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Draft

Industrial Supplemental Information Guideline (SIG) for Hydrocarbon Impacted Soil Storage and Landfarm Treatment Facilities (I3)

Date of Issuance: February 2010

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1.0 Introduction

This Supplemental Information Guideline (SIG) is for applicants seeking a water licence for hydrocarbon impacted soil storage and landfarm treatment facilities which is an undertaking classified as industrial 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 five (5) 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 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
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>).	Y					
	2	Information required to satisfy the requirements of the SIG including plans, reports and designs.	Y					
	3	Executive summary in english.	Y					
	4	Translated executive summary in appropriate language and dialect.	Y					
	5	Application fee.	NA	Government of Canada				
	6	Water use fee.	NA	Government of Canada				
	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.	Y					

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 or 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 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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Applicant	1	Provide the full name of the applicant and contact person including contact information (position, phone number, address, fax number and email address).	Y						
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).	NA	Not applicable					
	3	Provide a signed letter authorizing a party to be the applicant's representative in the licensing process.	NA	Not applicable					
Project Name	4	Provide the name of the project.	Y		Water Licence Application Form dated: 16 Nov 2009	ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20-%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	Supplemental Questionnaire for Municipalities		
Location of Undertaking	5	Provide coordinates of the project extents	Y		Water Licence Amendment Application Form dated: 31 Mar 2015	Application_for_Water_Licence_Amendment-OEDE-edited13.doc	Section 4		
	a	Provide location by Latitude and Longitude.	Y		Water Licence Amendment Application Form dated: 31 Mar 2015	Application_for_Water_Licence_Amendment-OEDE-edited13.doc	Section 4		
	b	Provide location by UTM coordinates, if available.	NA	Not applicable					
Map	6	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 including soil, fuel, and chemicals. 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.	Y		Water Licence Application Form dated: 16 Nov 2009	ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20-%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	Supplemental Questionnaire for Municipalities (Appendix E)		
Nature of Interest in the Land	7	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. Provide the permit or licence	NA	DND Lands					
	b	The date or expected date of issuance of any authorization and the date of expiry.	NA	DND Lands					
	8	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.	NA	DND Lands					
NPC Determination	9	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.	NA	DND Lands					
NIRB Determination	10	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:	NA	DND Lands					
	a	Written confirmation from NIRB that the project proposal does not require screening;	NA	DND Lands					
	b	NIRB's screening determination;	NA	DND Lands					
	c	If a review is required, NIRB's recommendation to the Minister regarding the type of review;	NA	DND Lands					

