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NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

# **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 <u>Title</u> , <u>Author and</u> <u>Date of Document</u> where information is provided	Insert <u>electronic file</u> <u>name of document</u> where information is provided	Insert <u>Section of</u> <u>document</u> where information is provided	NWB Concordance Assessment
Minimum Application	1	General Water Licence Application Form (see the	<u>Y</u>					
Requirements		NWB's Guide 4: Completing and Submitting a Water Licence Application for a New Licence) or Application for Water Licence Amendment Form, if appropriate (see NWB's Guide 7: Licensee Requirements Following the Issuance of a Water Licence).						
	2	Information required to satisfy the requirements of the SIG including plans, reports and designs.	Υ					
	3	Executive summary in english.						
	4	Translated executive summary in appropriate language and dialect.						
	5		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.						

#### 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 Inuinnagtun (where applicable).

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

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Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y'or'NA'	If 'NA' provide justification	Insert <u>Title</u> , <u>Author and</u> <u>Date of Document</u> where information is provided	Insert <u>electronic file</u> <u>name of document</u> where information is provided	Insert <u>Section of</u> <u>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
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%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2 0New/	Supplemental Questionaire for Municipalities		
Location of Undertaking	5	Provide coordinates of the project extents	Y		Form dated: 31 Mar 2014	100401- Application_for_Water_ Licence_Amendment- OEDE-edited13.doc	Section 4		
	а	Provide location by Latitude and Longitude.	Y		Water Licence Amendment Application Form dated: 31 Mar 2014	100401- Application_for_Water_ Licence_Amendment- OEDE-edited13.doc	Section 4		
	b	Provide location by UTM coordinates, if available.	NA	Not applicable					
Мар	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%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2 0New/	Supplemental Questionaire for Municipalities (Appendix E)		
Nature of Interest in the	7	Provide the nature of the interest in the land associated with the proposed undertaking, including:							
Land	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 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					
	а	Written confirmation from NIRB that the project proposal does not require screening;	NA	DND Lands					
	b	NIRB's screening determination;	NA NA	DND Lands	ļ				
	С	If a review is required, NIRB's recommendation to the Minister regarding the type of review;	NA	DND Lands					

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 <u>Section of</u> <u>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
	d	If a review is required, the Minister's written decision regarding the review of the development proposal;	NA	DND Lands					
	е	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					
		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.		DND Lands					
Description of Undertaking		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 January 2014		O&M Plan (Sections 1 & 2;Appendix A)		
	а	Barriers to prevent site access	NA	This is a Military Station					
	b	Existing on site infrastructure	Y		Operation and Maintenance Plan dated January 2014	-	Appendix A)		
	С	Existing and proposed drainage modifications such as berms (natural or constructed) and diversion ditches	Υ		Operation and Maintenance Plan dated January 2014	Jan 2014.pdf	O&M Plan (Sections 2-6 & Appendix A)		
	d	Quarries / borrow pits	Y		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (entire & Appendix A)		
	е	Water use for landfarm operations if applicable	Y		Operation and Maintenance Plan dated January 2014		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		Indicate whether any other Supplemental Information Guidelines apply to the undertaking including the following:							
Information Guidelines		Hydrostatic testing	NA						
Guidelines		Tannery Tourist / remote camp	NA NA						
		Landfarm and on-site storage of hydrocarbon contaminated soil	Y						
		Onshore oil and gas exploration drilling	NA						
		Mineral exploration/ remote camp	NA NA						
		Advanced exploration Mine development	NA NA						
		Municipal	NA NA						
		General Water Works	NA						
		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 incuding: (See the NWB definition of "use" in the NWB Guide 2: Terminology and Definitions)							
	<u>a</u> b		NA NA		1				
		To cross a water course	NA NA		l .				
	d	To alter the flow of water, or store water	NA						
	е	Flood control	NA						
	f	To divert a watercourse	NA						
	g h	To modify the bed or bank of a watercourse  Others:	NA V	Increase Water	See below	see below	see below		
	n	Outoro.	1	Usagesee below	OCC DEIOW	SCC DGIOW	GGC DGIOW		

