

Land and Water Boards of the Mackenzie Valley
Standard Water Licence Conditions – DRAFT Schedules

October, 2020

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Instructions and Notes for Reviewing this Document

These draft Schedules are not intended to stand alone: they will be incorporated into the [Standard Water Licence Conditions Template](#) (Standard Licence Conditions). **The Standard Licence Conditions should be used as a reference when reviewing these draft Schedules, because they provide additional information about the use, purpose, limitations, and/or expectations associated with the individual licence conditions that are related to the draft schedule conditions below.**

Please ensure that each of your comments indicates which Schedule and condition you are commenting on. Overarching comments and recommendations are also encouraged.

Notes on Format and Structure			
#	Condition	Rationale	Notes on Proposed Changes
	<p>Proposed standard condition with any significant changes tracked. New and revised wording is set out in red text. A line is drawn through deleted or replaced text.</p> <p>Green highlighting is used to identify any areas where the Board would need to fill in or choose text to customize the condition.</p>	<p>A description of the purpose of the restrictions, limitations, or requirements imposed by the condition.</p>	<p>Additional information and rationale relating to proposed changes, and notes on planned follow up items.</p>

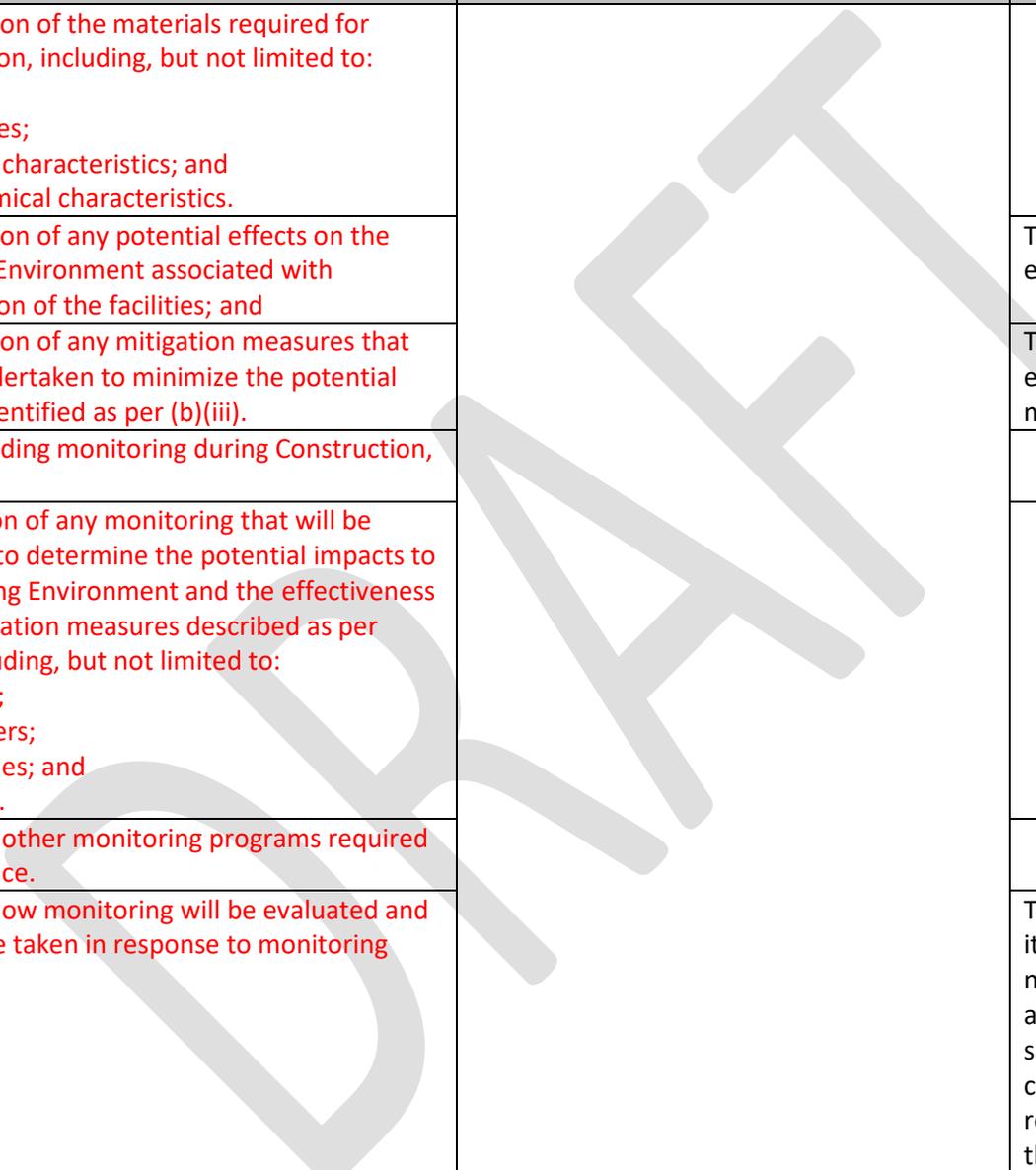
Notes on Schedules Overall
<p>The Standard Licence Conditions should be used as a reference when reviewing these draft Schedules, because they provide additional information about the use, purpose, limitations, and/or expectations associated with the individual licence conditions that are related to the draft schedule conditions below.</p>
<p>Schedules (or parts of schedules) that have already been approved as part of the current Standard Licence Conditions have not been included here and are not being considered for review at this time.</p>
<p>Not all conditions in this list are necessary for all licences, and project-specific terms and conditions or variations may be required.</p>

