Canada Coal Inc.

# General Water Licence Application
# (Application for a new Water Licence)

Document Date: May 2011

Application Submission Date: 11/12/2012

Month/Day/Year

P.O. BOX 119
GJOA HAVEN, NUNAVUT
XOB 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

kNK5 wmoEp5 vtmpq
NUNAVUT IMALIRIYIN KATIMAYIT
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

## DOCUMENT MANAGEMENT

Original Document Date: April 2010

### DOCUMENT AMENDMENTS

| | Description | Date |
|---|---|---|
| (1) | Updated for public distribution as separate document from NWB Guide 4 | June 2010 |
| (2) | Updated NWB logos and reformatted table to allow rows to break across page | May 2011 |
| (3) | | |
| (4) | | |
| (5) | | |
| (6) | | |
| (7) | | |
| (8) | | |
| (9) | | |
| (10) | | |

P.O. BOX 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

kNK5 wmoEp5 vtmp5
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

## GENERAL WATER LICENCE APPLICATION
## (APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: *Guide to Completing and Submitting a Water Licence Application for a New Licence* for more information about this application form.

**LICENCE NO:**
(for NWB use only)

**1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION** (name, address)

Canada Coal Inc.
Braam Jonker, President & CEO

Phone: 1.604.638.0971
Fax: 1.604.638.0973
e-mail: braam.jonker@gmail.com

**2. APPLICANT REPRESENTATIVE CONTACT INFORMATION** if different from Block 1 (name, address)

DMT Geosciences Ltd.
Susan O'Donnell, P. Geol.

Phone: 1.403.264.9496
Fax: 1.403.263.7641
e-mail: susan.odonnell@dmtgeosciences.ca

**3. NAME OF PROJECT** (including the name of the project location)

Fosheim Peninsula Coal Project

**4. LOCATION OF UNDERTAKING**

**Project Extents**

| | | |
|---|---|---|
| NW: | Latitude: (80° 20 ' N) | Longitude: (86° 30' W) |
| NE: | Latitude: (80° 20 ' N) | Longitude: (81° 30' W) |
| SE: | Latitude: (78° 50' N) | Longitude: (81° 30' W) |
| SW: | Latitude: (78° 50' N) | Longitude: (86° 30' W) |

**Camp Location(s)**

Latitude: (79° 51' N) Longitude: (85° 00' W)

**5. MAP** - Attach a topographical map, indicating the main components of the undertaking.

See attached maps and appendices listing NTS Map Sheets and relevant coal exploration licence blocks.

NTS Map Sheet No.: See appendices Map Name: CCI Water Application Map Map Scale: 1:125,000

**6. NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

**Sub-surface**

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

X Coal Exploration Licences from Aboriginal Affairs and Northern Development Canada
Date (expected date) of issuance: various see licences attached Date of expiry: various

**Surface**

X Crown Land Use Authorization from Aboriginal Affairs and Northern Development Canada
Date (expected date) of issuance: spring 2013 Date of expiry: two years from issuance

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

X IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: spring 2013 Date of expiry: 2 years from issuance

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Other: _____
Date (expected date) of issuance: _____ Date of expiry: _____

Name of entity(s) holding authorizations:
Canada Coal Inc.

**7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION**

Indicate the land use planning area in which the project is located.

X North Baffin
☐ South Baffin
☐ Akunniq
☐ Keewatin
☐ Sanikiluaq
☐ West Kitikmeot

Is a land use plan conformity determination required?

X Yes ☐ No To be determined

If Yes, indicate date issued and attach copy _____
If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

**8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION**

Is an Article 12 Part 4 screening determination required?

☐ Yes ☐ No X To be determined

If Yes, indicate date issued and attach copy _____
If No, provide written confirmation from NIRB confirming that a screening determination is not required.

**9. DESCRIPTION OF UNDERTAKING** – List and attach plans and drawings or project proposal.

The company intends to continue to evaluate various coal exploration licences situated in the Fosheim Peninsula region. Various exploration methodologies may be employed, including geological mapping and sampling, diamond drilling, geophysical studies, heritage studies, environmental studies, and logistical studies. Field work will either be based out of: 1) a temporary exploration camp, 2) the Eureka Weather Station, or 3) some combination thereof. Please refer to additional information sheets and maps attached for further details.