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;	NA	DND Lands					
	e	If a review is required, NIRB's project certificate;	NA	DND Lands					
	11	Provide a list of activities requested for exception in accordance with NLCA s. 12.10.2;	NA	DND Lands					
	12	Indicate whether any Type B water licence application is for an activity to be considered for interim, short term approval in accordance with NLCA s. 13.5.5.	NA	DND Lands					
Description of Undertaking	13	Provide a complete description of the undertaking with detailed site plan(s) of all infrastructure. Include maps and/or aerial photos with scales that allow the determination of distances between the objects depicted. Differentiate any temporary components from permanent components. Consider the following in providing the description:	Y		Operation and Maintenance Plan dated February 2015	CFS Alert OM Plan Final.pdf	O&M Plan (Sections 1 & 2;Appendix A)		
	a	Barriers to prevent site access	NA	This is a Military Station					
	b	Existing on site infrastructure	Y		Operation and Maintenance Plan dated February 2015	CFS Alert OM Plan Final.pdf	O&M Plan (entire & Appendix A)		
	c	Existing and proposed drainage modifications such as berms (natural or constructed) and diversion ditches	Y		Operation and Maintenance Plan dated February 2015	CFS Alert OM Plan Final.pdf	O&M Plan (Sections 2-6 & Appendix A)		
	d	Quarries / borrow pits	Y		Operation and Maintenance Plan dated February 2015	CFS Alert OM Plan Final.pdf	O&M Plan (entire & Appendix A)		
	e	Water use for landfarm operations if applicable	Y		Operation and Maintenance Plan dated February 2015	CFS Alert OM Plan Final.pdf	O&M Plan (Section 6 & Appendix A)		
	f	Transportation access routes and details of any water course crossings (see the NWB's SIG for General Water Works (M1))	NA	No water crossings					
Other Applicable Supplemental Information Guidelines	14	Indicate whether any other Supplemental Information Guidelines apply to the undertaking including the following:							
	a	Hydrostatic testing	NA						
	b	Tannery	NA						
	c	Tourist / remote camp	NA						
	d	Landfarm and on-site storage of hydrocarbon contaminated soil	Y						
	e	Onshore oil and gas exploration drilling	NA						
	f	Mineral exploration/ remote camp	NA						
	g	Advanced exploration	NA						
	h	Mine development	NA						
	i	Municipal	NA						
	j	General Water Works	NA						
	l	Power	NA						
Options	15	Provide a brief explanation of the alternative methods and locations that were considered to carry out the project.							
Water Use	16	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	NA						
	b	Obtain water for industrial purposes	NA						
	c	To cross a water course	NA						
	d	To alter the flow of water, or store water	NA						
	e	Flood control	NA						
	f	To divert a watercourse	Y	Consider the intake and return pipelines of raw water as "diversion"	Water Licence Amendment Application Form dated: 31 Mar 2015	3BC-ALT1015-Application-for-Water-Licence-Amendment.pdf			
	g	To modify the bed or bank of a watercourse	NA						

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	h	Others:	Y	Increase Water Usage limits	See below	see below	see below		
	17	If any of the sub categories c through g of item 16 of this Section apply to the project, please refer to the NWB's SIG for General Water Works (M1).	NA						
Water Use: Quality and Quantity	18	Provide the following for each type of water use described in item 16 of this section:							
	a	The source of water including the name of the water body and the location of the water source as shown on a map;	Y		Water Licence Application Form dated: 16 Nov 2009	ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20-%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	Supplemental Questionnaire for Municipalities		
	b	A description of the quality of the water from the source as well as the available capacity of the water source;	NA						
	c	The estimated amount of water to be taken from each source and the method of extraction including specific pumping rates, pumping procedures and potential for draw down;	Y	Intake: 700 cu.m; 3 pumps with combined max rate of 736 cu.m/day.					
	d	The estimated amount of water to be returned to the source; and		515 cu.m					
	e	Methods to ensure the quality of the water returned to source is of a quality acceptable to the NWB.	Y	Raw water - untreated in the return line	Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (entire & Appendix A)		
Waste Disposal	19	See section 5 of this SIG for specific requirements							
Waste Disposal: Quality and Quantity	20	See section 5 of this SIG for specific requirements							
Other Authorizations	21	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.	NA						
	22	Provide a timetable for filing the appropriate plans and procedures required by government parties.	NA						
	23	Indicate whether the applicant/ licensee holds any existing water licences. If applicable, provide the licence number and expiry date of any existing water licences.	NA						
Predicted Environmental Effect and Proposed mitigation measures	24	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)	NA	Intake/Return Water amount usage has not changed since water licence was applicable.					
		quantity	NA	Intake/Return Water amount usage has not changed since water licence was applicable.					
		quality	NA	Raw water - untreated in the return line					
	b	Land including:							
		geologic structure change	NA	Landfarm construction does not affect bedrock					
		soil contamination	NA	Landfarm construction on level ground with polymer liner.					
		compaction, settling and erosion	NA	Landfarm base will freeze and be incorporated with the permafrost.					
		alteration of the permafrost regime	NA	Landfarm facility does not affect permafrost					
		riparian zone loss	NA	Location not near water areas					
	c	Vegetation including:							
		species composition and abundance	NA	Lack of vegetation at site.					
		non-native species introduction	NA	Lack of vegetation at site.					
		accumulation of toxins and heavy metals (in relation to remediation objectives for closure)	NA	Lack of vegetation at site.					
	d	Aquatic Ecosystems including:							