Schedule X: Conditions Applying to Security

	Condition	Rationale	Notes on Proposed Changes
1.	<p><u>Option 1: Single Deposit – New Licences, Amendments, Renewals, and Security Adjustments</u></p> <p>The amount of security referred to in Part C, condition X, shall total \$XX.</p> <p><u>Option 2: Phased Amounts</u></p> <p>The amount of security referred to in Part C, condition X, shall total \$XX, as per the following schedule:</p> <p>EXAMPLES:</p> <p>a) Maintain the security of Following issuance of this Licence, \$XX as previously required by Water Licence XXX;</p> <p>b) Upon issuance of this Licence, post and maintain Within X days of issuance of this Licence, [\$XX or an additional \$XX] for a total of \$XX;</p> <p>c) Prior to commencement of [enter: activity, Construction of X, etc.], post and maintain an additional \$XX for a total of \$XX;</p> <p>d) [60 or 90] days prior to commencement of [enter: activity, Construction of X, etc.], post and maintain an additional \$XX for a total of \$XX;</p>	<p>This condition sets out the amount of the security deposit that must be posted by the Licensee as per Part C.</p> <p>Option 1 will be used for licences with a single deposit.</p> <p>Variations and combinations of Option 2 will be used for new licences with phased deposits, and for renewals and amendments with additional and/or phased deposits. For renewals, Option 2(a) will be used to reflect any security that has already been posted as required under the previous licence; this will also be reflected in the Board’s Reasons for Decision.</p> <p>(See the POST SECURITY DEPOSIT condition in Part C of the Standard Water Licence Conditions Template.)</p>	<p>The proposed revisions to this condition reduce duplication with the conditions in Part C, which require the licensee to post and maintain security, and clarify the purpose of this schedule, which is to set out the amount of security required.</p> <p>The subtotals have been removed from the phases in Option 2, because the order of the phases could change, rendering these subtotals incorrect.</p> <p>Where timelines for posting security are applied (e.g., Option 2(b) and (d)), the timeline is often set at 90 days; however, please provide suggestions on a reasonable timeline to accommodate the review and acceptance of the security by the Minister. ‘Upon issuance’ has been changed to ‘following issuance’ in 2(a). This is consistent with Option 1 and is intended to address concerns about compliance if the posting of security is not completed immediately when the licence is issued, which may be due to factors outside of the licensee’s control, such as the Minister’s response time. Note that the licence condition still states that the licensee cannot begin activities until the security is posted.</p>

Schedule X: Conditions Applying to Construction

	Condition	Rationale	Notes on Proposed Changes
1.	The Structure Description and Construction Plan referred to in Part E, Condition 1 shall include, but not be limited to, the following:	This condition sets out the information requirements for Structure Description and Construction Plans for non-engineered water and waste management structures. The level of detail provided should be appropriate to the scale and nature of the structure.	This draft list is based on the Design and Construction Plan list for Engineered Structures. There were no examples to consider, since this type of Plan is a new requirement in the Standard Licence Conditions Template.
	a) Information regarding the facilities:		
	i. A description of the facilities to be constructed, including the purpose of the facilities;	(See the STRUCTURE DESCRIPTION AND CONSTRUCTION PLAN condition in Part E of the Standard Water Licence Conditions Template .)	
	ii. The proposed location(s) of the facilities, with GPS coordinates and a map to scale;		
	iii. Relevant background information for the area beneath the footprint of the facilities, including the results of any investigations;		
	iv. Construction specifications and performance parameters;		
	v. A description of any operations and maintenance requirements associated with the facilities; and		
	vi. An explanation of why the facilities do not need to be designed by a Professional Engineer.		
	b) Information regarding the Construction of the facilities:		
	i. A Construction schedule, including sequencing information;		

	Condition	Rationale	Notes on Proposed Changes
	ii. A description of the materials required for Construction, including, but not limited to: <ul style="list-style-type: none"> a. sources; b. quantities; c. physical characteristics; and d. geochemical characteristics. 		
	iii. A description of any potential effects on the Receiving Environment associated with Construction of the facilities; and		This requirement encompasses all potential effects, both positive and negative.
	iv. A description of any mitigation measures that will be undertaken to minimize the potential impacts identified as per (b)(iii).		This requirement would apply to negative effects (impacts), which typically require management and/or mitigation measures.
	c) Information regarding monitoring during Construction, including:		
	i. A description of any monitoring that will be conducted to determine the potential impacts to the Receiving Environment and the effectiveness of the mitigation measures described as per (b)(iv), including, but not limited to: <ul style="list-style-type: none"> a. locations; b. parameters; c. frequencies; and d. rationale. 		
	ii. Linkages to other monitoring programs required in this Licence.		
	d) A description of how monitoring will be evaluated and what actions may be taken in response to monitoring results.		This item is more general than the parallel item in the Design and Construction Plan. It is not necessary to require the development of action levels and response plans for these smaller structures; however, if monitoring is conducted, the licensee should still be required to explain how they will respond to the monitoring results.

