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NUNAVUT WATER BOARD
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NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

Draft

Municipal Supplemental Information Guideline (SIG) for Municipal Undertakings (MU1)

Date of Issuance: December 2009

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1.0 Introduction

This Supplemental Information Guideline (SIG) is for applicants seeking a water licence for water use, waste disposal, works and associated activities for Municipal Development which is an undertaking classified as Municipal in accordance with the *Northwest Territories Water Regulations* (NTWR or Regulations).

Supplemental information is required as part of the water licence application in accordance with section 48(2) of the Nunavut Waters Nunavut Surface Rights Tribunal Act (NWNSRTA or Act) which states:

“An application, except in relation to a cancellation, shall be accompanied by the information and studies concerning the use of waters or the deposit of waste that are required for the Board to evaluate the qualitative and quantitative effects of the use or the deposit on waters.”

Also, in accordance with section 48(3) of the Act, on the filing of an application, the Board may provide guidelines to the applicant respecting the information to be provided by the applicant in respect of any matter that the Board considers relevant, including the following:

- a) the description of the use of waters, deposit of waste or appurtenant undertaking, as the case may be;
- b) the qualitative and quantitative effects of the use of waters or the deposit of waste on the drainage basin where the use is to be undertaken or the deposit is to be made, and the anticipated impact of the use or deposit on other users;
- c) the measures the applicant proposes to take to avoid or mitigate any adverse impact of the use of waters or the deposit of waste;
- d) the measures the applicant proposes to take to compensate persons, including the designated Inuit organization, who are adversely affected by the use of waters or the deposit of waste;
- e) the program the applicant proposes to undertake to monitor the impact of the use of waters or the deposit of waste;
- f) The interests in and rights to lands and waters that the applicant has obtained or seeks to obtain; and

g) the options available for the use of waters or the deposit of waste.

To provide further guidance for these requirements, as well as the requirements of section 6(2) of the Regulations which outlines more specific information requirements for proposed undertakings, the NWB has developed Supplemental Information Guidelines (SIGs or Guidelines).

The SIGs are designed in spreadsheet format to facilitate the development of a concordance table that cross references the requirements of the SIG with the documents that make up the water licence application. The tables in the following eight (8) worksheets include columns for the applicant to enter information regarding the applicability of the requirement to the proposed undertaking; the title, author, and date of the document where information to address the requirement can be found; the electronic file name of the document; as well as the section of the document where the information can be found. Specific information about the proposed undertaking should not be inserted into these spreadsheets.

The applicant must complete the yellow sections of the SIG and submit the completed SIG along with the documents that address the requirements of the SIG to the NWB.

Further to this SIG, the applicant is referred to the NWB's *Guide 4 - Completing and Submitting a Water Licence Application for a New Licence*. This Guide provides more details regarding completion of the NWB's minimum information requirements, information required to complete plans including designs and reports, executive summaries and translations, as well as how, when and who to contact when submitting a water licence application.

Following submission of a water licence application, the NWB will determine whether the application is complete. If the NWB determines that an application is materially incomplete, meaning that items included in Section 2: Minimum Application Requirements are missing, the applicant will be informed by the NWB that their application has been rejected. In other cases, NWB staff will correspond with the applicant to resolve deficiencies before proceeding.

The NWB cannot issue, amend, or renew a licence where there is an applicable, approved land use plan until the NPC's requirements under the NLCA have been addressed regarding land use planning (Article 11). In addition, the NWB cannot issue, amend, or renew a licence where the appurtenant undertaking requires screening by NIRB in accordance with Part 4 of Article 12 of the NLCA until NIRB has completed its screening. Furthermore, notwithstanding sections 13.5.5 or 12.10.2 of the NLCA, where the appurtenant undertaking requires a review under Part 5 or Part 6 of Article 12 of the NLCA, the Board may not issue, amend, or renew a licence until NIRB has issued a project certificate. For this reason, the applicant must provide the NWB with written confirmation that both NPC's and NIRB's requirements under the NLCA have been addressed.

Following completion of development impact assessment in accordance with Article 12 of the NLCA, the NWB may issue additional Project Specific Information Requirements (PSIR) to the applicant.

The applicant is referred to Appendix A of these Guidelines for a list of additional documents, guidelines, legislation and standards that may be of use to the applicant in preparing the information to address this SIG.

Submission of the information required by this SIG does not relieve the applicant from confirming and following up on other information requirements which may be required during the regulatory process.

2.0 Minimum Application Requirements (Application Checklist)

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment
Minimum Application Requirements	1	General Water Licence Application Form (see the NWB's <i>Guide 4: Completing and Submitting a Water Licence Application for a New Licence</i>) or Application for Water Licence Amendment Form, if appropriate (see NWB's <i>Guide 7: Licensee Requirements Following the Issuance of a Water Licence</i>).						
	2	Information required to satisfy the requirements of the SIG including plans, reports and designs.						
	3	Executive summary in english.						
	4	Translated executive summary in appropriate language and dialect.						
	5	Application fee.						
	6	Water use fee.	Not applicable to municipal undertakings					
	7	A table indicating concordance of the application and supporting documents to the Guidelines. These generic Guidelines are provided in excel as a tool for applicants to provide the necessary concordance table.						

Qualifications:

- 1 Applications that do not include all of the items listed above will be returned to the applicant as incomplete with a request for the deficient information.
- 2 If more than one licensable activity or facility is proposed that requires a water licence (eg. multiple water sources, waste deposits, structures, crossings, etc.) the required information must be provided for each activity of facility.
- 3 Information between all documents that make up the application package must be consistent and must be accurately cross referenced.
- 4 The application must distinguish between recommendations or options and actual commitments to chosen alternatives.
- 5 For additional guidance regarding the submission of electronic documentation, see the NWB's *Guide 6: Electronic Documentation: Submissions and Registry*.
- 6 The applicant, where practical, may combine components of the information requested in the SIG into more concise plans to provide clarity and eliminate duplication. If this practice is considered, then the applicant must clearly outline, through proper referencing and clearly detailed statements, how the NWB should consider the documents that have combined elements of information. Information management is the responsibility of the applicant.
- 7 The applicant must submit a concise executive summary of the application package. In addition, the Applicant shall submit an executive summary for each separate supporting document, report or study. All executive summaries shall be provided in English, Inuktitut and/or Inuinnaqtun (where applicable).