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
		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	18	Provide the following for each type of water use described in item 16 of this section:							
Quantity	а	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%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2 0New/	Supplemental Questionaire 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						
	С	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					
	е	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 January 2014	CFS Alert OM Plan Final Jan 2014.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		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	24	Identify the potential effect of water use and waste disposal on the following components:							
Effect and	а	Groundwater and Surface Water including:							
Proposed mitigation		changes in flow (including seasonal rate of flow)	NA		mount usage has not chang				
mitigation measures	<del></del>	quantity quality	NA NA	Raw water - untreated	mount usage has not chang	ged since water licence was	s applicable.		
incasures	b	Land including:	INC	naw water - uniteated	in the return line				
	_ ·	geologic structure change	NA	Landfarm construction	does not affect bedrock				
		soil contamination	NA		on level ground with polym	ner liner.			
		compaction, settling and erosion	NA		eze and be incorporated wi				
		alteration of the permafrost regime	NA	Landfarm facility does	not affect permafrost				
		riparian zone loss	NA	Location not near water	er areas				
	С	Vegetation including:							
		species composition and abundance	NA	Lack of vegetation at s					
		non-native species introduction	NA	Lack of vegetation at s					
		accumulation of toxins and heavy metals (in relation to remediation objectives for closure)	NA	Lack of vegetation at s	Site.				
İ	d	Aquatic Ecosystems including:	NIA.	Niet Incested annual Control	<u> </u>				
1		fish	NA NA	Not located near wate					
1		benthic invertebrates	NA	Not located near wate	i source	I			