	Condition	Rationale	Notes on Proposed Changes
2.	The Design and Construction Plans referred to in Part E, Condition X shall include, but not be limited to, the following:	This condition sets out the information requirements for Design and Construction Plans for Engineered Structures.	
	a) Information regarding the design of the facilities:		
	i. A description of the facilities to be constructed;	Some licences may only have a general schedule condition for all Design and Construction Plans, while others may require a general condition and/or conditions for specific Engineered Structures. (See the DESIGN AND CONSTRUCTION PLAN condition in Part E of the Standard Water Licence Conditions Template .)	
	ii. The proposed location(s) of the facilities, with GPS coordinates and a map to scale;		
	iii. Relevant background information for the area beneath the footprint of the facilities, as deemed adequate by the Professional Engineer responsible for the design, including: a. the results and data from geotechnical and geochemical investigations; hydrogeological investigations ; and programs to characterize soil, rock, Groundwater, ground ice, and ground temperature conditions to the depth expected to be affected by the proposed facilities; and b. any other relevant information.		
	iv. A design alternatives analysis;		
	v. Design specifications and performance parameters [if required by this Licence, enter and quantifiable performance objectives as established by the Engineer of Record];		This has primarily been required for landfill covers in the past; however, it is proposed here as a more general requirement. This approach could improve clarity regarding preliminary screening exemptions if alternatives that were considered during the regulatory process need to be reconsidered at a later date.
	vi. Stability analyses;		The proposed revisions link this requirement to the condition QUANTIFIABLE PERFORMANCE OBJECTIVES if applicable.
	vii. A description of how the design has been optimized for Closure and Reclamation;		This requirement replaces a previous requirement in licences to optimize

	Condition	Rationale	Notes on Proposed Changes
			structures for closure (see ENTER STRUCTURE/FACILITY NAME condition in the Operation of Structures and Facilities subsection of Part F). As a component of a licence condition, this requirement was vague and not quantifiable or enforceable. As a component of an approved plan, the details provided by the licensee are enforceable.
viii.	A description of how climate change projections and considerations have been incorporated into the design;		Similar requirements are proposed for all design and management plans. This information requirement is consistent with current LWB expectations.
ix.	A description of any instrumentation that will be installed as part of the facilities, including locations and rationale; and		
x.	A description of any operations and maintenance requirements associated with the design of the facilities.		Staff notes for this condition will remind Board staff to minimize overlap with other plans when developing draft licences.
	b) Information regarding the Construction of the facilities:		
i.	A Construction schedule, including sequencing information;		
ii.	A description of the materials required for Construction, including, but not limited to: a. sources; b. quantities; c. physical characteristics; and d. geochemical characteristics.		
iii.	A description of any potential effects on the Receiving Environment associated with Construction of the facilities; and		This requirement encompasses all potential effects, both positive and negative. The proposed revision limits this description to effects associated with construction. Potential effects associated with the operation and closure of the facilities should

	Condition	Rationale	Notes on Proposed Changes
			<p>be described in other plans. Note that the overall potential effects over the life of the facilities will have been presented in the application and considered in the preliminary screening.</p>
iv.	<p>A description of any mitigation measures that will be undertaken to minimize the potential impacts identified above.</p>		<p>This requirement would apply to negative effects (impacts), which typically require management and/or mitigation measures.</p>
	<p>c) Information regarding monitoring during Construction [and operation], including:</p>		<p>The proposed standard monitoring requirements included here represent the compilation of various specific and non-specific monitoring requirements from design and management plan schedules in licences recently issued by the LWBs.</p> <p>The monitoring set out here could include operational monitoring if no post-construction management or O&M plan will be in place for the facilities.</p> <p>Staff notes for this condition will remind Board staff to minimize overlap with other plans when developing draft licences.</p>
i.	<p>A description of any monitoring that will be conducted to detect potential impacts to the Receiving Environment and evaluate the effectiveness of the mitigation measures described above, including, but not limited to:</p> <ul style="list-style-type: none"> a. locations; b. parameters; c. frequencies; and d. rationale. 		

	Condition	Rationale	Notes on Proposed Changes
	ii. Linkages to other monitoring programs required in this Licence.		
	d) Information regarding responses to monitoring results during Construction, including:		Revised to reflect current standard language, which replaces the adaptive management language that has typically been used in the past for these types of design plans. Staff notes for this condition will remind Board staff to minimize overlap with other plans when developing draft licences.
	i. Definitions, with rationale, for Action Levels applicable to the performance of the mitigation measures; and		
	ii. For each Action Level, a description of how exceedances of the Action Level will be assessed and, generally, which types of actions may be taken by the Licensee if the Action Level is exceeded.		
	e) A Quality Control Plan stamped by a Professional Engineer, a component of which includes a plan for a Professional Engineer to supervise and field check Construction activities.		