The applicant must complete the yellow columns of the worksheet(s). Blue columns are for NWB use only.

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Applicant	1	Provide the full name of the applicant and contact person including contact information (position, phone number, address, fax number and email address).							
Applicant Representative	2	Provide the name and contact information of any party submitting the application on behalf of the applicant (including position, phone number, address, fax number and email address).							
	3	Provide a signed letter authorizing a party to be the applicant's representative in the licensing process.							
Project Name	4	Provide the name of the community and indicate the community's status as either village, town, city, hamlet, or settlement corporation.							
	5	Indicate whether the project is for a camp or lodge and provide the name of the camp or lodge.							
	6	Provide the current population of the community or the number of people that the camp or lodge can accommodate.							
	7	Provide the estimated population growth rate of the community over the next five (5) years.							
Location of Undertaking	8	Provide coordinates of the project extents taking into account the Local Project Area (LPA) and the Regional Project Area (RPA), where applicable.							
	a	Provide location by Latitude and Longitude.							
	b	Provide location by UTM coordinates, if available.							
Map	9	Provide a map at a 1:50,000 scale based on the National Topographic series indicating the location of the undertaking, watercourses and the location of waste deposits. Additional maps at various scales may be provided if those maps will provide additional information or clarification. All maps must indicate the scale, map sheet number, and the location of north.							
Nature of Interest in the Land	10	Provide the nature of the interest in the land associated with the proposed undertaking, including:							
	a	Sub-surface leases from Nunavut Tunngavik Incorporated (NTI) and/or Indian and Northern Affairs Canada (INAC) as well as surface authorizations from INAC for crown land use, a Designated Inuit Organization (DIO) for Inuit Owned Land (IOL) use, or the Government of Nunavut for Commissioner's land use.							
	b	The date or expected date of issuance of any authorization and the date of expiry.							
	11	Indicate whether the applicant is the name of the entity holding the authorization for the interest in the land and if not, provide the name of the entity holding the authorization.							
NPC Determination	12	Provide written confirmation from the NPC confirming that NPC's requirements under the NLCA regarding land use plan conformity (Article 11 of the NLCA) have been addressed.							
NIRB Determination	13	Provide written confirmation from the NIRB confirming that NIRB's requirements under the NLCA regarding development impact assessment (Article 12 of the NLCA) have been or are in the process of being addressed. Documentation may include:							
	a	Written confirmation from NIRB that the project proposal does not require screening;							
	b	NIRB's screening determination;							
	c	If a review is required, NIRB's recommendation to the Minister regarding the type of review;							

3.0 General Water Licence Application

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	d	If a review is required, the Minister's written decision regarding the review of the development proposal;							
	e	If a review is required, NIRB's project certificate;							
	14	Provide a list of activities requested for exception in accordance with NLCA s. 12.10.2;							
	15	Type B water application for any activities to be considered for interim, short term approval in accordance with NLCA s. 13.5.5.							
Description of Undertaking	16	See section 4 of this SIG for specific requirements.							
Other Applicable Supplemental Information Guidelines	17	Indicate whether any other Supplemental Information Guidelines apply to the undertaking including the following:							
	a	Hydrostatic testing							
	b	Tannery							
	c	Remote camp							
	d	Landfarm and on-site storage of hydrocarbon contaminated soil							
	e	Onshore oil and gas exploration drilling							
	f	Exploration remote camp							
	g	Advanced exploration							
	h	Mine development							
	i	Municipal							
	j	Bridge construction/ in-stream use/ dredging							
	k	Tourist camp							
	l	Power							
Options	18	Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.							
Water Use	19	See section 6 of this SIG for specific requirements							
Water Use: Quality and Quantity	20	See section 6 of this SIG for specific requirements							
Waste Disposal	21	See section 7 of this SIG for specific requirements							
Waste Disposal: Quality and Quantity	22	See section 7 of this SIG for specific requirements							
Other Authorizations	23	Provide a list of any authorizations required in relation to the project in addition to the water licence. For each additional authorization required for the project, provide the name of the authorization, the administering agency, the project activity requiring the authorization, the date or expected date of issuance and the date of expiry. Provide a description of how those authorizations may affect the NWB's water licensing process.							
	24	Provide formal applications to the Navigable Waters Protection Program (NWPP) for any works.							
	25	Provide a timetable for filing the appropriate plans and procedures required by government parties.							
	26	Indicate whether the community holds any existing water licences. If applicable, provide the licence number and expiry date of any existing water licences.							
Predicted Environmental Effect and Proposed mitigation measures	27	Identify the potential effect of water use and waste disposal on the following components:							
	a	Groundwater and Surface Water including: changes in flow (including seasonal rate of flow) quantity quality							
	b	Land including: geologic structure change soil contamination							