25   See sections 4, 5 and 1 of this SIG for additional information   Programment	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
Extering and Provide the immines, addresses, and resulte of use for any VA Provide a description of the project		25		INA	Not located flear water	i source				
Other User   Water Rights   Water										
the persons or properties identified in letter 26 of this section.  28 Provide a description of the measures incorporated into the project on the project design in military effects of the project on the persons or properties identified in letter 26 of the project on the persons or properties identified in letter 26 of the project on the persons or properties identified in letter 26 of the section.  29 Indicate whether compressation has been paid and/or agreement(s) for compressation have been paid and/or agreement(s) for compressation have been paid and/or secting or other users.  30 Provide a description of any potential effects of the project on NA OND Lands  21 Provide a description of measures incorporated into the project on the quality.  22 Provide a description of the measures incorporated into the project on the quality, quantity, or flow of whether flowing through ILLU.  23 Provide a summary of any constraint making the parties have been unable to reach an agreement on compressation  24 Provide a summary of the results of computation meetings and compressation of the parties have been unable to reach an agreement on compressation  24 Provide a summary of the results of computation meetings and compressation of the parties have peen unable to reach an agreement on compensation  25 Provide a summary of the results of computation meetings and provided and the parties of the project of the parties have proposed to address concerns.  31 Provide a flaminal security for final flowing the parties of the project of the underfination of the parties of the underfination of the und	Other User	26	known persons or properties that may be adversely affected by the proposed undertaking, including those that 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.							
project design to mitigate effects of the project on the persons or properties inferited in tem 20 of the section.  29 Indicate whether compensation has been paid analyzed agreement (b) for compensation have been reached with any generation of the project on NA and the project of the project on NA to the project on the quality.  31 Provide a description of any potential effects of the project on NA to the project of design to mitigate effects of the project on the quality.  32 Indicate whether an agreement to pay compensation for any to so or damage has been reached with one or more Designated must Organization (D(C)) or if the presis have been unable to reach as agreement on compensation.  33 Indicate whether an agreement on compensation or any other unables to reach as agreement on compensation.  34 Provide a summary of the results of consultation meetings. NA including all sist of concrete expressed and measures proposed to additions concerns.  35 Provide a summary of the results of consultation meetings. NA including all sist of concrete expressed and measures proposed to additions concerns.  36 Provide a summary of the results of consultation meetings. NA including all sist of concrete expressed and measures proposed to additions concerns.  37 Provide a description of all remediation work done by NA DND Lands including a lind of concrete accordance and sufficient to cover the highest ballety over the field of the understation.  38 Provide a description of all remediation plans and V DND Lands understation and and water combined sufficient to cover the highest ballety over the field of the understation of a concerns appropriate to the particular work to be NA DND Lands understation.  39 Provide a description of all remediation plans and very the particular work to be NA DND Lands understation.  30 Provide a description of all remediation plans and very the particula		27		NA	DND Lands					
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loss or damage has been reached with one or more   Designated Intuit Organization (DIO); or if the parties have been unable to reach an agreement on compensation			project design to mitigate effects of the project on the quality, quantity, or flow of waters flowing through IOL.							
when the meetings were held, where and with whom.  34 Provide a summary of the results of consultation meetings including a list of concerns expressed and measures proposed to address concerns.  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:  b The cost of having the necessary reclamation work done by NA DND Lands a third-party contractor if the operator defaults;  c Contingency factors appropriate to the particular work to be undertaking.  Abandonment and Restoration  Abandonment and Restoration  A Provide plans for the abandonment and restoration of facilities.  7 Provide plans for the abandonment and restoration of facilities.  8 Provide a description of all remediation plans and remediation objectives.  9 Provide a list and description of any existing abandoned or NA None exists		32	loss or damage has been reached with one or more Designated Inuit Organization (DIO); or if the parties have	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 isability for land and water combined sufficient to cover the highest liability over the life of the undertaking;   b   The cost of having the necessary reclamation work done by NA a third-party contractor if the operator defaults;   c   Contingency factors appropriate to the particular work to be NA undertaken.     Abandonment and Restoration   36   Provide plans for the abandonment and restoration of facilities.     37   Provide a description of all remediation plans and remediation objectives.   The continuation of the provide plans for the abandoned or NA     38   Provide a list and description of any existing abandoned or NA   None exists   No pole is to the particular work to be a continuation of the provide abandoned or NA   None exists   None exists   No pole is the particular work to be a continuation of the par	Consultation		when the meetings were held, where and with whom.							
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:  b The cost of having the necessary reclamation work done by NA a third-party contractor of efaults: c Contingency factors appropriate to the particular work to be undertaken.  Abandonment and Restoration  Abandonment and Restoration  Frovide plans for the abandonment and restoration of facilities.  NA DND Lands  DND Lands  DND Lands  Abandonment & Restoration fits:  Abandonment and Restoration  Abandonment & Restoration facilities.  Provide a description of all remediation plans and remediation objectives.  Provide a list and description of any existing abandoned or NA None exists		34	including a list of concerns expressed and measures	NA	DND Lands					
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;  b The cost of having the necessary reclamation work done by NA a third-party contractor if the operator defaults;  c Comingency factors appropriate to the particular work to be NA DND Lands undertaken.  Abandonment and Restoration  Abandonment and Restoration  Abandonment and Restoration of facilities.  36 Provide a description of all remediation plans and remediation objectives.  37 Provide a description of any existing abandoned or NA None exists  DND Lands Undertaken.  Abandonment Restoration Abandonment & Restoration of Section 6 & Appendix A) DND Lands DND Lands DND Lands Undertaken.  Abandonment & Restoration Fig.//nunavutwaterboard or Section of Section 6 & Appendix A)  Abandonment & Restoration Operation and Maintenance Plan dated January 2014	Security	35	Provide a financial security assessment that includes the following:							
a third-party contractor if the operator defaults;  c Contingency factors appropriate to the particular work to be NA  Abandonment and Restoration  Abandonment and Restoration  Abandonment and Restoration  36 Provide plans for the abandonment and restoration of facilities.  Y No plans to abandon Abandonment & Restoratio ftp://nunavutwaterboard   AR Plan   .org/1%20PRUC/3%20M   UNICIPAL/3B/3BC%20- %20Camp/3BC-   ALT1015%20(Alert)/1%2   0APPLICATION/2009%2   0		а	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;							
Abandonment and Restoration   Section 6 tacilities.		b	a third-party contractor if the operator defaults;							
Abandonment and Restoration of facilities.  36 Provide plans for the abandonment and restoration of facilities.  37 Provide a description of all remediation plans and remediation objectives.  38 Provide a list and description of any existing abandoned or NA None exists		C		INA	DIND Lands					
37 Provide a description of all remediation plans and remediation plans and remediation objectives.  38 Provide a list and description of any existing abandoned or NA None exists  Operation and Maintenance Plan dated Jan 2014.pdf  January 2014  Appendix A)		36	Provide plans for the abandonment and restoration of	Y	No plans to abandon	Abandonment & Restoration	.org/1%20PRUC/3%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2			
38 Provide a list and description of any existing abandoned or NA None exists		37		Υ		Maintenance Plan dated	CFS Alert OM Plan Final			
Financial 39 Provide a statement of financial responsibility. NA DND Lands			restored site facilities.							

