

Guide to Completing Water License Applications to the Mackenzie Valley Land and Water Board



Mackenzie Valley Land and Water Board
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Regulating the use of land and waters and the deposit of waste, and enabling residents to participate in the management of resources to provide optimum benefit to the residents of the settlement areas and of the Mackenzie Valley and to all Canadians.

October 2003

Introduction

The *Mackenzie Valley Resource Management Act* (MVRMA), in conjunction with the Northwest Territories Waters Act (NWTWA), empowers the Mackenzie Valley Land and Water Board (MVLWB) to regulate the use of water and the deposit of waste by issuing, amending, extending and suspending water licenses in the **unsettled land claims area of the Mackenzie Valley**. Copies of the Acts and associated regulations can be obtained from the MVLWB office in Yellowknife or on the web at www.mvlwb.com.

Water licenses for water use or the deposit of waste in the Sahtu or Gwich'in settlement areas are issued by either the Sahtu Land and Water Board (SLWB) or the Gwich'in Land and Water Board (GLWB). These boards should be contacted directly for license application information at:

SLWB
Box 1
Fort Good Hope, NT X0E 0H0
www.slwb.com
Phone: (867) 598-2413
Fax: (867) 598-2325

GLWB
Box 2018
Inuvik, NT X0E 0T0
www.glwb.com
Phone: (867) 777-7961
Fax: (867) 777-7970

What Activities Require a Water License?

The Northwest Territories Water Regulations (NWTWR) specify 8 types of undertakings which require licenses, and two classes of licenses, based on the potential water use or water disturbance caused by the project, or the amount of waste to be deposited. The types of undertakings are defined in Appendix A and the criteria for the classes of licenses are provided in Appendix B.

The types of activities that do not require a Water License are:

- Domestic user, which is described as a person using water for household requirements, watering of domestic animals and irrigation of a garden adjacent to a dwelling,
- An in-stream user, which is described as a person using water for the purpose of boating, personal fishing and swimming,
- Water used for the purpose of extinguishing a fire,
- Water used in an emergency basis for controlling or preventing a flood,
- Any activity that is described in Column II of Schedule IV to VIII in the NWTWR.

What is Considered a Complete Application?

For all Water License applications, the following is required:

1. **Application Form included in this Guide** or at www.mvlwb.com;
2. **Site plan to scale**, with the location of structures and features, and **Map**, usually at a 1:50,000 scale, showing location of the development.
3. **Application Fee** payable to the Receiver General of Canada; and
4. **Confirmation of Involvement** of affected First Nations and communities in the project area.

For certain Type “A” applications, additional information is required which is outlined in a series of Questionnaires to Accompany Water License Applications which are available at www.mvlwb.com or through the Yellowknife Office. Where the information on the questionnaire serves to satisfy the information requested on the Application Form, a note should be made on the application form indicating this.

In this Guide, the description of the information required for a complete application is meant to reflect all data required for a Type “A” application. Proponents must decide what level of detail is required for smaller projects while realizing that if the MVLWB feels information is lacking, they will request that this information be provided before the application goes forward for review, and this will slow the decision process.

Completing the Water License Application Form

The following numbered statements correspond to specific blocks within the Water License Application form. In all cases, additional pages or documents should be attached to the application form where necessary.

1. Indicate the full name, address, telephone number and facsimile number of the person or registered company (in good standing) applying for the Water License. Please be advised that initials are not acceptable for financial reasons.
2. Indicate the full name, address, telephone number and facsimile number of the company's head office if not the same as in 1.
3. Indicate the location of the undertaking by Latitude and Longitude. A map at a 1:50,000 scale must be provided indicating watercourses and location of any proposed waste deposits.

Proponents are requested to provide GIS data on all major projects involving:

- Mineral exploration
- Oil and gas exploration and development
- Pipelines and gathering systems

- Mining and milling developments
- New access for both all-season and winter roads

Please see Appendix C for details of the GIS data format.