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		fish	NA	Not located near water source					
		benthic invertebrates	NA	Not located near water source					
		plankton	NA	Not located near water source					
	25	See sections 4, 5 and 6 of this SIG for additional information requirements							
Existing and Other User Water Rights	26	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.	NA	DND Lands					
	27	Provide a description of any potential effects of the project on the persons or properties identified in item 26 of this section.	NA	DND Lands					
	28	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 26 of this section.	NA	DND Lands					
	29	Indicate whether compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.	NA	DND Lands					
Inuit Water Rights	30	Provide a description of any potential effects of the project on the quality, quantity, or flow of waters flowing through Inuit Owned Land (IOL).	NA	DND Lands					
	31	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.	NA	DND Lands					
	32	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	NA	DND Lands					
Consultation	33	Provide a summary of any consultation meetings including when the meetings were held, where and with whom.	NA	DND Lands					
	34	Provide a summary of the results of consultation meetings including a list of concerns expressed and measures proposed to address concerns.	NA	DND Lands					
Security	35	Provide a financial security assessment that includes the following:							
	a	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;	NA	DND Lands					
	b	The cost of having the necessary reclamation work done by a third-party contractor if the operator defaults;	NA	DND Lands					
	c	Contingency factors appropriate to the particular work to be undertaken.	NA	DND Lands					
Abandonment and Restoration	36	Provide plans for the abandonment and restoration of facilities.	Y	No plans to abandon	Abandonment & Restoration	ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20-%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	AR Plan		
	37	Provide a description of all remediation plans and remediation objectives.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6 & Appendix A)		
	38	Provide a list and description of any existing abandoned or restored site facilities.	NA	None exists					
Financial	39	Provide a statement of financial responsibility.	NA	DND Lands					

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Information	40	If the applicant is an entity for which audited financial statements are issued, a copy of the most recent audited financial statements must be attached to the statement of financial responsibility.	NA	DND Lands					
	41	Provide the name of the corporation, limited company or other business entity, with a list of the officers of the company and a copy of the Certificate of Incorporation or evidence of registration of the company name.	NA	DND Lands					
Studies and Designs	42	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;	NA	DND Lands					
	b	Design assumptions and the limitations associated with such design assumptions;	NA	DND Lands					
	c	The inclusion of clear, definable engineering qualifiers with all design drawings and reports;	NA	DND Lands					
	d	Site specific data and analysis to support the design and management decisions made;	NA	DND Lands					
	e	Materials that appropriately delineate the particulars of a design or plan.	NA	DND Lands					
	43	Provide construction methods and procedures regarding how infrastructure will be put in place on-site.	NA	DND Lands					
	44	Provide a timetable for submission of preliminary and final-for-construction engineered designs (note: for construction designs are required for NWB approvals).	NA	DND Lands					
	45	See sections 4 and 5 of this SIG for additional information requirements							
Proposed Time Schedule	46	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.	Y	Implement amendment starting June 2014					
Proposed Term of Licence	47	Provide a proposed term of licence including the expected date of licence issuance and the expected date of licence expiry.	NA						
Annual Reporting	48	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;	Y						
	b	Comparison of water quality and quantity monitoring data with the water quality and quantity predictions presented in the application;	Y						
	c	A description of how any conditions in the NIRB screening decision related to the NWB mandate have been implemented;	NA						
	d	Project changes under adaptive management;	NA						
	e	Any actions taken in response to direction provided by the Inspector.	Y		Compliance Plan attached				
Renewals and Amendments	49	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.	Y	3BC-ALT1015 Amendment					

3.0 General Water Licence Application

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	50	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.	Y		Compliance Plan attached				