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 <u>Section of</u> <u>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
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:							
	а	Design rational, design requirements, design criteria, design parameters, design standards/analysis/method;	NA	DND Lands					
	b	such design assumptions;	NA	DND Lands					
	С	The inclusion of clear, definable engineering qualifiers with all design drawings and reports;		DND Lands					
	d	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.		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 amendme	nt 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;	Υ						
	b	Comparison of water quality and quantity monitoring data with the water quality and quantity predictions presented in the application;	Y						
	С	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						
	е	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.	Υ	3BC-ALT1015 Amend	dment				

Section Title S	Section No.		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 <u>Section of</u> <u>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
		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 occured 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 <u>Title</u> , <u>Author and</u> <u>Date of Document</u> where information is provided	Insert electronic file name of document where information is provided	Insert <u>Section of</u> <u>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
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:							
	а	location of fuel and chemical storage facilities	Y		Operation and Maintenance Plan dated January 2014		O&M Plan (Appendix D)		
	b	location of soil landfarm active treatment facilities	Y		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (Section 6 & Appendix A)		
	С	location of surface water bodies, particularly potable water sources and fish bearing waters	Υ		Operation and Maintenance Plan dated January 2014	•	O&M Plan (Section 2 & Appendix A)		
	d	location of site access routes	Y		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (Appendix A)		
	е	surface water drainage patterns	NA						
	f	groundwater flow and direction	NA	Permafrost present					
	g	groundwater regime	NA	Permafrost present					
	h	surface water quality	NA						
	<u>!</u>	groundwater quality	NA						
		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:							
	а	microbial population density	Y			ftp://nunavutwaterboard .org/1%20PRUC/3%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2 0New/	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%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2 0New/	Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT Detailed Characterization		
	С	moisture content	Y			ftp://nunavutwaterboard .org/1%20PRUC/3%20M UNICIPAL/3B/3BC%20- %20Camp/3BC- ALT1015%20(Alert)/1%2 0APPLICATION/2009%2 0New/	Characterization of Contaminated Sites Fi.pdf ; 100215 3BC-ALT Detailed Characterization		

d   nutrient concentration   Y	
%20Camp/3BC- ; 100215 3BC-ALT ALT1015%20(Alert)1%2 Detailed Characterization 0APLICATION/2009%2 Update Multiple.pdf; 0New/ 100215 3BC-ALT Site	i i
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	
5 Provide a climatic assessment of the site including:	
a precipitation and temperature profiles Y Operation and Maintenance Plan dated Jan 2014.pdf  Jan 2014.pdf	
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)	
6 Provide the slope of the land underlying the facility NA	
7 Provide a description of the results of any consultation with NA	
Elders regarding the collection of baseline data.	
8 Provide a description of the historical uses of the waters Alfected by the project.	
9 Provide a description of any traditional uses of water in the NA project area.	
Indicate whether fish, shellfish, or other wildlife are present and NA harvested in or near the project area and, if applicable, indicate the species harvested and the level of harvest.	
Provide a description of the geochemical tests which have been (or will be) performed on quarrry 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).	
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/eng.htm. Indicate	
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:	
planned including:  a Hydrological and hydrogeological studies; NA	
planned including:  a Hydrological and hydrogeological studies; NA  b Geological studies NA	
planned including:  a Hydrological and hydrogeological studies; NA  b Geological studies NA  c Geotechnical studies NA	
planned including:  a Hydrological and hydrogeological studies; NA  b Geological studies NA  c Geotechnical studies NA  d Traditional use studies; NA	
planned including:  a Hydrological and hydrogeological studies; NA  b Geological studies NA  c Geotechnical studies NA	

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</u> name of document where information is provided	Insert <u>Section of</u> <u>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 <u>Guide 2: Terminology and Definitions</u> )							
	а	Contaminated soil	Υ		Operation and Maintenance Plan dated January 2014		O&M Plan (Sections 6 & 7)		
	b	Contaminated snow and ice	NA						
	С	Wastewater	Y		Operation and Maintenance Plan dated January 2014		O&M Plan (Sections 3 & 7)		
		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 January 2014	Jan 2014.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 January 2014	Jan 2014.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 January 2014	Jan 2014.pdf	O&M Plan (Sections 2-5)		
Hydrocarbon Impacted Soil Storage and	5	Indicate what products are used on site that if spilled may be treated in the landfarm	Υ		Operation and Maintenance Plan dated January 2014	_	Appendix D)		
Treatment	6	Provide an estimate of the volume of material(s) to be stored and/or treated	Y		Operation and Maintenance Plan dated January 2014	•	Appendix D)		
	7	Indicate whether there are any existing landfarm facilities on site	Y		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (Section 6, Appendix A, and Appendix D)		
	8	Indicate whether there have been any operating problems with existing landfarm facilities.							
	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	Υ						
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:							
	а	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		
	С	Retaining structures	Y		As built attached	3BC-ALT1015-ALT10- Landfarm-Record-Dwgs- 2013.pdf	page 3		
	d	Spillways	NA	Contained facility					
	е	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 so	oils for hydration.	ļ			
	<u> </u>	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	INA						