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
		compaction, settling and erosion							
		alteration of the permafrost regime							
		riparian zone loss							
	c	Vegetation including:							
		species composition and abundance							
		non-native species introduction							
		accumulation of toxins and heavy metals (in relation to remediation objectives for closure)							
	d	Aquatic Ecosystems including:							
		fish							
		benthic invertebrates							
		plankton							
	28	Identify effects separately for each project phase.							
	29	Provide a description of the methods used to predict effects.							
	30	Provide a cumulative effects assessment of the project's water use and waste disposal activities in combination with other past, present and reasonably foreseeable projects in the same drainage basin.							
	31	Identify effects that may arise from accidental events or malfunctions.							
Existing and Other User Water Rights	32	Provide a description of all proposed mitigation, management and monitoring programs to mitigate adverse impacts.							
	33	Provide a description of the measures to be taken to mitigate impacts on historical resources or traditional uses of water and procedures to be followed should artifacts be discovered.							
	34	See sections 6 and 7 of this SIG for additional information requirements							
	35	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.							
	36	Provide a description of any potential effects of the project on the persons or properties identified in item 35 of this section.							
	37	Provide a description of the measures incorporated into the project design to mitigate effects of the project on the persons or properties identified in item 35 of this section.							
	38	Indicate whether compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.							
	39	Provide a description of any potential effects of the project on the quality, quantity, or flow of waters flowing through Inuit Owned Land (IOL).							
Inuit Water Rights	40	Provide a description of the measures incorporated into the project design to mitigate effects of the project on the quality, quantity, or flow of waters flowing through IOL.							
	41	Indicate whether an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO); or if the parties have been unable to reach an agreement on compensation							

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Consultation	42	Provide a summary of any consultation meetings including when the meetings were held, where and with whom.							
	43	Provide a summary of the results of consultation meetings including a list of concerns expressed and measures proposed to address concerns.							
Security	44	Security information is not required in an application for a municipal undertaking							
Abandonment and Restoration	45	Provide plans for the abandonment and restoration of facilities.							
	46	Provide a description of all remediation plans and remediation objectives.							
	47	Provide a list and description of any existing abandoned or restored site facilities.							
Financial Information	48	Indicate the status of the project within the Government of Nunavut Community Government Services (GN-CGS) capital planning process.							
Studies and Designs	49	Provide a list of studies, reports and plans relevant to the application that have been undertaken to date including:							
	a	Design rational, design requirements, design criteria, design parameters, design standards/analysis/method;							
	b	Design assumptions and the limitations associated with such design assumptions;							
	c	The inclusion of clear, definable engineering qualifiers with all design drawings and reports;							
	d	Site specific data and analysis to support the design and management decisions made;							
	e	Materials that appropriately delineate the particulars of a design or plan.							
	50	Provide construction methods and procedures regarding how infrastructure will be put in place on-site.							
Proposed Time Schedule	51	Provide a timetable for submission of preliminary and final-for-construction engineered designs (note: for construction designs are required for NWB approvals).							
	52	Provide the proposed start and completion dates for each phase of development (construction, operation, closure and post closure) and any anticipated periods of seasonal shut down.							
Proposed Term of Licence	53	Provide a proposed term of licence including the expected date of licence issuance and the expected date of licence expiry.							
Annual Reporting	54	Provide detailed information regarding the content of annual reports and a proposed outline or template of the annual report. The annual report should include the following:							
	a	Water related monitoring results;							
	b	Comparison of water quality and quantity monitoring data with the water quality and quantity predictions presented in the application;							
	c	A description of how any conditions in the NIRB screening decision related to the NWB mandate have been implemented;							
	d	Project changes under adaptive management;							
Renewals and Amendments	e	Any actions taken in response to direction provided by the Inspector.							
	55	If the application is for a renewal or amendment of an existing licence provide the water licence number and the date of water licence expiry.							

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
	56	If the application is for a renewal or amendment of an existing licence, provide a compliance assessment/status report. This report must document the status of compliance for each condition of the existing water licence taking into consideration inspector dialogues and inspector directions, responses to inspector dialogues and inspector directions, spills that may have occurred, and any reporting requirements. The report must indicate when facilities were inspected by regulatory agencies and list any spills that may have occurred including a description, location shown on a map, and the action taken to address the affected area.							

4.0 Project Description

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Description of Undertaking	1	Provide a complete description of the undertaking with detailed site plan(s) of all infrastructure for the Local Project Area (LPA) and/or the Regional Project Area (RPA), where applicable, and differentiate temporary components from permanent components. Consider the following in providing the description:							
	a	Raw water intake;							
	b	Water storage and treatment facilities including distribution systems;							
	c	Existing water bodies/courses and any changes to these water bodies/courses that may have or may occur as a result of water use or waste disposal facilities.							
	d	Location of receiving water bodies and drainage pathways;							
	e	Transportation access routes and details of water course crossings;							
	f	Locations of environmental monitoring sites;							
	g	Traditional water use and land use areas that may be impacted by the project;							
	h	Wastewater collection, disposal, treatment and discharge facilities (lagoon, wetland, honey bag pit, mechanical system, combination, other);							
	i	Solid waste disposal areas and drainage patterns;							
	j	Incinerators;							
	k	Landfarm;							
	l	Quarries;							
	m	Hazardous waste disposal area;							
	n	Waste discharge distribution lines;							
	o	Fuel and chemical storage;							
	p	Abandoned and/or restored facilities;							
	q	Existing on site infrastructure;							
	r	Others:							