4.0 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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Site Characterization	1	Provide a description of the site using current detailed topographic survey maps and/or aerial photos where applicable. Maps, diagram, and aerial photos must include accurate scales that allow the determination of distances between the objects depicted. The description must consider:							
	a	location of fuel and chemical storage facilities	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Appendix D)		
	b	location of soil landfarm active treatment facilities	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6 & Appendix A)		
	c	location of surface water bodies, particularly potable water sources and fish bearing waters	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 2 & Appendix A)		
	d	location of site access routes	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Appendix A)		
	e	surface water drainage patterns	NA						
	f	groundwater flow and direction	NA	Permafrost present					
	g	groundwater regime	NA	Permafrost present					
	h	surface water quality	NA						
	i	groundwater quality	NA						
	j	potential seepage in the area of the undertaking	NA						
	2	Provide an evaluation of the soil characteristics to determine whether the soil, if contaminated, is well-suited for landfarming. Consider the following characteristics:							
	a	microbial population density	Y			ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	100215 3BC-ALT---- Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT-- -- Detailed Characterization Update Multiple.pdf; 100215 3BC-ALT---- Site Charaterization Bioremediation Studi.pdf		
	b	soil pH	Y			ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	100215 3BC-ALT---- Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT-- -- Detailed Characterization Update Multiple.pdf; 100215 3BC-ALT---- Site Charaterization Bioremediation Studi.pdf		
	c	moisture content	Y			ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	100215 3BC-ALT---- Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT-- -- Detailed Characterization Update Multiple.pdf; 100215 3BC-ALT---- Site Charaterization Bioremediation Studi.pdf		

	d	nutrient concentration	Y			ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	100215 3BC-ALT---- Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT-- -- Detailed Characterization Update Multiple.pdf; 100215 3BC-ALT---- Site Charaterization Bioremediation Studi.pdf		
	e	soil type	Y			ftp://nunavutwaterboard.org/1%20PRUC/3%20MUNICIPAL/3B/3BC%20%20Camp/3BC-ALT1015%20(Alert)/1%20APPLICATION/2009%20New/	100215 3BC-ALT---- Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT-- -- Detailed Characterization Update Multiple.pdf; 100215 3BC-ALT---- Site Charaterization Bioremediation Studi.pdf		
	3	Provide a description of the site geology including:							
	a	the thickness of underlying soil	NA						
	b	presence of bedrock	NA						
	c	degree of bedrock fracturing	NA						
	4	Provide a description of the permafrost regime including:							
	a	the depth of the permafrost active layer	NA						
	b	permafrost characteristics that may impact the construction or operation of the facility such as frost heave, presence of ice lenses, evidence of permafrost degradation	NA						
	5	Provide a climatic assessment of the site including:							
	a	precipitation and temperature profiles	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 1)		
	b	a discussion concerning the likelihood of flood events that could disrupt operations or threaten water quality and whether the local landforms may encourage or discourage such events (ie. a facility situated in an active flood plain)	NA						
	6	Provide the slope of the land underlying the facility	NA						
	7	Provide a description of the results of any consultation with Elders regarding the collection of baseline data.	NA						
	8	Provide a description of the historical uses of the waters affected by the project.	NA						
	9	Provide a description of any traditional uses of water in the project area.	NA						
	10	Indicate whether fish, shellfish, or other wildlife are present and harvested in or near the project area and, if applicable, indicate the species harvested and the level of harvest.	NA						
	11	Provide a description of the geochemical tests which have been (or will be) performed on quarry or borrow material to determine the relative acid generation and contaminant leaching potential. Outline methods used (or to be used) and provide test results in an attached report (ie. static test, kinetic tests).	NA						
Fisheries	12	If applicable, provide baseline data and an evaluation of baseline data describing fish and fish habitat in the project area. The applicant is advised to consult with DFO regarding fish and fish habitat related issues and to visit DFO's website at http://www.dfo-mpo.gc.ca/habitat/habitat-eng.htm . Indicate	NA						
Studies	13	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	Hydrological and hydrogeological studies;	NA						
	b	Geological studies	NA						
	c	Geotechnical studies	NA						
	d	Traditional use studies;	NA						
	e	Aquatic studies;	NA						
	f	Meteorological studies;	NA						

