



Application for Water Licence Renewal

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Month/Day/Year

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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 7	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)		
(4)		
(5)		
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APPLICATION FOR WATER LICENCE RENEWAL

Your application may be classified as a **renewal** only if all operations remain the same as previously licensed and only the term of the licence requires change. If your application contemplates:

- a change to the volume of water authorized for use;
- a new activity related to water use or waste disposal;
- a new component related to water use or waste disposal;
- a change in predicted environmental impacts(s); and/or
- a change to any term or condition of the original licence

your application is **NOT** classified as a renewal but rather an amendment and will require submission of an Application for Water Licence Amendment. Licensees applying for combined renewal / amendment are also referred to the Application for Water Licence Amendment.

The applicant is referred to the NWB's Guide 7: *Licensee Requirements Following the Issuance of a Water Licence* for more information about this application form.

EXISTING LICENCE NO: 2BE – IZO0712

1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB. **A renewal will only be issued in the name of the current licensee in the absence of assignment of the licence.**

If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: MMG RESOURCES INC. (MINERALS AND METALS GROUP)

Address: 26TH FLOOR – 1177 WEST HASTINGS ST.
VANCOUVER, BC, V6E 2K3

Phone: 778 373 5601

Fax: 778 373 5598

e-mail: TED.MURARO@MMG.COM

2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.

Name: [THEODORE J. MURARO](#)

Address: [AS ABOVE](#)

Phone: [778 373 5589](#)

Fax: [778 373 5598](#)

e-mail: TED.MURARO@MMG.COM

(Attach authorization letter.)

3. NAME OF PROJECT

Is the name of the project the same as that considered in the existing water licence?

☒ Yes ☐ No

Indicate the name of the project including the name of the location: [IZOK](#)

4. LOCATION OF UNDERTAKING

Is the location of the undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

Project Extents

NW: Latitude: ([68° 00' 00" N](#))

Longitude: ([111° 30' 00" W](#))

NE: Latitude: ([68° 00' 00" N](#))

Longitude: ([109° 30' 00" W](#))

SE: Latitude: ([66° 45' 00" N](#))

Longitude: ([109° 30' 00" W](#))

SW: Latitude: ([66° 45' 00" N](#))

Longitude: ([111° 30' 00" W](#))

Camp Location(s)

[HAM LAKE CAMP](#) Latitude: ([65° 43' 22" N](#)) Longitude: ([112° 49' 16" W](#))

5. MAP

Are the locations of the main components of the undertaking the same as those considered in the existing licence?

☒ Yes ☐ No

Attach a topographical map, indicating the main components of the undertaking. – [SEE ATTACHED MAPS](#)

NTS Map Sheet No.: [86H-10](#) Map Name: [POINT LAKE](#) Map Scale: [1:50,000](#)

6. NATURE OF INTEREST IN THE LAND

Is the nature of the interest in the land the same as that considered in the existing water licence?

☒ Yes ☐ No

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: **OCTOBER 2001** Date of expiry: **SEPTEMBER 2021**
- ☒ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: **2008/2009/2010** Date of expiry: **2018/2019/2020**
SEE ATTACHED TABLE SHOWING MINERAL LEASES AND ASSOCIATED DATES

Surface

- ☒ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: **26 MARCH 2007** Date of expiry: **26 MARCH, 2013**
- ☒ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: _____ Date of expiry: **15 FEBRUARY, 2013**
- ☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____
- ☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____
- ☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____
- ☐ Other _____
Date (expected date) of issuance: _____ Date of expiry: _____

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB.

Name of entity(s) holding authorizations: **MMG RESOURCES INC.**

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Is the undertaking located in the same land use planning area as that considered in the existing licence?

☒ Yes ☐ No

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

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> North Baffin | <input type="checkbox"/> Keewatin |
| <input type="checkbox"/> South Baffin | <input type="checkbox"/> Sanikiluaq |
| <input type="checkbox"/> Akunnig | <input checked="" type="checkbox"/> West Kitikmeot |

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

☐ Yes ☒ No

If Yes, indicate date issued and attach copy. _____

Does the proposed renewal change the original NPC conformity determination or the need to obtain one?