5.0 Baseline Information

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Environmental Setting	1	Provide a description of the regional and local setting.							
	2	Provide a description of the regional and local surface water regime and drainage area and outline the drainage basin on an attached map.							
	3	Provide a description of receiving lakes (lake id, hydrology, water quality).							
	4	Provide a description of the groundwater regime.							
	5	Provide a description of the usual break-up and freeze-up periods.							
	6	Provide a description of the site conditions, including the location, topography, geologic and hydrologic characteristics, climate conditions and predicted future climate trends, seismicity, permafrost conditions and soil and rock conditions (if applicable, provide test pit/ drill hole logs and laboratory test results).							
	7	Provide a description of streambed material, streambank material, and streambank vegetation.							
	8	Provide a description of the ground condition for design and engineering of earthwork infrastructure, including:							
	a	Landfills							
	b	Landfills							
	c	Roads							
	d	Quarries or borrow pits							
	e	Hazardous waste facilities							
	f	Wastewater treatment facilities							
	9	Provide a description of the historical uses of the waters affected by the project.							
	10	Provide a description of any traditional uses of water in the project area.							
	11	Indicate whether fish, shellfish, or other wildlife are present and harvested in or near discharge areas and, if applicable, indicate the species harvested and the level of harvest.							
	12	Provide the following streamflow data in cubic metres per second for each watercourse included in the application:							
	a	mean annual flow;							
	b	mean summer flow;							
	c	minimum summer flow;							
	d	minimum annual flow;							
	e	mean annual flood;							
	f	maximum summer flood;							
	g	mean summer flood;							
	13	Provide bathymetric information for each water body in the application.							
	14	Provide results of any assessment of the permeability of any faults and taliks beneath water bodies.							
	15	Provide baseline data and an evaluation of baseline data describing surface and groundwater quality in the project area (physical, chemical, and biological characteristics).							
	16	Provide a description of the results of any consultation with Elders regarding the collection of baseline data.							
Fisheries	17	Provide baseline data and an evaluation of baseline data describing fish and fish habitat in the project area.							
	18	Provide a fisheries assessment including:							
	a	Detailed area description (including photographic record);							
	b	Description of fish habitat (including river or lake bottom substrates such as silt, sand, or cobble);							
	c	Presence of sensitive habitats (spawning, migration corridors etc.);							
	d	Description of aquatic and riparian vegetation;							
	e	Fish community and lifestage present;							
	f	Depth and width of watercourse;							
	g	Max/min water flows, currents, tides;							
	h	Turbidity and sediment loads (total suspended solids);							
	i	Sport, commercial, subsistence fishery present.							

5.0 Baseline Information

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Studies	19	Provide a list of baseline studies, reports and plans relevant to the application that have been undertaken to date or are being planned including:							
	a	Geotechnical studies;							
	b	Geochemical studies;							
	c	Water quality studies;							
	d	Hydrological and hydrogeological studies;							
	e	Traditional use studies;							
	f	Aquatic studies;							
	g	Meteorological studies;							

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Water Use	1	Provide a detailed description of all types of water uses including: (See the NWB definition of "use" in the NWB Guide 2: Terminology and Definitions)							
	a	Obtain water for domestic purposes							
	b	Obtain water for industrial purposes							
	c	To cross a water course							
	d	To alter the flow of water, or store water							
	e	Flood control							
	f	To divert a watercourse							
	g	To modify the bed or bank of a watercourse							
	h	Others:							
Water Use: Quality and Quantity Water Intake	2	Provide the name of the primary water source as well as the name of any alternative water source(s).							
	3	Provide a description of the source of water and the location of the water source as shown on a map.							
	4	Indicate the type of water source(s) as lake, river, well, or other type.							
	5	Provide a description of the quality of the water from the source for each season (summer, fall, winter, spring).							
	6	Provide the capacity of the water source.							
	7	Indicate the amount of water taken from each source and provide a description of the method of extraction including specific pumping rates, pumping procedures and potential for draw down.							
	8	Provide the acquisition rate in cubic metres per day and cubic metres per year.							
	9	Provide a description of the water intake method including the intake facility, the operating capacity of the pump used, the details of any screening to exclude fish, and the distance the pump will be placed from the ordinary high water mark of the watercourse.							
	10	Provide a description of the general condition of any existing water intake facility. Rate the condition of the facility as satisfactory or unsatisfactory and explain the rating.							
	11	Indicate whether water is drawn from the source intermittently or continuously and if intermittently indicate during what months it is drawn and for what period it is drawn (days/weeks/months).							
	12	Indicate the amount of water to be returned to the source.							
	13	Provide a description of the methods to ensure water returned to source is of an acceptable quality.							
	14	Provide a description of any hydrostatic testing programs, including water sources, and treatment/disposal requirements.							
	15	Provide a description of any measures to reduce water consumption.							
Water Storage	16	Provide a description of any water storage facilities including the type (reservoir/pond, storage tank), location, design, and the water storage volume in cubic meters.							
	17	If the water storage facility is a reservoir, indicate whether the reservoir is lined, the type of liner and when it was or will be installed.							
	18	Indicate whether a storage reservoir is created in a natural channel. If applicable, provide plan and profile drawings of the reservoir including the size of the drainage basin upstream of the reservoir, topographical plan showing the drainage area boundary, number of hectares flooded, surface area of the reservoir at full capacity, storage capacity, and details of shoreline protection.							
	19	Provide a plan showing representative cross sections of the reservoir.							

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
	20	Provide a description of the general condition of any existing water storage facility and provide an explanation if it is unsatisfactory.							
Water Distribution	21	Provide a description of water distribution systems (ie. piped water, trucked) including the number of people on each system.							
	22	For each phase of development, calculate the total water consumed per day (L/day) by multiplying the estimated number of persons on the system by the estimated average water consumption (Litres/ capita/day). Calculate the total water consumed for each individual distribution system if more than one is used (ie. piped water, trucked water).							
	23	Provide a description of the general condition of any existing water distribution system and provide an explanation if it is unsatisfactory.							
Watercourse Crossings and/or Trainings	24	Provide a description of any watercourse crossings including pipelines, bridges, culverts or roads and its purpose.							
	25	Indicate whether a temporary detour road is required to construct the watercourse crossing. If applicable, provide a schematic drawing that shows the location of the proposed detour road, any watercourse crossings to be constructed to facilitate the detour road, and the type of crossing.							
	26	Provide a plan of any watercourse crossing showing cross section and elevations							
Watercourse Trainings	27	Provide a description of any watercourse trainings including channel and bank alterations, culverts, spurs, erosion control, and artificial accretion, and its purpose.							
Flood Control	28	Provide a description of any flood control structures and its purpose.							
Diversions	29	Provide a description of any diversions including ditches and dikes, and its purpose.							
Alterations in flow	30	Provide a description of any activities or structures that could alter the flow of a watercourse including dams, spillways, berms, cofferdams, and dikes, and its purpose.							
	31	Indicate whether the natural storage capacity or water level of any lake or pond will be altered.							
	32	If the alteration involves a dam, provide a plan showing the length, height, cross section and elevations of the dam and the location and preliminary designs of spillways, canals, sluice pipes, and any other outlet work.							
Identification	33	Indicate whether there are any signs identifying past or present water intake, storage, distribution systems and/or waterwork structures presently in the community.							
Modifications	34	Indicate whether any changes are planned for the water intake, storage, distribution systems and/or waterwork structures. If applicable, see item 36 of this section.							
	35	Indicate whether the community believes changes are needed to the water intake, storage, distribution systems and/or waterwork structures. If applicable, provide a description.							
Proposed Water works	36	For each proposed water work component provide design plans. Design plans shall consider the following:							
	a	Name of the water body(s) affected.							
	b	Site photos, site map, or air photos of the location.							
	c	Description of the existing condition of the site (see section 5)							
	d	Indicate whether the structure will be placed in water on a temporary, seasonal or permanent basis and provide a description of when and how structure will be removed.							
	e	The design flood flow in cubic metres per second and its return period for the type of structure proposed.							
	f	An explanation of the rationale for the selected design flow flood and its return period.							

