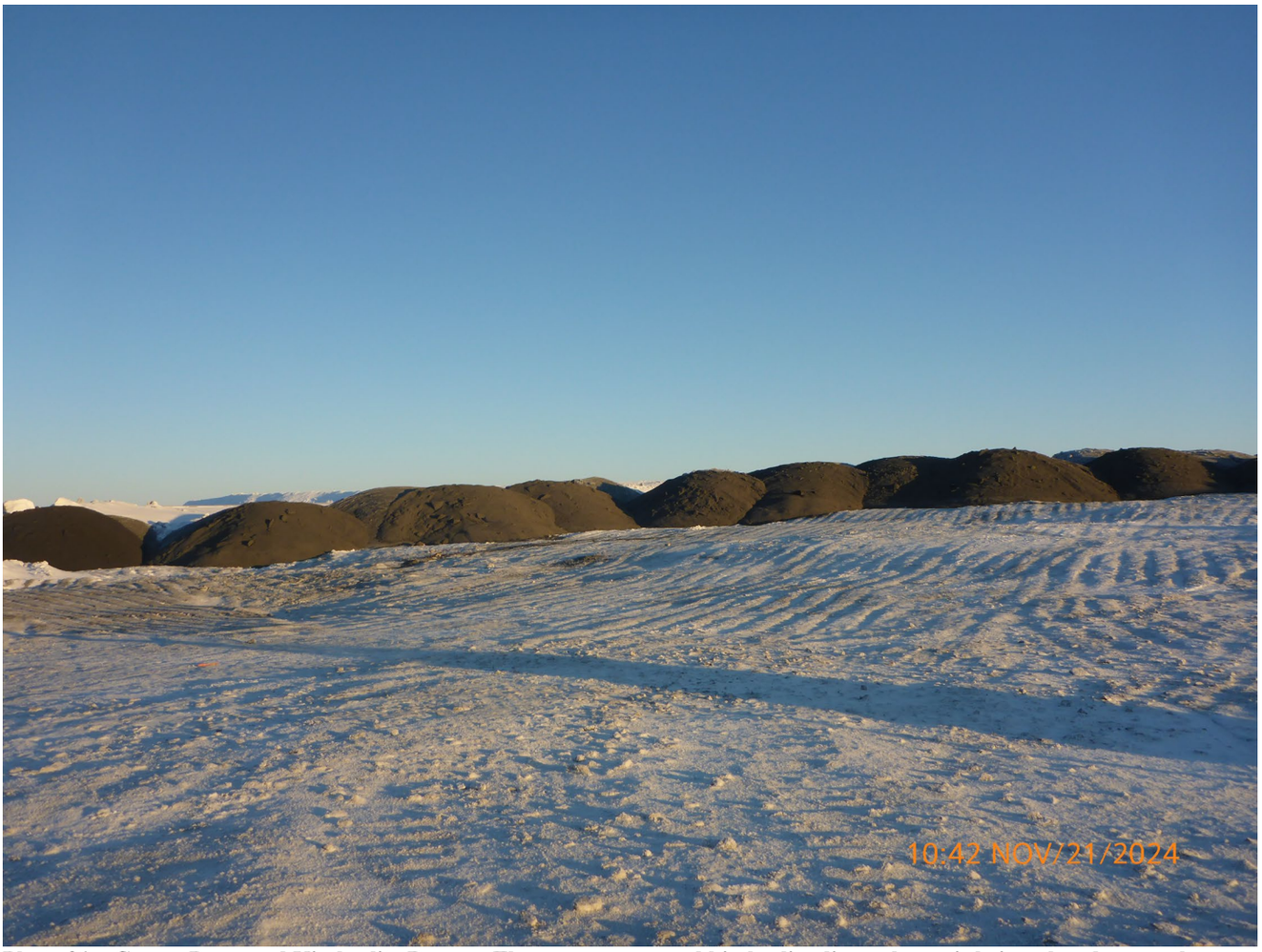

Photo 21 – Coarse Processed Kimberlite Dump – The coarse processed kimberlite disposal area is being placed as per the Wastewater Processed Kimberlite Management Plan. Coarse Kimberlite is also used to cap the landfill in between lifts.

Photo 22 – Incinerator Building – Ekati is equipped with two dual chambered incinerators. The incinerators were scheduled for tuning and stack testing in the summer of 2024; however the testing was not able to proceed.

Photo 23 – Incinerator Building – Incinerator waste is segregated and batched. Much of the organics are sent to the composter, and the remaining waste is sent to the incinerators.

Photo 24 – Incinerator Building – Waste after it has been through the composter is dried out and rendered inert. It is then disposed of in the Landfill.

Photo 25 – Zone S – Zone S is the designated disposal area for sewage sludge and hydrocarbon contaminated mine rock. Zone S has plenty of capacity and there is no indication of any non-compliant or misdirected waste.

Photo 26 – PDC Culverts – The culverts along the PDC are beginning to fill in with snow. Normally Ekati staff will cover these culverts to prevent them from becoming packed with snow. A packed culvert will potentially create a flooding situation in the spring. Culverts along the PDC and the Airstrip are of particular concern. Arctic should cover these culverts as soon as possible.

Photo 27 – Main Camp Refuelling – The Main Camp Refuelling Station was clean and well organized with no indication of any leaks or spills. Spill response equipment is fully stocked and easily accessible.

Photo 28 – Koala Refuelling Station – The Koala Refuelling Station was clean and well organized with no indication of any leaks or spills. Spill response equipment is fully stocked and easily accessible.

Photo 29 – Sable Haul Road – NT Spill #2024424 occurred on November 18 2024. A Road Train hauling kimberlite ore went off the road and spilled some ore onto the ground. The Inspector attended the site, but the clean-up was still under way. The spill consisted of Kimberlite ore and some minor hydrocarbon staining in the snow from the hydraulic hoses disconnecting.

Photo 30 – Sable Waste Bins – Waste at the Sable Development is segregated into labelled bins. The waste bins were clean and well maintained with no indication of spills or misdirected waste.

Photo 31 – Sable Refuelling Station – The Sable Refuelling Station is clean and well organized with no indication of any leaks or spills. Spill response equipment is stocked and easily accessible.

Photo 32 – Sable Drilling – Drilling in the Sable Pit has stopped for the season. The drills and equipment are stored in a laydown near the pit. Equipment storage is neat and well organized and there is no indication of any leaks or spills.

Photo 33 – Sable Drilling – Drilling additives are stored out of the way on pallets to prevent breakage and spills.

Photo 34 – Process Plant Laydown – The Process Plant laydown has been cleaned up and the broken bags have been removed. The laydown is clean and well organized.