Schedule X: Conditions Applying to Water and Waste Management

All conditions in this draft Schedule are linked to the [ENTER PLAN NAME] condition in Part F of the [Standard Water Licence Conditions Template](#).

	Condition	Rationale	Notes on Proposed Changes
1.	The Water and Wastewater Management Plan , referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following information:	This condition sets out the information requirements for a Water and Wastewater Management Plan. The level of detail provided should be appropriate to the scale and nature of a project.	
	a) Information regarding Water and Wastewater management, including:		
	i. A summary, with appropriate maps or diagrams, of all the Water and Wastewater streams and management system(s); A summary, with appropriate maps or diagrams, of the components of the Water	There may be some overlap with other plans (e.g., facility O&M Plans, Tailings Management Plan, Waste Rock Management Plan), since specific facilities will have Water and Wastewater	The proposed revisions remove the assumption that there is a central system that all water and/or wastewater streams report to, which is not necessarily the case on all sites.

	Condition	Rationale	Notes on Proposed Changes
	management system and all the Water and Wastewater streams that report to it;	<p>management systems. An overview of the entire Project should be presented here, with details of specific systems in other relevant plans.</p> <p>Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.</p> <p>This Plan is typically not required for municipalities, since this information is provided through O&M plans.</p>	
ii.	A description of the processes and facilities intended for the purposes of obtaining fresh/raw Water from [insert Water source(s)] for use at the Project;		Removed fresh/raw for consistency with Part D.
iii.	A description of the processes and facilities for the collection, storage and management of surface Runoff generated on site;		This could include runoff that isn't classified as waste, but still requires some management (e.g. erosion control).
iv.	A description of the processes and facilities for the collection, storage and management of any Wastewater resulting from the Project, including a description of procedures that will be employed to minimize the quantity of Wastewater;		Note that this includes seepage, because seepage is included in the definition of wastewater.
v.	A description of the processes and facilities for the treatment and Discharge of treated Effluent to the Receiving Environment, including a description of procedures that will be employed to minimize the quantity of Effluent discharged to the Receiving Environment; and		Effluent is addressed separately here to specifically identify wastewater that is discharged to the receiving environment.
vi.	<p>A description of the processes and facilities for the collection, storage and management of any Water or Wastewater related to the Waste Rock Storage Areas, including:</p> <ol style="list-style-type: none"> Identification of all potential sources of drainage from each storage site and the distance to the downstream Receiving Environment; A detailed description, including a map or diagram, of the structures intended to contain, withhold, divert, or retain Water or Wastes related to the Waste Rock Storage 		Propose to remove 'treated,' because the effluent may or may not require treatment to meet any specified criteria for discharge.
		To compile all of the detailed water and wastewater management information in one place, this list of information requirements was transferred here from the Waste Rock Management Plan, so it is new to this Plan, but is not a new set of standard information requirements. A summary of water and wastewater management related to Waste Rock and linkages to this Plan are still required in the Waste Rock Management Plan.	

	Condition	Rationale	Notes on Proposed Changes
	<p>Facilities, and their predicted performance in terms of flow, capacity, and Water quality parameters;</p> <p>c. A summary of proposed contingency measures for controlling runoff and Seepage Water volume, routing, and quality; and</p> <p>d. Any linkages to activities described in the Waste Rock Management Plan.</p>		<p>Removed 'contingency' from (vi)(c) because measures for controlling seepage and runoff are not necessarily contingencies.</p>
vii.	<p>Predicted overall Water balance for the Project, including:</p> <p>a. Detailed Water balances for [list specific facilities if required];</p> <p>b. A description of when the Water balance will be recalculated; and</p> <p>c. A description of when changes to the Water balance will require updates to the Water and Wastewater Management Plan.</p>		<p>Annual reviews of management plans are required, but this Plan should not be updated only to account for minor updates to the water balance that don't affect water management. Water balance reporting is already required in the Annual Water Licence Report, so updates to water balance predictions should only be made when the Water Management Plan is updated for other reasons, or when changes to the water balance are significant enough to affect how water is managed.</p> <p>To address this, the proposed revisions include a requirement for a description of when changes to the water balance will require changes to the Plan.</p>
viii.	<p>A description of procedures that will be employed to minimize the quantity of Waste Discharged to the Receiving Environment;</p>		<p>This requirement is consistent with LWB policies and the overall objective for Part F, but it has been combined into the descriptions of processes and facilities above ((a)(iv) and (v)).</p>
ix.	<p>A description of how climate change has been considered, including any linkages to other plans required under this Licence; and</p>		<p>Similar requirements are proposed for all design and management plans. This</p>

	Condition	Rationale	Notes on Proposed Changes
			information requirement is consistent with current LWB expectations.
x.	Any other information required to describe how Water and Wastewater will be managed such that the objectives listed in Part F, Condition 1 will be met.		
b)	Information related to Drawdown/Dewatering activities, including:		This section will only be included when the scope of the licence includes drawdown and/or dewatering activities. In some cases, a separate Drawdown/Dewatering Plan may be required.
i.	Volume of water produced by Drawdown/Dewatering from each Water source;		
ii.	A schedule for Drawdown/Dewatering, including daily flow rates;		
iii.	Pumping methods, including locations of intake and outflow structures;		
iv.	The frequency, location, and procedures for monitoring flow rates;		
v.	The design of the pipeline, diffusers, and related facilities, with appropriate maps or diagrams of the components;		
vi.	A description of, and any mitigation measures for, any predicted hydrological or water quality impacts to downstream Watercourse(s); and		
vii.	The procedures for inspecting any erosion along the affected Watercourse(s).		
	c) Information regarding monitoring, including:		
i.	Details of the monitoring, including rationale, that will be undertaken for each component of the Water management system, including:		Basic standard information requirements for monitoring have been added for consistency across management plans.