4. Include a complete description of the undertaking with detailed site plans attached.
5. Check the appropriate description of the undertaking that is to take place.
6. Check the appropriate description of the type of water use that is needed.
7. Indicate the volumes of water to be used (litres per second, litres per day or cubic meters per day or year) and the water sources including their available capacity. This will include both quantity to be used and amounts to be returned to source. Include what methods will be used to ensure the quality of the water that will be returned to source.
8. Indicate waste disposal that is required and what disposal methods are to be undertaken. i.e. quantity, quality, treatment and disposal. This will include:
 - Systems for the treatment/disposal of solid wastes, liquid effluent, and gaseous materials expected from the operation, including any measures proposed to minimize the production of wastes.
 - Substances and their amounts that will be released to the environment as a result of the project, method of release, and any associated control technology.
9. List other persons or properties affected by this undertaking. i.e., domestic users, in-stream users, authorized 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. Names, addresses and function must be included.
10. Describe the environmental and resource impacts on:
 - Groundwater and surface water – include changes to flow, quantity and quality;
 - Land, including geologic structure change, soil contamination, compaction/settling/erosion, alteration of the permafrost regime and riparian zone loss;
 - Vegetation, including species composition and abundance, non-native species introduction, or accumulation of toxins/heavy metals; and
 - Fauna (wildlife, fish, fowl) including population abundance and diversity, breeding patterns, health, habitat, behavioral, wildlife corridors, buffer zones.

Describe all proposed environmental management systems and monitoring programs for all significant impacts, and describe all mitigations and/or remediation included in the application.

Archaeological resources that may be impacted must be noted and a plan outlined for avoiding damage to these must be provided. This should include:

- Traditional land use (historic and present harvesting uses including hunting, fishing and medicinal herb gathering)
- Burial sites and other historic sites
- Any pertinent additional heritage resources as defined in the MVRMA

Information for this section may be obtained from the NWT Cultural Places Program at the Prince of Wales Northern Heritage Centre.

11. Provide the full names, addresses and functions of any and all contractors and sub-contractors involved in the project. As well, please indicate the total number of personnel involved in the operation and the total number of person days required to complete the operation (number of people x number of operating days = number of person days).
12. Provide a list of studies that have been undertaken to date and where possible, include a copy of each study.
13. Indicate the proposed start and completion dates and where possible, list any anticipated periods of seasonal shut down.

The applicant must print their name at the end of the form and the application **must be signed** by the representative who has the authority to sign on behalf of the proponent.

All applications must be accompanied by the Application Fee of \$30.00.

Confirmation of Community Involvement

One of the major features of the MVRMA is the inclusion of First Nations in decision-making. To ensure that these groups are aware of projects being proposed for their areas, applicants must make an effort to inform and obtain feedback on the project from the First Nations and communities in the project area. This is done prior to the application being submitted. Please refer to the "*Public Involvement Guidelines for Permit and License Applicants to the Mackenzie Valley Land and Water Board*" for a complete outline of the requirements. These guidelines can be obtained at www.mvlwb.com or from the Yellowknife office of the MVLWB.

What are the Application Submission Requirements?

Water License applications must be distributed by the MVLWB for review and comment. To facilitate this review the MVLWB requires the following number of copies of applications to be submitted:

Type of Document	Size (No. of Pages)	Hard Copy (Paper)	Electronic Copy (CD or Floppy Disk)
Application	Less than 20 pages	5	1
Application	20 pages or over	40	20
Annual Reports	Less than 10 pages	5	1
Annual Reports	10 pages or over	25	20
Technical Reports	Less than 10 Pages	5	1
Technical Reports	10 pages or over	15	15

Please Contact the MVLWB offices for clarification of these requirements.

What are the Time Frames for Application Review and Decision?

The NWTWR do not specify a time frame for application processing, however, the MVLWB anticipates that the review of an application to the point where the preliminary screening is complete, will take less than 60 days for Type “B” applications and less than 90 days for Type “A” application. The quality of the information provided in the application will greatly affect the time necessary to complete the regulatory review. The application should be submitted early enough to allow the minimum processing time and thus preventing any delays in the commencement of a development.

Once submitted, the staff of the MVLWB will review the application for completeness. When the application is deemed complete, a letter stating the file number and acceptance of the application will be sent to the applicant, and the review process begins. If an application is not complete, the MVLWB will return it with a letter stating reasons. The processing of the application and the time frame for processing it does not begin until it is complete.

The next step in processing a Type “A” water use application is to convene a Public Hearing. If no one requests to appear, the Public Hearing may be cancelled, or the Board may chose to hold the Public Hearing to allow any public concerns to be voiced.

With Type “B” Applications, the Panel “MAY” chose to hold a Public Hearing on an application. This will depend on the type of development, and the sensitivity of the area of the development. If a Public Hearing is held it will be under a similar format to a Type “A” Public Hearing.