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
	g	Design drawings in plan and profile, drawn to scale, including all relevant dimensions.							
	h	Details of design parameters including seismic design criteria if applicable.							
	i	In water work timing restriction for fisheries.							
	j	Start and completion dates for construction.							
	k	Construction schedule and sequence taking into account any timing restrictions.							
	l	Construction methods.							
	m	Equipment to be used.							
	n	A description of the source, type, and composition of material used in construction							
	o	The quantity of material to be either placed into or removed from the watercourse.							
	p	Sedimentation and erosion control measures.							
	q	Construction monitoring plans.							
	r	Quality assurance and quality control measures.							
	s	Assessment of impacts to fish and fish habitat (see Section 6 item 46).							
	t	Bank stabilization measures (size range of material).							
	u	Operation and maintenance plans including instrumentation, monitoring and inspection requirements.							
	v	Contingency plans.							
	w	Abandonment and restoration plans.							
	37	Final plans and drawings for construction must be stamped by a Professional Engineer licensed to practice in Nunavut. (See Section 7 of the NWB's Guide 4: Completing and Submitting a Water Licence Application for more information regarding design drawings).							
	38	If geotextile is used or a similar material to prevent the transport of sediment into a watercourse, provide the technical specifications for the proposed material as well as the location, extent and placement method for the material.							
	39	If rip rap is used or a similar material for erosion protection, provide information regarding the minimum and maximum sizes of the material and the gradation between those limits. Indicate the quantity to be used and its source.							
Predicted Environmental Effects and Proposed mitigation measures	40	Provide a description of the effects of water usage on the river or lake from which water will be drawn.							
	41	Provide a description of any expected changes in surface water flow or storage including changes downstream of the project.							
	42	If the cross-section of any watercourse is changed, provide a description of the change and its effect on the flow capacity of the channel.							
	43	If the course of any channel is changed, provide a description of measures to maintain stream bed and bank stability.							
	44	Provide a description of measures of preventing surface water from coming into contact with waste and measures of managing surface water that does come into contact with waste (surface water management plan).							
	45	Provide a description of measures of preventing groundwater from coming into contact with waste and measures of managing groundwater that does come into contact with waste (groundwater management plan).							
Fisheries	46	Provide a description of any potential impacts to fish and/or fish habitat. (Indirect effects may include project effects, water quality, or aquatic organisms. Direct effects may include degradation or alteration of fish habitat). The applicant is advised to consult with DFO regarding fish and fish habitat related issues.							
	a	Potential effects on fish or fish habitat;							
	b	The area in square metres to be impacted;							

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert <u>Title, Author and Date of Document</u> where information is provided	Insert <u>electronic file name of document</u> where information is provided	Insert <u>Section of document</u> where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
	c	Measures to avoid sensitive periods and habitat areas (i.e., spawning beds, migration corridors);							
	d	Measures to avoid physical impacts on habitat;							
	e	Measures to maintain flows and fish passage;							
	f	Measures to avoid sedimentation;							
	g	Measures to avoid spills;							
	h	Detailed habitat no-net-loss plan and site restoration plan;							
	47	Provide a list of studies, reports and plans relevant to the application that have been undertaken to date, or are being planned including:							
	a	Options analysis;							
Studies	b	Water management plan including water balance analysis;							
	c	Construction plan and construction schedule for water works;							
	d	Operation and maintenance plan;							
	e	Implementation schedule for construction of works.							
	f	Abandonment and restoration plans for water works infrastructure;							
	g	Fisheries assessment;							
	h	Monitoring plans (See Section 8).							

7.0 Waste Disposal: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Waste Disposal	1	Provide a detailed description of all types of waste and all forms of waste disposal including: (see the NWB definition of Waste in the NWB <i>Guide 2: Terminology and Definitions</i>)							
	a	Wastewater							
	b	Solid waste							
	c	Sludge							
	d	Hazardous waste							
	e	Contaminated soil and/or water							
Waste Disposal: Quality and Quantity	2	For each type of waste, provide the composition and quantity generated. Also provide the location, rate, timing, frequency and duration of the deposit.							
	3	For each type of waste, provide the proposed methods and processes for collecting, storing, treating and discharging the waste. Indicate the capacity of these facilities.							
	4	Provide a description of any existing or proposed measures to minimize the production of wastes.							
Wastewater including sewage	5	Provide a description of wastewater collection, disposal, treatment, and discharge facilities (honey bag, lagoon, wetland, mechanical, combination, other) including descriptions of the location, drainage, and operation and maintenance of each site.							
	6	Indicate whether any sources of commercial or industrial liquid waste enter the wastewater treatment facility. If applicable, provide a description of sources, types and quantities. The municipality should be aware that any discharge of commercial or industrial waste must be approved by the municipality.							
	7	Indicate the level of wastewater treatment (primary, secondary, tertiary).							
	8	Provide a description of any pre-treatment measures (screening, maceration).							
	9	If applicable, indicate whether the lagoon(s) are anaerobic, aerobic, and/or facultative.							
	10	Indicate the capacity of the wastewater treatment facility.							
	11	Based on current population projections, indicate what year the wastewater treatment facility will meet the needs of the community.							
	12	If applicable, indicate the freeboard and average depth of any lagoon.							
	13	Indicate the retention time of the wastewater while in the treatment facility.							
	14	Indicate the estimated rate of discharge of wastewater (L/sec).							
	15	Indicate the location of the final discharge point (final point of control).							
	16	Indicate whether the discharge is seasonal, continuous, or intermittent. If seasonal, indicate what months discharge occurs and the duration of discharge (days, weeks, months).							
	17	Provide a description of the methods of discharge.							
	18	Indicate whether any sludges are produced and if applicable, sludge management procedures.							
	19	Indicate whether there have been any operating problems with existing wastewater treatment facilities.							
	20	Provide a description of the general condition of any existing wastewater collection system, discharge control system, dams, diversion dykes, or berms and provide an explanation if it is unsatisfactory.							
Solid Waste	21	Provide a description of solid waste collection systems and solid waste disposal facilities including descriptions of the location, drainage, and operation and maintenance of each site.							