	Condition	Rationale	Notes on Proposed Changes
	<ul style="list-style-type: none"> a. monitoring locations, parameters, frequencies and duration, methods, and types of instrumentation; b. a map to scale, with monitoring locations; and c. predicted performance values for monitoring parameters based on expected facility design. 		
	ii. Linkages to other monitoring programs required under this Licence; and		
	iii. Any other information about monitoring that will be performed to meet the objectives listed in Part F, Condition 1.		
	d) Information regarding responses to monitoring results, including:		
	<ul style="list-style-type: none"> i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include: <ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to the performance of the water management system; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and, generally, which types of actions may be taken by the Licensee if the Action Level is exceeded. 		<p>This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.</p>
	<ul style="list-style-type: none"> ii. Action Level exceedances and actions taken during the year shall be reported in the Annual Report as per Part B, Condition X and Schedule 1, Condition X. 		<p>Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.</p>

	Condition	Rationale	Notes on Proposed Changes
	e) Information regarding contingency planning, including:		Contingency planning information requirements have been added to all management plans. This ensures that licensees and Inspectors have pre-approved response options immediately available in situations where a timely response is necessary. This reflects the limited legislated ability of the LWBs to sub-delegate their authority to the Inspectors for water use and waste deposit.
	i. A description of reasonably foreseeable scenarios; and		
	ii. For each scenario identified in (e)(i) above: a. A description of response action options; and b. A risk-based analysis of response action options, identifying preferred options and alternate options.		
2.	The Erosion and Sedimentation Management Plan referred to in Part F, Condition X shall include, but not be limited to, the following information:	<p>This condition sets out the information requirements for an Erosion and Sedimentation Management Plan.</p> <p>This Plan will only be required if significant erosion, sedimentation, and/or permafrost degradation potential or risk is identified in the regulatory process and the preliminary screening. In some cases, a separate Permafrost Protection Plan may be required; however, permafrost protection for engineered structures will typically be incorporated into the Design and Construction Plan.</p> <p>Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.</p>	<p>References to phase/activities of the project have been removed from this Plan, because they are not necessary and could be mis-interpreted depending on the nature of the project (e.g. if specific phases are not identified or overlap). The Plan should cover the entire life of the project and can be revised as needed over the life of the project.</p> <p>Permafrost degradation is a proposed addition to this Plan. Where permafrost exists, degradation is often linked to erosion and sedimentation control. Permafrost can be removed from this condition if there is no permafrost (continuous or discontinuous) in the project area.</p>
	a) Information regarding erosion, sedimentation, and permafrost degradation potential and management, including:		
	i. A summary, with appropriate maps or diagrams of the Project site, identifying areas susceptible to erosion, sedimentation, and/or permafrost degradation;		

	Condition	Rationale	Notes on Proposed Changes
	ii. A description of the process and criteria for assessing the risk of erosion, sedimentation, and/or permafrost degradation;		
	iii. A description of the best management practices that will be employed for different Project activities and for different levels of assessed risk; and		
	iv. A description of Water management during [list activities];		This addition has been included as a consideration for projects where there is no Water and Wastewater Management Plan required for the project, and water management will be necessary to prevent erosion and sedimentation associated with particular activities (e.g., excavation during remediation projects).
	v. A description of how climate change has been considered, including any linkages to other plans required under this Licence; and		Similar requirements are proposed for all design and management plans. This information requirement is consistent with current LWB expectations.
	vi. Any other information required to describe how erosion and sediment release into the Receiving Environment, and permafrost degradation will be minimized.		
	b) Information regarding monitoring, including;		
	i. Details of the monitoring, including rationale, that will be undertaken with respect to the effectiveness and maintenance of erosion and sediment management practices, including; <ul style="list-style-type: none"> a. monitoring locations, parameters, frequencies, methods, and types of instrumentation; b. a map to scale, with monitoring locations; and 		Basic standard information requirements for monitoring have been added for consistency across management plans. Although remediation licences have typically specifically required stabilization and revegetation monitoring, a separate version of this condition was not developed for remediation licences. This type of monitoring is still captured under the general wording