☐ Yes ☒ No

If Yes, indicate date issued (or expected) and attach a 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

Was a screening determination required from NIRB prior to the issuance of the existing water licence?

☒ Yes ☐ No

If Yes, indicate date issued and attach copy.

Does the proposed renewal change the original NIRB screening determination or the need to obtain one?

☐ Yes ☒ No

If Yes, indicate date issued (or expected) and attach a copy. [SEE ATTACHED SCREENING DECISION](#)

If No, provide written confirmation from NIRB confirming that a screening determination is not required.

9. DESCRIPTION OF UNDERTAKING

Is the description of the undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

List and attach plans and drawings or project proposal. – [SEE ATTACHED INFORMATION SUPPLEMENT](#)

10. OPTIONS

Are the alternative methods and locations that were considered to carry out the project the same as those considered in the existing water licence?

☒ Yes ☐ No

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

11. CLASSIFICATION OF PRIMARY UNDERTAKING

Is the primary undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

Indicate the primary classification of undertaking by checking one of the following boxes.

- | | |
|--|--|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural |
| <input checked="" type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) | |
| <input type="checkbox"/> Conservation | |
| <input type="checkbox"/> Municipal (includes camps/lodges) | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Power | <input type="checkbox"/> Miscellaneous (describe below): |
- _____

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

12. WATER USE

Is the type(s) of water use(s) the same as that considered in the existing water licence?

☒ Yes ☐ No

Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

- | | |
|--|---|
| <input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes | |
| <input checked="" type="checkbox"/> To obtain water for industrial purposes | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To cross a watercourse | <input type="checkbox"/> To modify the bed or bank of a watercourse |
| <input type="checkbox"/> To alter the flow of, or store water | <input type="checkbox"/> Flood control |
| <input type="checkbox"/> Other: _____ | |

13. QUANTITY OF WATER INVOLVED

Is the source of water the same as that considered in the existing licence?

☒ Yes ☐ No

Name of water source(s):

The domestic source for Ham Lake camp is Ham Lake itself, for the majority of drilling and industrial use associated with drilling on the Izok resource, Izok Lake will supply the water. Sources for drilling may vary depending on drill target location, and generally the closest adequate source available is used. Ham Lake will also supply that small amount of water associated with the cutting of drill core for sampling. At the Hood claim group, small lakes adjacent to the areas of interest will be used as water sources. A map showing areas of interest for mineral exploration is provided.

Is the quality of the water source and its available capacity the same as that considered in the existing licence?

☒ Yes ☐ No

Describe the quality of the water source(s) and the available capacity(s): Ham Lake is the principal source for the Ham Lake camp, usage is minimal in comparison to the volume of water in the system. Capacities and water quality of sources for drilling will vary, but Izok Lake is also a sizeable system.

Is the overall estimated quantity of water to be used the same as that considered in the existing licence?

☒ Yes ☐ No

Provide the overall estimated quantity of water to be used: 100 m³/day

Are the quantity(s) of water to be used from each source the same as those considered in the existing licence?

☒ Yes ☐ No

Provide the estimated quantity(s) of water to be used from each source: 5m³ per day from Ham Lake for domestic use. Sources for drilling will be target dependent. Usage volume for drilling will vary depending on several factors such as number of holes, depth of hole, and the presence of faults or fractures in the local geology. On average a drill will complete a 300m hole in about 7 days of drilling, and require 150m³ of water during this period, of which only about 40m³ is actually 'consumed' during this 7 day period in the cooling of the drill bit.

Are the quantity(s) of water to be used for each purpose the same as those considered in the existing licence?

☒ Yes ☐ No

Provide the estimated quantities to be used for each purpose (camp, drilling, etc.):

Camp (domestic use): 5m³/day X 180 days = 900m³

Drilling (industrial use): 30m³/day/drill X 3 drills X 150 days = 13,500m³

Are the method(s) of extraction the same as those considered in the existing licence?