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</u> <u>Date of Document</u> where information is provided	Insert <u>electronic file</u> name of document where information is provided	Insert <u>Section of</u> <u>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		
	1	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		
	0	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		
	р	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 January 2014	CFS Alert OM Plan Final Jan 2014.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 Contigency Plan	CFS Alert OM Plan Final Jan 2014.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 Guide 4: Completing and Submitting a Water Licence Application for more information regarding	Y		As built attached	3BC-ALT1015-ALT10- Landfarm-Record-Dwgs- 2013.pdf	All pages		
Predicted Environmental Effects and Proposed	15	design drawings). 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						
mitigation measures	16		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 January 2014		O&M Plan (Sections 6-7)		
Operations and Maintenance	18	Provide procedures to determine whether soils may be accepted at the Facility including							
	а	Chemical, physical and biological characterization of the soil and the associated hydrocarbon and metal contaminant concentrations	Y		Operation and Maintenance Plan dated January 2014	Jan 2014.pdf	O&M Plan (Sections 6-7)		
	b	Treatability studies to determine the viability of landfarm treatment	Y		Operation and Maintenance Plan dated January 2014	Jan 2014.pdf	O&M Plan (Sections 6-7)		
	С	Sampling frequency and number of samples per volume of soil accepted	Y		Operation and Maintenance Plan dated January 2014		O&M Plan (Sections 6-7)		
	19	Provide procedures to be used during active landfarming operations in the active treatment cells							

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	a	Treatment cell development and material placement therein	Y				O&M Plan (Sections 6-7)		
					Maintenance Plan dated	Jan 2014.pdf			
					January 2014				
	b	Contaminated soil thickness in treatment cells	Y				O&M Plan (Sections 6-7)		
					Maintenance Plan dated	Jan 2014.pdf			
	С	Method of mechanical aeration in treatment cells	V		January 2014 Operation and	CES Alort OM Blan Final	O&M Plan (Sections 6-7)		
	۲	Method of mechanical aeration in treatment cens	1		Maintenance Plan dated		Odw Flan (Sections 6-7)		
					January 2014	3aii 2014.pui			
	d	Oversize material management	NA		January 2014				
	e	Surface water management, leachate containment and/or	Y		Operation and	CFS Alert OM Plan Final	O&M Plan (Sections 6-7)		
		treatment, and site grade planning			Maintenance Plan dated	Jan 2014.pdf	, ,		
					January 2014	·			
	f	Process water management and treatment prior to discharge	Υ		Operation and	CFS Alert OM Plan Final	O&M Plan (Sections 6-7)		
					Maintenance Plan dated	Jan 2014.pdf			
					January 2014				
	g	Site volume and operational monitoring programs	Υ				O&M Plan (Sections 6-7)		
					Maintenance Plan dated	Jan 2014.pdf			
		Double and the land and the lan	NIA.		January 2014				
	<u>h</u>		NA NA						
	20		NA NA						
	20	which the applicant is intending to achieve.	INA						
Closure	21		NA						
Ologaro	22		NA NA		<b>†</b>				
		soils							
	23		NA						
		bioremediation - unsuitable compounds, or for soils that do not							
		respond well to the proposed landfarming treatment							

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 <u>Section of</u> <u>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		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.							
Studies		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:							
	а		NA						
	b	Weather data for purposes of design;	NA						
	С	Fisheries assessment;	NA						
	d	Construction plan;	NA						
	е	Construction quality assurance and quality control plan;	NA						
	f	Operation and maintenance plan;	Y		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (Section 6)		
	g	Contingency plan;	NA					·	·
	h	Closure plan;	NA						
	i	Monitoring plans (see section 6);	Υ		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.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</u> , <u>Author and</u> <u>Date of Document</u> 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
Monitoring		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 January 2014	CFS Alert OM Plan Final Jan 2014.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.	Υ		Operation and Maintenance Plan dated January 2014	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (Sections 6-7)		
	3	Indicate the name and contact information of the certified laboratory performing the analysis of samples.	Y				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		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	CFS Alert OM Plan Final Jan 2014.pdf	O&M Plan (Sections 6-7; Appendix E)		
		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 January 2014		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 <a href="http://laws.justice.gc.ca/">http://laws.justice.gc.ca/</a>. Territorial Legislation may be found on the Canadian Legal Information Institute's website at <a href="http://www.canlii.org/">http://www.canlii.org/</a>. 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 Univeral Transverse Mercator

UV Ultraviolet Light

VOC Volatile Organic Compound VEC Valued Ecosystem Component

WHMIS Workplace Hazardous Material Information System