7.0 Waste Disposal: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
	22	Indicate whether the solid waste disposal site(s) is fenced and whether the fence is adequate. If applicable, provide an explanation for why the fence is inadequate.							
	23	Indicate the capacity of the solid waste disposal area(s) in cubic metres.							
	24	Indicate the average depth of the solid waste disposal site(s) in metres.							
	25	Based on current population projections, indicate what year the solid waste disposal facility will meet the needs of the community.							
	26	Indicate whether the community burns garbage, and if applicable provide a description of when, where and how this is done.							
	27	Indicate whether the community has separate disposal areas for animal carcasses, waste oil, bulky scrap metal wastes, or hazardous wastes. If applicable, provide a description of the location, structures, drainage, and operation and maintenance of each of these sites.							
	28	Indicate whether any commercial or industrial solid wastes enter solid waste disposal facilities. If applicable provide a description of sources, types and quantities. The municipality should be aware that any discharge of commercial or industrial waste must be approved by the municipality.							
	29	Provide a description of the general condition of any existing solid waste disposal facilities and provide an explanation if it is unsatisfactory.							
Identification	30	Indicate whether there are signs identifying any past or present wastewater disposal sites, solid waste disposal sites, or any other waste disposal sites presently in the community.							
Modifications	31	Indicate whether any changes are planned for the wastewater, solid waste, or any other waste facilities. If applicable, see item 33 of this Section.							
	32	Indicate whether the community believes changes are needed to the sewage, solid waste, or any other waste facilities. If applicable, provide a description.							
Proposed waste facilities	33	For each proposed waste facility provide design plans. The designs shall consider the following:							
	a	Site photos, site map, or air photos of the site.							
	b	Description of the existing condition of the site (see Section 5).							
	c	A description of the types of waste entering the facility.							
	d	Distance of the facility from watercourses and fish bearing waters.							
	e	Existing and proposed drainage modifications.							
	f	Details of retaining structures.							
	g	Level of treatment (primary, secondary or tertiary).							
	h	By products of treatment which may require further treatment, characterization, handling and disposal.							
	i	Capacity and retention time of the facility.							
	j	Identification of final discharge point (last point of control).							
	k	Method and type of discharge (seasonal, annual, continuous).							
	l	Estimated rates for discharge.							
	m	Restrictions on discharge.							
	n	Discharge effluent criteria proposed.							
	o	Receiving water quality objectives.							
	p	Details regarding direction and path of wastewater flow from the area or infrastructure.							
	q	Design drawings in plan and profile, drawn to scale, including all relevant dimensions.							
	r	Details of design parameters including seismic design if applicable.							

7.0 Waste Disposal: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting 'Y' or 'NA'	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
	s	Start and completion dates for construction.							
	t	Construction schedule and sequence taking into account any timing restrictions.							
	u	Construction methods.							
	v	Equipment to be used.							
	w	A description of the source, type, and composition of the material to be used in construction.							
	x	Construction monitoring plans.							
	y	Quality assurance and quality control measures;							
	z	Operation and maintenance plans.							
	aa	Contingency plans.							
	bb	Remediation plans;							
	cc	Abandonment and restoration plans.							
	34	Final plans and drawings for construction must be stamped by a Professional Engineer licensed to practice in Nunavut. (See Section 7 of the NWB's <i>Guide 4: Completing and Submitting a Water Licence Application</i> for more information regarding design drawings).							
Predicted Environmental Effects and Proposed mitigation measures	35	Provide detailed treatment plans for discharges from any waste treatment facility. Waste treatment plans should include estimates of treatment efficiency for each parameter of concern.							
	36	Clearly outline proposed discharge criteria, how the criteria were developed, standards to be applied, and how these criteria will be used to prevent ecological effects in the receiving environment.							
	37	Provide the geochemical characteristics of any quarry or borrow material and the methods used to determine the characteristics.							
Operations and Maintenance	38	Provide an Operations and Maintenance Manual in accordance with the "Guidelines for the Preparation of an Operations and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories, 1996". This Manual must address sewage disposal facilities, solid waste disposal facilities, landfarm facilities, any other waste disposal facilities, sludge management, and water supply facilities.							
Hazardous Materials	39	Provide a description of the type of petroleum products, chemicals and/or hazardous materials to be disposed.							
	40	Provide details regarding the handling and storage of petroleum products, chemicals or other hazardous or potentially hazardous materials.							
Emergency Response and Spill Contingency	41	Provide an Emergency Response and Spill Contingency Plan (ERSCP) that includes mechanisms and processes for addressing potential or actual failure of structures, response equipment and material storage, and programs for providing appropriate training to workers. The plan shall address all licensed facilities including aggregate sources.							
	42	Plan(s) shall address phases of the project including construction and operations.							
	43	Provide an explanation of how the applicant will ensure project contractors meet the applicant's due diligence standards with respect to oil and hazardous material spill prevention, preparedness, response, and restoration.							