5.0 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 <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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
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	Contaminated soil	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6 & 7)		
	b	Contaminated snow and ice	NA						
	c	Wastewater	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 3 & 7)		
	d	Others:	NA						
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.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 2-5)		
	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.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 2-5)		
	4	Provide a description of any existing or proposed measures to minimize the production of wastes.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 2-5)		
Hydrocarbon Impacted Soil Storage and Treatment	5	Indicate what products are used on site that if spilled may be treated in the landfarm	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6 & Appendix D)		
	6	Provide an estimate of the volume of material(s) to be stored and/or treated	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6 & Appendix D)		
	7	Indicate whether there are any existing landfarm facilities on site	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6, Appendix A, and Appendix D)		
	8	Indicate whether there have been any operating problems with existing landfarm facilities.	NA						
	9	Provide a description of the general condition of any existing landfarm and provide an explanation if it is unsatisfactory.	NA						
Identification	10	Indicate whether there are signs identifying any past or present landfarm sites	Y						
Modifications	11	Indicate whether any changes are planned for existing landfarm facilities. If applicable, see items 13 - 15 of this section.	Y	Constructed new Landfarm at ALT-10 (Lat: N 82°29'58.0"; Long: W 62°21'16.0")	As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf			
	12	If the landfarm is for a municipality, indicate whether the community believes changes are needed to the landfarm facility. If applicable, provide a description.	NA	DND Lands					
Proposed Facilities	13	Provide design plans for proposed facilities including descriptions of the following:							
	a	Design parameters including seismic design if applicable.	NA	NA					
	b	The capacity of the facility	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	all pages		
	c	Retaining structures	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	page 3		
	d	Spillways	NA	Contained facility					
	e	Barrier or liner systems including properties and installation details	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	page 3		
	f	Leachate and/or runoff control systems including sumps, pumps, storage ponds/tanks, and any other measures	NA	Contained facility					
	g	Identification of discharge point(s).	NA	Contained facility					
	h	Method of discharge.	NA	Water is re-applied to the soils for hydration.					
	i	Proposed discharge effluent criteria;	Y	To be identical to SNP ALT-11 (3BC-ALT1015)					
	j	Details regarding direction and path of wastewater flow from the area or infrastructure	NA						

5.0 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 <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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	k	Existing and proposed drainage modifications such as berms (natural or constructed) and diversion ditches	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
	l	Construction schedule and sequence taking into account any timing restrictions.	NA						
	m	Construction methods.	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
	n	Equipment to be used.	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
	o	A description of the source, type, and composition of the material to be used in construction.	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
	p	Water quality and environmental monitoring stations and associated equipment (design, placement, etc.)	NA						
	q	Construction monitoring plans	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
	r	Construction quality assurance and quality control measures;	Y						
	s	Operation and maintenance plans	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	Sections 6 & 7		
	t	Contingency plans to address the possibility that contaminated materials exceed expected volumes and/or sump volumes are exceeded.	NA	To be considered as a spill under the Spill Contingency Plan contained within the O&M Plan	Spill Contingency Plan	3BC-ALT1015-CFS Alert OM Plan.pdf	Appendix D		
	u	Closure plans (see items 21-23 of this section)	NA						
	v	Design drawings in plan and profile, drawn to scale, including all relevant dimensions.	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
	14	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).	Y		As built attached	3BC-ALT1015-ALT10-Landfarm-Record-Dwgs-2013.pdf	All pages		
Predicted Environmental Effects and Proposed mitigation measures	15	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.	NA						
	16	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.	NA						
	17	Provide a description of measures to prevent damage to any liner or barrier system during mechanical operation of the landfarm	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
<i>Operations and Maintenance</i>	18	Provide procedures to determine whether soils may be accepted at the Facility including							
	a	Chemical, physical and biological characterization of the soil and the associated hydrocarbon and metal contaminant concentrations	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	b	Treatability studies to determine the viability of landfarm treatment	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	c	Sampling frequency and number of samples per volume of soil accepted	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	19	Provide procedures to be used during active landfarming operations in the active treatment cells							