	Condition	Rationale	Notes on Proposed Changes
	c. predicted performance values for monitoring parameters based on expected facility design.		proposed here, and not all remediation projects include stabilization and revegetation.
	ii. Linkages to other monitoring programs required under this Licence; and		
	iii. Any other information about monitoring that will be performed to meet the objectives in Part F, Condition 1.		
	c) Information regarding responses to monitoring results, including:		
	i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include: <ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to the performance of erosion and sedimentation control measures; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and generally, which types of actions will be taken for the Action Levels exceeded. 		This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
	ii. Action Level exceedances and actions taken during the year shall be reported in the Annual Report as per Part B, Condition X and Schedule 1, Condition X.		Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.
	d) Information regarding contingency planning, including:		Contingency planning information requirements have been added to all management plans. This ensures that licensees and Inspectors have pre-approved response options immediately available in situations where a timely response is
	i. A description of reasonably foreseeable scenarios; and		
	ii. For each scenario identified in (d)(i) above: <ul style="list-style-type: none"> a. A description of response action options; and 		

	Condition	Rationale	Notes on Proposed Changes
	b. A risk-based analysis of response action options, identifying preferred options and alternate options.		necessary. This reflects the limited legislated ability of the LWBs to sub-delegate their authority to the Inspectors for water use and waste deposit.
3.	The Explosives Management Plan referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following:	This condition sets out the information requirements for an Explosives Management Plan.	
	a) Information regarding explosives management, including:	Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.	Volume information has not been required here, since it is regulated by other agencies.
	i. A description, including appropriate maps and diagrams, of the facilities used for management and storage of explosives;		Added for consistency with other management plan information requirements.
	ii. A description of the mitigation approaches to be employed with respect to storage, handling, blasting, disposal, and spills;		The addition of 'disposal' is proposed to address waste and cover the full life cycle of explosive materials.
	iii. The predicted ammonium nitrate dissolution rate;		
	iv. A description of how climate change has been considered, including any linkages to other plans required under this Licence; and		Similar requirements are proposed for all design and management plans. This information requirement is consistent with current LWB expectations.
	v. Any other information required to describe how explosives will be managed such that the objectives listed in Part F, Condition 1 will be met.		
	b) Information regarding monitoring, including;		
	i. Details of the monitoring, including rationale, that will be undertaken to evaluate whether the mitigation approaches for storage, handling, and blasting procedures are effective, including;		Unlike (a)(ii) above, disposal was not added here, because disposal of unused explosives will typically entail removal from the site, which would not require monitoring.
			Basic standard information requirements for

	Condition	Rationale	Notes on Proposed Changes
	<ul style="list-style-type: none"> a. monitoring locations, parameters, frequencies, methods, and types of instrumentation; b. a map to scale, with monitoring locations; and c. predicted performance values for monitoring parameters based on expected facility design. 		monitoring have been added for consistency across management plans.
	ii. Linkages to other monitoring programs required under this Licence; and		
	iii. Any other information about monitoring that will be performed to meet the objectives in Part F, Condition 1.		
	c) Information regarding responses to monitoring results, including:		
	<ul style="list-style-type: none"> i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include: <ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to the performance of the mitigation measures; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and generally, which types of actions will be taken for the Action Levels exceeded. 		This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
	ii. Action Level exceedances and actions taken during the year shall be reported in the Annual Report as per Part B, Condition X and Schedule 1, Condition X.		Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.
	d) Information regarding contingency planning, including:		

	Condition	Rationale	Notes on Proposed Changes
	i. A description of reasonably foreseeable scenarios; and		Contingency planning information requirements have been added to all management plans. This ensures that licensees and Inspectors have pre-approved response options immediately available in situations where a timely response is necessary. This reflects the limited legislated ability of the LWBs to sub-delegate their authority to the Inspectors for water use and waste deposit.
	ii. For each scenario identified in (d)(i) above: a. A description of response action options; and b. A risk-based analysis of response action options, identifying preferred options and alternate options.		
4.	The Waste Rock Management Plan referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following:	This condition sets out the information requirements for a Waste Rock Management Plan. Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.	A basic outline is provided, but this condition will often require site-specific revisions and additions, depending on the type of mining and any identified potential for ARD/Metal Leaching.
	a) Information regarding Waste Rock management, including:		
	i. A description of the facilities used for the management and storage of Waste Rock, ore, overburden , and till, including: a. appropriate maps or diagrams; and b. descriptions of the construction methods that will be used to limit generation of acidic drainage and/or Metal Leaching.		
	ii. An annual schedule for till storage, ore stockpiling, and Waste Rock production, over the term of this Licence, including: a. Sources, tonnage, volume and destination of each rock type; and		Annual reviews of management plans are required, but this Plan should not be updated only to account for minor updates to the schedule that don't affect waste rock management. Reporting is already required in the Annual Water Licence Report, so updates to the schedule should only be made

	Condition	Rationale	Notes on Proposed Changes
	<p>b. A description of when changes to the schedule will require updates to the Waste Rock Management Plan.</p>		<p>when the Waste Rock Management Plan is updated for other reasons, or when changes to the schedule are significant enough to affect how rock is managed.</p> <p>To address this, the proposed revisions include a requirement for a description of when to the schedule will require changes to the Plan. This is similar to water balance information requirements in the Water and Wastewater Management Plan.</p>
iii.	<p>A description of the operational procedures that will be used to segregate and manage the Waste Rock and ore;</p>		
iv.	<p><u>Option 1:</u> A description of the geochemical criteria for classifying, managing, and placing Waste Rock and ore, including linkages to the Geochemical Characterization and Monitoring Plan referred to in Part F, Condition X;</p> <p>OR</p> <p><u>Option 2:</u> A description of geochemical characterization and management, including:</p> <ul style="list-style-type: none"> a. A characterization of rock types (mineralogy and geology of typical rock units), including assessment of potential for Acid/Alkaline Drainage and Metal Leaching; b. A description of the potential uses for each rock type; 		<p>If a separate Geochemical Characterization and Monitoring Plan is also required, the first option will be used to minimize overlap.</p> <p>If a separate Geochemical Characterization and Monitoring Plan is not required, but more information is needed about rock characterization and management, the second option will be used as a starting point and any site-specific details will be added.</p>