7.0 Waste Disposal: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Studies	44	Provide a list of studies, reports and plans relevant to the application that have been undertaken to date or are being planned, including design and management decisions. Studies, reports and plans may include:							
	a	Options analysis;							
	b	Water quality model;							
	c	Geotechnical and geothermal assessment;							
	d	Snow drift assessment;							
	e	Wetland assessment;							
	f	Weather data for purposes of design;							
	g	Wastewater management;							
	h	Solid waste management;							
	i	Contaminated soil and water management;							
	j	Quarry management;							
	k	Hazardous waste management;							
	l	Operation and maintenance plan;							
	m	Quality assurance and quality control;							
	n	Spill contingency and emergency response plans;							
	o	Preliminary abandonment and reclamation plans for existing and proposed facilities;							
	p	Final abandonment and reclamation plans facilities to be closed;							
	q	Remediation plans for waste disposal infrastructure;							
	r	Construction plan and construction schedule for waste disposal infrastructure;							
	s	Implementation schedule for construction of works; and							
	t	Monitoring plans (see Section 8);							

8.0 Monitoring

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment	NIRB Guideline Section No.
Monitoring	1	Provide a Monitoring Plan including a description of the methods, procedures, standards, and schedules proposed. Monitoring may be required for water use; effluent, surface and/or groundwater water quality, quantity, or flow; ground temperature; ground settlement; etc.							
	2	Indicate who is responsible for sampling including that person's position, contact information and level of training.							
	3	Indicate the name and contact information of the certified laboratory performing the analysis of samples.							
	4	Provide an Inspection Plan including a description of the methods, procedures, standards, and schedules proposed. Inspections may be required for engineered facilities related to the management of water and waste as well as spills. The Inspection Plan must consider the life of the project, temporary closure and permanent closure.							
	5	Provide a summary table that details the monitoring plan. The table should include stations numbers, location, parameter(s) and frequency. Provide a map detailing the location of monitoring sites.							

APPENDIX A: ADDITIONAL SOURCE DOCUMENTS TO ASSIST THE APPLICANT

This appendix provides a list of reference documents including legislation, guidelines and standards that may be of use to the applicant in preparing the supplemental information.

Federal Legislation

- *Canadian Environmental Protection Act, [1999, c.33]*
- *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, [SOR/2008-197]*
- *Environmental Emergency Regulations, [SOR/2003-307]*
- *Fisheries Act, [R.S.C. c. F-14]*
- *Metal Mining Effluent Regulations, [SOR/ 2002-2222]*
- *Navigable Waters Protection Act, [R.S. 1985, c. N-22]*
- *Navigable Waters Bridges Regulations, [C.R.C., c. 1231]*
- *Navigable Waters Works Regulations, [C.R.C., c. 1232]*
- *Nunavut Land Claims Agreement*
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act, [2002, c.10]*
- *Northwest Territories Waters Regulations, [SOR/93/303]*
- *Territorial Lands Act, [R.S. 1985, c. T-7]*
- *Territorial Land Use Regulations, [C.R.C., c. 1524]*
- *Territorial Quarrying Operations, [C.R.C., c. 1527]*
- *Transportation of Dangerous Goods Act, [1992, c.34]*
- *Transportation of Dangerous Goods Regulations, [SOR/2001-286]*

Territorial Legislation

- *Environmental Protection Act (Nunavut), [R.S.N.W.T. 1988, c. E-7]*
- *Used Oil and Waste Fuel Management Regulations, [N.W.T. Reg. 064-2003]*
- *Mine Health and Safety Act, [S.N.W.T 1994, c.25]*
- *Mine Health and Safety Regulations, [R-125-95]*
- *Mine Health and Safety Regulations, amendment, Nu. Reg. 016-2003*
- *Safety Act, [R.S.N.W.T. 1988, c. S-1]*
- *Work Site Hazardous Materials Information System Regulations, [R.R.N.W.T. 1990 c. S-2]*
- *Transportation of Dangerous Goods Act, [R.S.N.W.T. 1988, c. 81 (Supp.)]*
- *Transportation of Dangerous Goods Regulations, [1991, N.W.T. Reg. 095-91]*

Guidelines and Policies

- CCME – *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems containing Petroleum and Allied Petroleum Products (2003);*
- CCME – *Canadian Environmental Quality Guidelines Guidelines (CEQG) and Canadian Water Quality Guidelines for the Protection of Aquatic Life;*
- CCME – *Canada-Wide Standards for Dioxins and Furans (2001);*
- CCME – *Canada-Wide Standards for Mercury Emissions (2000);*
- DFO – *Freshwater Intake End-of-Pipe Fish Screen Guideline (1995);*
- DFO – *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (1998);*
- DFO – *Policy for the Management of Fish Habitat (2001);*
- DFO – *Habitat Conservation and Protection Guidelines (1998);*

- DFO – *Operational Statements*;
- EC – *Guidelines for the Preparation of Hazardous Material Spill Contingency Plans (1990)*;
- EC – *Metal Mining Guidance Document for Aquatic Effects Monitoring (2002)*;
- EC – *Guidelines for the Assessment of Alternatives for Tailings Storage for Metal Mining Projects Proposing to use Natural, Fish-bearing Water Bodies as Tailings Impoundment Areas (Draft July 4, 2008)*;
- GN – *Spill Contingency Planning and Spill Reporting in Nunavut. A Guide to the New Regulations.*
- GN – *Environmental Guideline for Contaminated Site Remediation (2002)*;
- GN – *Environmental Guideline for General Management of Hazardous Waste in Nunavut (2002)*;
- GN - *Environmental Guideline for Ozone Depleting Substances (2002)*;
- GN - *Environmental Guideline for Waste Antifreeze (2002)*;
- GN - *Environmental Guideline for Waste Asbestos (2002)*;
- GN - *Environmental Guideline for Waste Batteries (2002)*;
- GN - *Environmental Guideline for Waste Paint (2002)*;
- GN - *Environmental Guideline for Waste Solvent (2002)*;
- GN - *Guideline for the Management of Waste Lead and Lead Paint (2001)*;
- GN - *Municipal Solid Wastes Suitable for Open Burning*;
- GN - *Disposal Guidelines for Fluorescent Lamp Tubes*;
- GN – *Occupational Health & Safety Guidelines (2006)*;