Applications are also sent to governmental departments and agencies, affected First Nations, and local governments, who review the applications. This review and the Public Hearing form part of the preliminary screening which determines if the proposed development should be licensed. The MVLWB then makes the decision to either issue the

Guide to Completing Water License Applications to the MVLWB

license, refer the application to the MVEIRB for environmental assessment, or reject the application with reasons. The applicant will be informed once a decision has been made by the Board

Are there Ongoing Requirements with a Water License?

A Water License will have a number of conditions that require holders to submit reports to the Board for approval. These must be adhered to for the holder to remain in compliance.

In addition, the following water use fees must be submitted on an annual basis to the Board.

Water Use Fees

Type of Undertaking	Basic Water Use Fee	+	Quantity Based Fee
Agricultural	\$30.00	+	\$0.15 / 1,000 m ³
Industrial, Mining, Milling and Miscellaneous	\$30.00	+ + +	\$1.00/100 m ³ /day for the first 2,000 m ³ /day \$1.50/100 m ³ /day for quantities between 2,000 m ³ /day and 4,000 m ³ /day \$2.00/100 m ³ /day for quantities greater than 4,000 m ³ /day
Power			Class 0 = \$ NIL Class 1 = \$1,500 Class 2 = \$4,000 Class 3 = \$10,000 Class 4 = \$30,000 Class 5 = \$80,000 Class 6 = \$90,000 for the first 100,000 kW of authorized production and \$1,000 for each 1,000 kW of authorized production in excess of 100,000 kW.

**APPENDIX A
CLASSIFICATIONS OF UNDERTAKINGS**

Industrial -	Any industrial undertaking other than mining and milling, including manufacturing processes, hydrostatic testing, fluming, the exploration for, and production and transportation of oil and gas, cooling systems, food processing, tanneries, smelters, sawmills, pulp mills, metal finishing and tailings reprocessing.
Mining and Milling -	Operation of a mine within the meaning of the <i>Canada Mining Regulations</i> or the <i>Territorial Coal Regulations</i> , and any milling related thereto.
Municipal -	Any activity (a) in a municipality, or in a settlement comprising a multiplicity of residential units, that uses only a municipal water and sewage system, including domestic, horticultural, fire protection, commercial or industrial activities, or (b) in a camp or lodge.
Power -	Authorized hydro or geothermal electrical generation of Class 0 - 150 or fewer kilowatts Class 1 - more than 150 kW but less than 5,000 kW Class 2 - more than 5,000 kW but less than 10,000 kW Class 3 - more than 10,000 kW but less than 20,000 kW Class 4 - more than 20,000 kW but less than 50,000 kW Class 5 - more than 50,000 kW but less than 100,000 kW Class 6 - 100,000 or more kW
Agricultural -	Nourishing crops or providing water for livestock
Conservation -	Construction of works for the preservation, protection or improvement of the existing natural environment
Recreation -	A commercial or public recreational development
Miscellaneous -	Any other undertaking

**APPENDIX B
WATER LICENSING CRITERIA**

For Industrial Undertakings

Activity	Water Use and Deposit of Waste Requiring a Class "A" License	Water Use and Deposit of Waste Requiring a Class "B" License
Direct water use in respect of: (a) Oil and gas exploration	None	Use of 100 or more cubic meters per day
(b) Any other industrial undertaking	Use of 300 or more cubic meters per day	Use of 100 or more cubic meters per day and less than 300 cubic meters per day
Watercourse crossings, including pipelines, bridges and roads	None	Construction of a structure across a watercourse 5 or more meters wide at ordinary high water mark at point of construction
Flood Control	None	Construction of a permanent in-stream structure
Diversions	None	All diversions more than 2m wide at ordinary high water mark at point of diversion
Alteration of flow or storage by means of dams or dikes	All other alterations or storage	Off-stream storage of a quantity of water greater than 2,500 m ³ and less than 60,000 m ³
Deposit of waste in conjunction with (a) oil and gas exploration	Deposit of drill waste in a manner other than to a sump	Deposit of drill waste to sump
(b) oil and gas production, processing and refining	All deposits of waste	None
(c) quarrying and gravel washing	None	Deposits of waste in conjunction with quarrying below ordinary high water mark or deposit of waste in conjunction with quarrying above high water mark where there is a direct or indirect deposit of waste to surface water
(d) hydrostatic testing	None	Any deposit of waste associated with cleaning or testing of used storage tanks or pipelines
(e) cooling, or	None	Any deposit of biocides or conditions
(f) other industrial undertakings	None	All