**10. OPTIONS** – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

Coal exploration licence blocks located on Axel Heiberg Island, Strathcona Fiord (Ellesmere), Stenkul Fiord (Ellesmere), and the Bache Peninsula (Ellesmere) were considered as alternative exploration targets. Canada Coal has selected the Fosheim Peninsula as the optimal target based on exploration results, proximity to the existing infrastructure, local input, and heritage considerations. Alternative camp locations may be considered once the area becomes accessible (May 2013 timeframe).

**11. CLASSIFICATION OF PRIMARY UNDERTAKING** - Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial
☐ Agricultural
X Mining and Milling (includes exploration/drilling/exploration camps)
☐ Conservation
☐ Municipal (includes camps/lodges)
☐ Recreational
☐ Power
☐ Miscellaneous (describe below):

_____

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings.

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.

☐ Hydrostatic Testing
☐ Tannery
☐ Tourist / Remote Camp
☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
☐ Onshore Oil and Gas Exploration Drilling
X Mineral Exploration / Remote Camp
☐ Advanced Exploration
☐ Mine Development
☐ Municipal
☐ General Water Works
☐ Power

**12. WATER USE** - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

X To obtain water for camp/ municipal purposes
☐ To obtain water for industrial purposes
☐ To cross a watercourse
☐ To alter the flow of, or store water
☐ Other: _____
☐ To divert a watercourse
☐ To modify the bed or bank of a watercourse
☐ Flood control

**13. QUANTITY AND QUALITY OF WATER INVOLVED** - For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.

Name of water source(s) (show location(s) on map):
Romulus Lake and associated drainage creeks (primary source), see map attached
Various creeks and waterways for drill targets (see map attached)

Describe the quality of the water source(s) and the available capacity:
Romulus Lake is a large freshwater lake, approximate size is 3.5 km E-W by 1.5 km N-S
Romulus Lake and its drainage creek will be the primary source of camp water if camp built
Drilling water will be obtained from local lakes, creeks, and permafrost melt ponds

Provide the overall estimated quantity of water to be used: 200 $m^3$/day

Provide the estimated quantity(s) of water to be used from each source:
Exploration camp, maximum 50 $m^3$/day, drawn from Romulus Lake and associated drainage
drilling rig = 50 $m^3$/day to a maximum of 3 rigs, drawn from various sources in proximity to drill targets (see drill targets map attached with nearest creeks/lakes overlain)

Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)
Exploration camp, maximum 50 $m^3$/day, drilling rig = 50 $m^3$/day to a maximum of 3 rigs

Describe the method of extraction(s):
Water is obtained from the sources using a well pump. Siphon for the pump is covered by a screen to prevent entrapment of fish.

Estimated quantity(s) of water returned to source(s) up to 160 $m^3$/day if 3 rigs operating

Describe the quality of water(s) returned to source(s):
Any camp water returned to original source will be non-contaminated drinking water only, and will be of same quality as it was when it was drawn. Any drilling water returned to original sources will be free of hazardous materials but may contain trace amounts of salt (CaCl2) used in drilling, no muds are used due to permafrost ground conditions. Drilling water will be filtered first using temporary settling ponds to remove drill cuttings and then returned to original source.

**14. WASTE** – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

X Sewage
X Solid Waste
X Hazardous
X Bulky Items/Scrap Metal
☐ Animal Waste
X Waste oil
X Greywater
☐ Sludges
☐ Contaminated soil and/or water

☐ Other (describe): _____

**15. QUANTITY AND QUALITY OF WASTE INVOLVED** – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

| Type of Waste | Composition | Quantity Generated | Treatment Method | Disposal Method |
|---|---|---|---|---|
| Sewage | Blackwater, human waste | 1 $m^3$/day | none | 2 stage incineration |
| Solid waste | Food waste, daily garbage, etc. | < 1 tonne | none | 2 stage incineration |
| Hazardous / waste oil | Waste oil from vehicles, rigs, etc. | < 500 L | none | 2 stage incineration |
| Bulky Items /Scrap Metal | Empty drums | Maximum 1500 | Cleaned, crushed | Backhauled for disposal or flown out to an approved facility |
| Unused fuels | Jet, diesel, gasoline, etc. | Estimate ~100 drums | None | Backhauled and sold to Eureka or the military or flown to local communities for redistribution |
| Greywater | Shower water, dishwashing water, etc. | 10 $m^3$/day | Sand sump if possible | 2 stage incineration |