5.0 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 <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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	a	Treatment cell development and material placement therein	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	b	Contaminated soil thickness in treatment cells	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	c	Method of mechanical aeration in treatment cells	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	d	Oversize material management	NA						
	e	Surface water management, leachate containment and/or treatment, and site grade planning	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	f	Process water management and treatment prior to discharge	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	g	Site volume and operational monitoring programs	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	h	Dust control programs	NA						
	i	Staff operational training programs	NA						
	20	Provide Soil Quality Remediation Objectives (SQROs) to which the applicant is intending to achieve.	NA						
Closure	21	Provide a description of closure procedures	NA						
	22	Provide details regarding the ultimate deposition of treated soils	NA						
	23	Provide a disposal plan for soils contaminated with bioremediation - unsuitable compounds, or for soils that do not respond well to the proposed landfarming treatment	NA						

5.0 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 <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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Fisheries	24	If applicable, 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 and to visit DFO's website at http://www.dfo-mpo.gc.ca/habitat/habitat-eng.htm .	NA						
Studies	25	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;	NA						
	b	Weather data for purposes of design;	NA						
	c	Fisheries assessment;	NA						
	d	Construction plan;	NA						
	e	Construction quality assurance and quality control plan;	NA						
	f	Operation and maintenance plan;	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6)		
	g	Contingency plan;	NA						
	h	Closure plan;	NA						
	i	Monitoring plans (see section 6);	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Section 6 & Appendix 7)		

6.0 Monitoring

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	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
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.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	2	Indicate who is responsible for sampling including that person's position, contact information and level of training.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7)		
	3	Indicate the name and contact information of the certified laboratory performing the analysis of samples.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7; Appendix E)		
	4	Provide an Inspection Plan including a description of the methods, procedures, standards, and schedules proposed.	Y		Operation and Maintenance Plan dated	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7; Appendix E)		
	5	Provide a Quality Assurance/ Quality Control (QA/QC) Plan that addresses both field sampling and laboratory analysis.	Y		Operation and Maintenance Plan dated	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7; Appendix E)		
	6	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.	Y		Operation and Maintenance Plan dated February 2015	3BC-ALT1015-CFS Alert OM Plan.pdf	O&M Plan (Sections 6-7; Appendix A; Appendix E)		

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]*
- *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]*
- *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 Petroleum Hydrocarbons in Soil (CWS-PHC) (2008);*
- CCME – *Subsurface Assessment Handbook for Contaminated Sites (1994);*
- CCME – *Canada-Wide Standards for Dioxins and Furans (2001);*
- CCME – *Canada-Wide Standards for Mercury Emissions (2000);*
- Canadian Standards Association (CSA) *Environmental Site Assessment Standards Z768-01 (2001) and Z769-00 (2000) for Phase 1 and 2 ;*
- 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 – *Operational Statements*;
- DFO - Other documents are available from DFO's website at <http://www.dfo-mpo.gc.ca/habitat/habitat-eng.htm>;
- EC – *Guidelines for the Preparation of Hazardous Material Spill Contingency Plans (1990)*;
- 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 – *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 – *A Policy Respecting the Prohibition of Bulk Water Removal from Major River Basins in Nunavut (2003)*;
- 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)*;
- SAIC - *Federal Guidelines for Landfarming Petroleum Hydrocarbon Contaminated Soils*, Science Applications International Corporation (2005)

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