☒ Yes ☐ No

Describe the method(s) of extraction: Water for the camp is drawn from Ham Lake with an electric submersible pump with a screened intake. Water for drilling is drawn from available local sources with either diesel powered piston style or "pedder" pumps or electric pumps, set back from the shoreline 30m with an extended screened intake hose.

Are the quantity(s) of water returned to source(s) the same as those considered in the existing licence?

☒ Yes ☐ No

Estimated quantity(s) of water returned to source(s):

It is estimated that about 25% of water involved in drilling is actually "lost" or "consumed" at the bit face, about 6 m³/day/drill. The majority of the water returns to surface in a closed system and passes through settling tanks before being pumped again to the bit face. In domestic use this percentage is much greater. The volume therefore that eventually returns to the environment of the 100m³ is around 80m³.

Are the quality(s) of water(s) returned to source(s) the same as those considered in the existing licence?

☒ Yes ☐ No

Describe the quality(s) of water(s) returned to source(s): Excess water is returned to the environment after passing through the settling tanks and is constantly visually inspected. Excess water exiting the system is never is returned directly to the source water body from which it has been drawn, but rather is directed into a natural depression and allowed to percolate into topsoil, eventually returning to ground water after further natural filtration has taken place.

14. WASTE

Are the type(s) of waste(s) to be generated and/ or deposited the same as those considered in the existing licence?

☒ Yes ☐ No

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

☒ Sewage
☒ Solid Waste
☒ Hazardous
☒ Bulky Items/Scrap Metal
☐ Animal Waste
☐ Other (describe): _____

☒ Waste oil
☒ Greywater
☒ Sludges
☐ Contaminated soil and/or water

15. QUANTITY AND QUALITY OF WASTE INVOLVED

Are the quantity(s) of the types of wastes involved the same as those considered in the existing licence?

☒ Yes ☐ No

Are the composition(s) of the types of wastes involved the same as those considered in the existing licence?

☒ Yes ☐ No

Are the method(s) of treatment for the types of waste involved the same as those considered in the existing licence?

☒ Yes ☐ No

Are the method(s) of disposal for the types of waste involved the same as those considered in the existing licence?

☒ Yes ☐ No

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	Human waste	0.25m ³ /day	Incinerated onsite	Remnant ash is transported to YK for disposal with KBL Environmental
GREYWATER	Kitchen and shower/washing facility effluent	3.0m ³ /day	Flows through settling tanks and a grease trap	enters a natural sump for further filtration by percolation
SLUDGE	Fine rock dust produced by drill bit	0.5m ³ /day	Flows through settling tanks with flocculent	Enters a natural sump for further filtration by percolation
WASTE OIL	Used engine oil from equipment	0.002m ³ /day	Collected and sealed in empty 45gal. drums for	Transported to Yellowknife where proper disposal is

			removal from site	carried out by KBL at an Edmonton facility
BULK SCRAP	Scrap metal from failed equipment and remnants from incinerator	0.03m ³ /day	Collected and sealed in empty 45gal. drums for removal from site	Transported to Yellowknife where proper disposal is carried out by KBL
HAZARDOUS	Used batteries of various sizes from 1.5V to 24V	0.0005m ³ /day	Collected and sealed in appropriate containers for removal from site	Transported to Yellowknife where proper disposal is carried out by KBL at an Edmonton facility

16. OTHER AUTHORIZATIONS

In addition to the sub-surface and surface land use authorizations provided in Block 6, are the same authorizations required as considered in the existing licence?

☒ Yes ☐ No

For each provide the following:

Authorization: SEE TABLE PROVIDED IN INFORMATION SUPPLEMENT

Administering Agency: _____

Project Activity: _____

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

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES

Are predicted environmental impacts of the undertaking and proposed mitigation measures the same as those considered in the existing water licence?

☒ Yes ☐ No

Describe direct, indirect, and cumulative impacts related to water and waste.