	Condition	Rationale	Notes on Proposed Changes
	<ul style="list-style-type: none"> c. A description of the geochemical criteria for classifying, managing, and placing Waste Rock and ore; and d. A description of the sampling program and analytical methods that will be used to support the operational classification and management of all rock types. 		
v.	<p>A summary of Water and Wastewater management for the Waste Rock Storage Facilities, with linkages to the Water and Wastewater Management Plan;</p> <p>A summary of Water management procedures, including:</p> <ul style="list-style-type: none"> a. Identification of all potential sources of drainage from each storage site and the distance to the downstream Receiving Environment; b. A detailed description, including a map or diagram, of the structures intended to contain, withhold, divert, or retain Water or Wastes related to the Waste Rock Storage Facilities, and their predicted performance in terms of flow, capacity, and Water quality parameters; c. A summary of proposed contingency measures for controlling runoff and Seepage Water volume, routing, and quality; and d. A summary of any linkages to activities described in the Water and Wastewater Management Plan. 		<p>Removed 'contingency' from (v)(c) because measures for controlling seepage and runoff are not necessarily contingencies.</p> <p>To compile all of the detailed water and wastewater management information in one place, the detailed list of information requirements was transferred to the Water and Wastewater Management Plan.</p>
vi.	<p>A description of how climate change has been considered, including any linkages to the Waste</p>		<p>Similar requirements are proposed for all design and management plans. This</p>

	Condition	Rationale	Notes on Proposed Changes
	<p>Rock Storage Facilities Design and Construction Plan(s) and other plans required under this Licence; and</p>		<p>information requirement is consistent with current LWB expectations.</p>
vii.	<p>Any other information required to describe how Waste Rock will be managed such that the objectives listed in Part F, Condition 1 of this Licence are achieved.</p>		
	<p>b) Information regarding monitoring activities:</p>		
i.	<p>Details of the monitoring, including rationale, that will be undertaken to evaluate geotechnical [and geochemical] stability, thermal characterization, Seepage quality and quantity, and Runoff for all Waste Rock Storage Facilities, including:</p> <ul style="list-style-type: none"> a. monitoring locations, parameters, frequency, methods, and types of instrumentation; b. a site map to scale with monitoring locations; and c. predicted performance values for monitoring parameters based on facility design. 		<p>Developed from a compilation of recently issued licences and proposed standard monitoring requirements for all management plans.</p> <p>Geochemical stability can be included here if a separate Geochemical Characterization and Monitoring Plan is not required.</p>
ii.	<p>Linkages to other monitoring programs required under this Licence; and</p>		
iii.	<p>Any other information about the monitoring that will be performed to meet the objectives in Part F, Condition 1.</p>		
	<p>c) Information regarding responses to monitoring results:</p>		
i.	<p>A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include:</p>		<p>This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate</p>

	Condition	Rationale	Notes on Proposed Changes
	<ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to the performance of erosion and sedimentation control measures; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and generally, which types of actions will be taken for the Action Levels exceeded. 		<p>general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.</p>
	<ul style="list-style-type: none"> ii. Action Level exceedances and actions taken during the year shall be reported in the Annual Report as per Part B, Condition X and Schedule 1, Condition X. 		<p>Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.</p>
	d) Information regarding contingency planning, including:		
	<ul style="list-style-type: none"> i. A description of reasonably foreseeable scenarios; and 		
	<ul style="list-style-type: none"> ii. For each scenario identified in (d)(i) above: <ul style="list-style-type: none"> a. A description of response action options; and b. A risk-based analysis of response action options, identifying preferred options and alternate options. 		<p>Contingency planning information requirements have been added to all management plans. This ensures that licensees and Inspectors have pre-approved response options immediately available in situations where a timely response is necessary. This reflects the limited legislated ability of the LWBs to sub-delegate their authority to the Inspectors for water use and waste deposit.</p>
5.	<p>The Geochemical Characterization and Monitoring Management Plan referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following:</p>	<p>This condition sets out the information requirements for a Geochemical Characterization and Monitoring Plan.</p> <p>Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.</p>	<p>A basic outline is provided here, but this condition will often require site-specific revisions and additions.</p> <p>Proposed standard contingency planning information requirements have not been added to this plan, because this is a monitoring plan rather than a management plan. Contingency planning will be addressed</p>