- GNWT - *Guidelines for the Discharge of Treated Municipal Wastewater in the Northwest Territories*, (1992)
- GNWT – *A Field Guide to Ice Construction Safety* (2007);
- *Guidelines for the Preparation of an Operations and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories*, Duong and Kent, 1996
- INAC - *Mine Site Reclamation Policy for Nunavut* (2002);
- INAC – *Guidelines for Spill Contingency Planning* (2007);
- INAC - *Quality Assurance (QA), Quality Control (QC) Guidelines for Use by Class "B" Licensees in Collecting Representative Water Samples in the Field and for Submission of a QA/QC Plan* (1996);
- INAC - *Mine Site Reclamation Guidelines for the Northwest Territories* (2007);
- INAC – *A Policy Respecting the Prohibition of Bulk Water Removal from Major River Basins in Nunavut* (2003);
- The Mining Association of Canada “*A Guide to the Management of Tailings Facilities*” (1998), (Referenced within the guidelines as GMTF);
- Mining Association of Canada, “*Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities*”
- The proponent where applicable should consider the application of the Canadian Dam Association “*Dam Safety Guidelines*” (January 1999) in the design, construction, operation, monitoring, decommission and closure of dam infrastructure. (Referenced within the guidelines as CDA);
- *Workplace Hazardous Materials Information System* (WHMIS);

The NWB maintains a folder on its FTP site containing electronic copies of reference documents. Federal legislation may be found on the Department of Justice Canada website at <http://laws.justice.gc.ca/>. Territorial Legislation may be found on the Canadian Legal Information Institute's website at <http://www.canlii.org/>. The applicant is encouraged to consult with government agencies on technical issues and to obtain the most up to date copy of reference documents.

It is the applicant's responsibility to ensure that all relevant standards and guidelines are considered in the water licence application and to incorporate proper footnotes and references.

APPENDIX B: COMMONLY USED ACRONYMS

AA	Authorizing Agency
ABA	Acid Base Accounting
AMD	Acid Mine Drainage
AP	Acid Potential
A&R	Abandonment and Restoration
ARD	Acid Rock Drainage
ANFO	Ammonium Nitrate and Fuel Oil
BOD	Biological Oxygen Demand
BTEX	Benzene, Toluene, Ethyl-benzene and Xylene
CBOD	Carbonaceous Biological Oxygen Demand
CEA	Cumulative Environmental Assessment
CCME	Canadian Council Ministry of the Environment
CFU	Colony Forming Units
COD	Chemical Oxygen Demand
CWQS	Canadian Water Quality Standards
DFO	Department of Fisheries and Oceans
DIO	Designated Inuit Organization
DO	Dissolved Oxygen
DSG	Dam Safety Guidelines
DSI	Dam Safety Inspection
DSR	Dam Safety Review
EC	Environment Canada
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPP	Emergency Preparedness Plan
ERSCP	Emergency Response Spill Contingency Plan
GN-DoE	Government Nunavut – Department of Environment
GN-CGS	Government Nunavut – Department of Community Government Service
GN-CLEY	Government of Nunavut - Department of Culture, Language, Elders and Youth
HDPE	High Density Polyethylene
FTP	File Transfer Protocol
IIBA	Inuit Impact Benefit Agreement
INAC	Indian and Northern Affairs Canada (also known as DIAND)
IOL	Inuit Owned Lands
IQ	Inuit Qaujimajatuqangit
IR	Information Request
LPA	Local Project Area
MSDS	Material Safety Data Sheet
MAC	Maximum Acceptable Concentration
MCE	Maximum Credible Earthquake
MDE	Maximum Design Earthquake
MMER	Metal Mining Effluent Regulations
NLCA	Nunavut Land Claims Agreement

NP	Neutralization Potential
NNP	Net Neutralization Potential
NPR	Neutralization Potential Ratio
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claims Agreement
NPC	Nunavut Planning Commission
NSA	Nunavut Settlement Area
NTI	Nunavut Tunngavik Incorporated
NTU	Nephelometric Turbidity Unit
NTWR	Northwest Territories Waters Regulations
NWB	Nunavut Water Board
NWNSRTA	Nunavut Waters Nunavut Surface Rights Tribunal Act
NWPP	Navigable Waters Protection Program
O&M	Operations and Maintenance
PAH	Polycyclic Aromatic Hydrocarbons
PC	Project Certificate
PCB	Poly-Chlorinated Biphenyl
PMF	Probable Maximum Flood
PMP	Probable Maximum Precipitation
POP	Persistent Organic Pollutant
PSIR	Project Specific Information Requirement
PVC	Polyvinyl Chloride
QA	Quality Assurance
QC	Quality Control
RBC	Rotating Biological Contactor
RPA	Regional Project Area
SIG	Supplemental Information Guidelines
SS	Suspended Solids
TDS	Total Dissolved Solids
TKN	Total Kjeldahl Nitrogen
TOC	Total Organic Carbon
TOD	Total Oxygen Demand
TS	Total Solids
TSP	Total Suspended Particulates
TSS	Total Suspended Solids
TK	Traditional Knowledge
UTM	Universal Transverse Mercator
UV	Ultraviolet Light
VOC	Volatile Organic Compound
VEC	Valued Ecosystem Component
WHMIS	Workplace Hazardous Material Information System