SEE ATTACHED SUPPLEMENTARY INFORMATION PACKAGE FOR POSSIBLE IMPACTS AND MITIGATION

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS

Are the effects of the undertaking on any known persons or property including those that hold licences for water use in precedence 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, the same as those considered in the existing water licence?

☒ Yes ☐ No

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.

THE UNDERTAKING SHOULD HAVE NO IMPACT ON LOCAL WATER USAGE

19. INUIT WATER RIGHTS

Are the effects of the undertaking on the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL) the same as those considered in the existing water licence?

☒ Yes ☐ No

Advise the Board of any substantial effect 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).

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. Consultation was held in Cambridge Bay and Kugluktuk with local groups at the time of original license application. The scope of the exploration work to continue is unchanged. Consultation with relation to Development planning and more advanced levels of permitting associated is ongoing, and in 2012 several visits were made by MMGs development team to West Kitikmeot communities as well as principal communities in the Eastern Arctic.

21. SECURITY INFORMATION

Is the financial security assessment the same as that considered in the existing water licence?

☒ Yes ☐ No

Is the estimate of the total financial security for final reclamation the same as that considered in the existing water licence?

☒ Yes ☐ No

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.

22. FINANCIAL INFORMATION

Is the statement of financial security the same as that considered in the existing water licence?

☒ Yes ☐ No

Provide an updated statement of financial security.

If the applicant is a business entity please answer the questions below:

Is the list of the officers of the company the same as those considered in the existing water licence?

☒ Yes ☐ No

Provide a list of the officers of the company.

[SEE LIST PROVIDED IN THE INFORMATION SUPPLEMENT ASSOCIATED WITH THIS APPLICATION.](#)

Is the Certificate of Incorporation or evidence of registration of the company name the same?

☒ Yes ☐ No

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

[SEE ATTACHED INFORMATION SUPPLEMENT](#)

23. PROPOSED TIME SCHEDULE

Is the time schedule for all phases of development (construction, operations, closure and post closure) the same as that considered in the existing licence?

☒ Yes ☐ No

Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction

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

Operation [ANNUALLY BETWEEN THE FOLLOWING DATES.....](#)

Proposed Start Date: [5 MARCH](#) Proposed Completion Date: [5 OCTOBER](#)
(month/year) (month/year)

Closure

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

Post - Closure

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

24. PROPOSED TERM OF LICENCE

On what date does the existing licence expire? 31 DECEMBER 2012

Indicate the proposed term of the renewal (maximum of 25 years): 5 YEARS

Requested date of renewal issuance: DECEMBER 2012
(month/year)

Requested Expiry Date: DECEMBER 2017
(month/year)

(The requested date of renewal 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)

25. ANNUAL REPORTING

Is the annual report template expected to be the same as that considered in the existing licence?

☒ Yes ☐ No

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 of exploration activity associated with the current water use license 2BE-IZO0712 has been provided to the Nunavut Water Board on an annual basis. A copy of the 2011 annual report is included in this application package and the 2012 report will be submitted before years end.

26. CHECKLIST

The following must be included with the application for renewal for the water licensing process to begin.

Completed Application for Water Licence Renewal form.

☒ Yes ☐ No If no, date expected _____

Updated plans, including designs and reports (see Block 23).

☒ Yes ☐ No If no, date expected _____

Updated security assessment (see Block 21).

☒ Yes ☐ No If no, date expected _____

Updated financial statement (see Block 22).

☒ Yes ☐ No If no, date expected _____

Compliance Assessment / Status Report (see Block 23).

☒ Yes ☐ No If no, date expected _____

English Summary of Renewal Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Renewal Application.

☒ Yes ☐ No If no, date expected _____

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

☒ 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.

☒ Yes ☐ No If no, date expected _____

27. SIGNATURE

I, _____ (print name)

certify that the application requires no changes to water use or waste disposal as previously authorized and that the information given on this form is, to the best of my knowledge, correct and complete.

Signature

Date