For Mining and Milling Undertakings

Activity	Water Use and Deposit of Waste Requiring a Class "A" License	Water Use and Deposit of Waste Requiring a Class "B" License
Direct water use	Use of water for milling at a rate of 100 or more tonnes of ore per day or use of water for production leaching	Use of less than 100 tonnes of ore per day, use of water for leaching other than production leaching or use of 100 or more cubic meters per day for undertakings other than milling or production leaching.
Watercourse crossings, including pipelines, bridges and roads	None	Construction of a structure across a watercourse 5 or more meters wide at ordinary high water mark at point of construction
Flood Control	None	Construction of a permanent in-stream structure
Diversion	None	All other diversions more than 2m wide at ordinary high water mark at point of diversion
Alteration of flow or storage by means of dams or dikes	All other alterations or storage	Off-stream storage of a quantity of water greater than 2,500 m ³ and less than 60,000 m ³ , or in-stream storage of a quantity of water less than 60,000 m ³
Deposit of waste in conjunction with (a) placer mining, or (b) other mining and milling	None Deposits of waste from milling at a rate of 100 tonnes or more of ore per day	Any deposit of waste in conjunction with mechanized in-stream placer operations or with any operations where chemical additives are used Any direct or indirect deposit of waste to surface waters, or any deposit of waste from milling at a rate of less than 100 tonnes or ore per day

Municipal Undertakings

Activity	Water Use and Deposit of Waste Requiring a Class "A" License	Water Use and Deposit of Waste Requiring a Class "B" License
Direct water use	Use of 2,000 or more cubic meters per day	Use of 50 or more cubic meters and less than 2,000 m ³ per day.
Watercourse crossings, including pipelines, bridges and roads	None	Construction of a structure across a watercourse 5 or more meters wide at ordinary high water mark at point of construction
Flood Control	None	Construction of a permanent in-stream structure
Diversion	None	All other diversions more than 2m wide at ordinary high water mark at point of diversion
Alteration of flow or storage by means of dams or dikes	All other alterations or storage	Off-stream storage of a quantity of water greater than 2,500 m ³ and less than 60,000 m ³ , or in-stream storage of a quantity of water less than 60,000 m ³
Deposit of waste in conjunction with (a) municipalities or settlements (b) camps or lodges	Any deposit of waste by means of a sewage collection or treatment system serving a population of 2,000 or more None	Any deposit of waste by means of sewage collection or treatment system serving a population of between 50 and 2,000 Any deposit of waste by a camp or a lodge with capacity of more than 50 occupants per day or any direct or indirect deposit of waste to surface waters

Power Undertakings

Activity	Water Use and Deposit of Waste Requiring a Class "A" License	Water Use and Deposit of Waste Requiring a Class "B" License
Direct water use	Classes 1 through 6	Class 0
Watercourse crossings, including pipelines, bridges and roads	None	Construction of a structure across a watercourse 5 or more meters wide at ordinary high water mark at point of construction
Watercourse training including channel and bank alterations, culverts, spurs, erosion control, and artificial accretion	None	All other watercourse training
Flood Control	None	Construction of a permanent in-stream structure
Diversion	None	All other diversions more than 2m wide at ordinary high water mark at point of diversion
Alteration of flow or storage by means of dams or dikes	All other alterations or storage	Off-stream storage of a quantity of water greater than 2,500 m ³ and less than 60,000 m ³ , or in-stream storage of a quantity of water less than 60,000 m ³

Agricultural, Conservation, Recreational and Miscellaneous Undertakings

Activity	Water Use and Deposit of Waste Requiring a Class "A" License	Water Use and Deposit of Waste Requiring a Class "B" License
Direct water use	Use of 300 or more cubic meters per day	Use of 100 or more cubic meters per day and less than 300 cubic meters per day.
Watercourse crossings, including pipelines, bridges and roads	None	Construction of a structure across a watercourse 5 or more meters wide at ordinary high water mark at point of construction
Flood Control	None	Construction of a permanent in-stream structure
Diversions	None	All other diversions more than 2m wide at ordinary high water mark at point of diversion
Alteration of flow or storage by means of dams or dikes	All other alterations or storage	Off-stream storage of a quantity of water greater than 2,500 m ³ and less than 60,000 m ³ , or in-stream storage of a quantity of water less than 60,000 m ³
Deposit of waste	None	Any deposit of waste

APPENDIX C
MVLWB GIS DATA FORMAT

Please ensure that all aspects of the project are included in the data submission. Information on the specification for submission of GIS data to the MVLWB is provided below. The specification has been developed in lieu of a currently accepted metadata standard.