**16. OTHER AUTHORIZATIONS** – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following:

Authorization: Quarry Permit

Administering Agency: AANDC

Project Activity: repair surface of an existing historic airstrip, level area for camp placement

Date (expected date) of issuance: Spring 2013 Date of expiry: 2 years from issuance

Authorization: Heritage Permits (archaeological and paleontological)

Administering Agency: Department of Culture, Language, Elders, and Youth (CLEY)

Project Activity: Conduct site impact assessments/mitigate disturbance and map sites

Date (expected date) of issuance: Summer 2013 Date of expiry: 2 years from issuance

**17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** - Describe direct, indirect, and cumulative impacts related to water and waste.

Refer to attached appendix, 'Potential project impacts and proposed mitigation measures'

**18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER**

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

To the best of Canada Coal Inc.'s knowledge, no other water users are known within the project area.

**19. INUIT WATER RIGHTS**

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

No substantial changes are anticipated to the quality, quantity, or flow of waters through IOL.

**20. CONSULTATION** – Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

Please refer to community consultation log, appended.

**21. SECURITY INFORMATION**

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut,* Indian and Northern Affairs Canada, 2002.

**Reclamation cost estimate: Total Estimate = $2,625,000**
-Removal of camp/equipment/scrap items from Ellesmere Island = Maximum $2,000,000
-Incineration of waste/contaminated water/hazardous fuels = Maximum $50,000
-Reclamation of historic airstrip = No cost
-Reclamation of camp surface disturbance = Maximum $50,000
-Contingency = 25% of total = $525,000

**22. FINANCIAL INFORMATION**

Provide a statement of financial responsibility.

If the applicant is a business entity, provide a list of the officers of the company.

If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

See attached appendix.

**23. STUDIES UNDERTAKEN TO DATE** - List and attach copies of studies, reports, research, etc.

- An independent NI 43-101 compliant technical report entitled, 'The Nunavut Coal Project – Ellesmere Island and Axel Heiberg Island, Nunavut, Canada' prepared by Associated Geosciences Ltd. and dated September 30th, 2011.
- A logistical study entitled, 'Ice Conditions in Eureka and approaches Phase 1 – Preliminary Study' prepared by Enfotec Technical Services and dated February 2012.
- A logistical study entitled, 'Ice and Marine Shipping Assessment, Eureka Coal Deposit, Ellesmere Island Nunavut, Phase 3 – Ice and Shipping Study, Final Report' prepared by Enfotec Technical Services and dated July 31st, 2012.
- An updated NI 43-101 compliant technical report, describing the 2012 field exploration program and results, is due to be completed end of November, 2012.

**24. PROPOSED TIME SCHEDULE** – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Canada Coal Inc. is still in the exploration stage and does not yet have plans for construction, operations, closure, and post closure.

Construction
Proposed Start Date: _____ (month/year) Proposed Completion Date: _____ (month/year)

Operation
Proposed Start Date: _____ (month/year) Proposed Completion Date: _____ (month/year)

Closure
Proposed Start Date: _____ (month/year) Proposed Completion Date: _____ (month/year)

Post - Closure
Proposed Start Date: _____ (month/year) Proposed Completion Date: _____ (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Operation
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Post - Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

**25. PROPOSED TERM OF LICENCE**

Number of years (maximum of 25 years): 5 years

Requested Date of Issuance: 04/2013 (month/year) Requested Expiry Date: 04/2018 (month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

**26. ANNUAL REPORTING –** If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

Annual reporting to be submitted according to the standardized form for annual reporting.

**27. CHECKLIST –** The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

☐ Yes X No If no, date expected: January 2013

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

☐ Yes X No If no, date expected January 2013

Completed General Water Licence Application form.

X Yes ☐ No If no, date expected _____

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

☐ Yes X N/A ☐ No If no, date expected _____

English Summary of Application.

X Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

Yes X No If no, date expected November 25th, 2012

Application Fee of $30.00 CDN (Payee Receiver General for Canada).

X Yes ☐ No If no, date expected _____

Water Use Fee Deposit of $30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

X Yes ☐ No If no, date expected _____

**28. SIGNATURE**

| Braam Jonker | President & CEO | | |
|---|---|---|---|
| **Name (Print)** | **Title (Print)** | **Signature** | **Date** |