1. GIS data must be submitted in a format directly readable by ArcView 3.2. Acceptable ArcView compatible formats are stated below.

Spatial formats: Acceptable formats are Shapefiles, ARC/INFO Coverages, and AutoCAD drawings (.dwg and ASCII .dxf formats). Photocopies, blueprints, scans, faxes, raster representations, PDF files, or any other form of spatial data representation is not acceptable.

Image formats (satellite imagery or aerial photography): Acceptable formats include BMP, BSQ, BIL, BIP, ARC/INFO GRID, JPEG, TIFF, GeoTIFF, TIFF/LZW compressed. Images must be ortho-corrected and georectified with accompanying transformation information in order to georeference with spatial data. The georeferencing information can be provided either in the image header of the image file or in a separate world file.

Tabular formats: Acceptable formats include DBASE IV (.dbf) and ARC/INFO INFO tables. Where attributes are stored in a database separate from the spatial format, all attribute data must be in DBASE IV format. Specify a common key column in both the spatial and the attribute schemas to link database records to spatial features. These should have the same data type, width, and name.

2. All data must be in geographic coordinates and be registered to the horizontal datum NAD83 (North American Datum 1983). If you are requested to submit digital elevation data, it must be registered to the vertical datum CVD28 (Canadian Vertical Datum 1928). This datum defines all vertical measurements based on mean sea level, expressed in metres.
3. All data must be seamless and must not be divided into tiles or other geographic units. Use of geographic coordinates is the standard for seamless databases.
4. Basic metadata documentation must be included with all data sets or the submission will be considered incomplete. The documentation should contain the following items.
 - project name or identification;
 - data set name and type (e.g. spatial, image, or tabular);
 - data set format (e.g. shapefile, coverage);
 - data set feature class (e.g. point, line, polygon);
 - scale of data set compilation (e.g. 1:20,000);
 - positional accuracy of the data set (specified in terms of maximum error);
 - data set resolution (specified in terms of minimum feature size);
 - data set survey year;
 - data set collection methods;
 - agency and person responsible for the data set and contact information;

If you provided distance and area measurements (e.g. length of shorelines, aquatic area, land area) with your application, please include information on the planar (map) projection used to derive the measurements.



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APPLICATION FOR A NEW WATER LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE.

Application/License No:
 (amendment or renewal only)

<p>1. Name and Mailing Address of Applicant</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Telephone: _____</p> <p>Fax: _____</p>	<p>2. Address of Head Office in Canada if Incorporate</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Telephone: _____</p> <p>Fax: _____</p>
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3. Location of Undertaking (describe and attach a map, indicating watercourses and location of any proposed waste deposits).

Latitude _____ Longitude _____

4. Description of Undertaking (describe and attach plans)

5. Type of Undertaking.

- | | |
|-----------------------------|------------------------|
| 1. Industrial _____ | 5. Agriculture _____ |
| 2. Mining and Milling _____ | 6. Conservation _____ |
| 3. Municipal _____ | 7. Recreation _____ |
| 4. Power _____ | 8. Miscellaneous _____ |

6. Water Use

To obtain water	_____	Flood control	_____
To cross a watercourse	_____	To divert water	_____
To modify the bed or bank of a watercourse	_____	To alter the flow of, or store water	_____

Other (describe): _____

7. Quantity of water involved (litres per second, litres per day or cubic meter per year, including both quantity to be used and quantity to be returned to source.

8. Waste deposited (quantity, quality, treatment and disposal)

9. Other persons or properties affected by this Undertaking (give name, mailing address and location. Attach a list if necessary.

10. Predicted environmental impacts of Undertaking and proposed mitigation.

11. Contractors and sub-contractors (names, addresses and functions). Attach a list if necessary.

12. Studies undertaken to date. Attach a list if necessary.

13. Proposed time schedule.

Start date: _____ Completion date: _____

Name (print): _____ Signature: _____

Title (print): _____ Date: _____

Please make all cheques payable to "Receiver General of Canada"

FOR OFFICE USE ONLY

Application Fee Amount: \$ _____ Receipt No: _____

Water Use Deposit Amount: \$ _____ Receipt No: _____