	Condition	Rationale	Notes on Proposed Changes
			in the associated management plan(s) (e.g., Waste Rock and Tailings Management Plans).
	a) Information regarding geochemical characterization, including:		
	i. <u>Option 1:</u> A summary of findings from previous geochemical characterization (Acid Rock Drainage/Metal Leaching potential) on [list types of materials (e.g., Waste Rock, Processed Kimberlite, overburden, etc.)] , including references and weblinks to previous reports; OR <u>Option 2:</u> A description of geochemical characterization studies to identify PAG materials and/or materials with Metal Leaching potential, including sampling frequencies, rock units, volumes, and test methods;		The first option will be used if geochemical characterization studies have already been completed. If geochemical characterization has not been conducted prior to licensing, the second option will be used.
	ii. A description of the geochemical characterization of overburden that will be used in Construction [and/or] for Closure and Reclamation, including specific measures to ensure that this material meets or exceeds the geochemical cut-off criteria defined for non-PAG;		This would typically be included if there is a plan to save and/or use overburden in construction or closure and reclamation, and overburden is identified as PAG.
	iii. Criteria, with rationale, for defining: a. PAG, non-PAG and Metal Leaching materials; and b. high, moderate, and low risk Waste Rock;		Generally, (iii)(b) will only be included for remediation projects.
	iv. Production schedules showing estimated volumes and tonnages of [list types of materials]		Generally, this will only be included for mining projects.

	Condition	Rationale	Notes on Proposed Changes
	<p>(e.g., Waste Rock, Tailings, Processed Kimberlite, overburden, etc.)) that will be produced each year over the duration of the Project.</p>		
	<p>b) Information regarding geochemical assessments inspections and supplemental monitoring, including:</p>		<p>The terminology in this subsection has been revised to reflect previous comments on the licence conditions regarding geochemical inspections.</p>
	<p>i. A description of geochemical assessments inspections, including visual inspections, and supplemental sampling and testing of [list types of materials to be tested (e.g., Waste Rock, Tailings, Processed Kimberlite, overburden, etc.)];</p>		
	<p>ii. A description of sampling and analysis of any Seepage or Runoff found outside of the Water management system (e.g., roads, rock pads etc.), or that does not report directly to an SNP monitoring station;</p>		
	<p>iii. A description of monitoring of the field test cells, including sampling frequency, field measurements, and analytical parameters;</p>		
	<p>iv. Linkages to other monitoring programs required under this Licence; and</p>		
	<p>v. Any other information about the monitoring that will be performed to meet the objectives in Part F, Condition 1.</p>		
	<p>b) Information regarding responses to monitoring results:</p>		
	<p>i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include:</p>		<p>This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an</p>

	Condition	Rationale	Notes on Proposed Changes
	<ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to the performance of this Plan with respect to geochemical stability as well as Seepage and Runoff quality and quantity; b. For each Action Level, a description of how exceedances of the Action Level will be assessed and, generally, which types of actions may be taken by the Licensee if the Action Level is exceeded; 		early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
	<ul style="list-style-type: none"> ii. Action Level exceedances and actions taken during the year shall be reported in the Annual Report as per Part B, Condition X and Schedule 1, Condition X. 		Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.
6.	The Tailings Management Plan referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following:	This condition sets out the information requirements for a Tailings Management Plan.	A basic outline is provided here, but this condition will often require site-specific revisions and additions.
	a) Information regarding Tailings management:		
	<ul style="list-style-type: none"> i. A description, with appropriate maps or diagrams, of the facilities used for Tailings management, including a description of the Waste streams that report to each facility; 	Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.	
	<ul style="list-style-type: none"> ii. A schedule showing the expected quantities and destinations for Tailings produced each year, including an evaluation of storage capacity over time for each Tailings Containment Facility; 		
	<ul style="list-style-type: none"> iii. A description of Tailings deposition procedures, including: <ul style="list-style-type: none"> a. details on any physical or chemical treatment applied to the Tailings before deposition; b. details on Tailings delivery and deposition methods; 		

	Condition	Rationale	Notes on Proposed Changes
	<ul style="list-style-type: none"> c. details on any deposition sequencing; d. details on any monitoring and recording conducted to confirm appropriate placement of Tailings; and e. any other information necessary to describe how Tailings are deposited; 		
	iv. A description of dust control measures for the Tailings Containment Facilities;		
	v. A summary of Water management for the Tailings Containment Facilities, with linkages to the Water and Wastewater Management Plan;		
	vi. A description of how climate change has been considered, including any linkages to the Tailings Containment Facilities Design and Construction Plan(s) and other plans required under this Licence; and		Similar requirements are proposed for all design and management plans. This information requirement is consistent with current LWB expectations.
	vii. Any other information required to describe how the Tailings will be managed such that the objectives listed in Part F, Condition 1 are achieved.		
	b) Information regarding monitoring, including:		
	<ul style="list-style-type: none"> i. Details and rationale for monitoring and inspections, including: <ul style="list-style-type: none"> a. [list types of monitoring required] for all Tailings facilities; b. monitoring locations, parameters, frequency, duration, methods, and types of instrumentation; c. a site map to scale with monitoring locations; and d. predicted performance values for monitoring parameters based on expected facility design. 		<p>Removed inspections because they are addressed in general conditions for inspection of engineered structures in Part F.</p> <p>Developed from a compilation of recently issued licences and proposed standard monitoring requirements for all management plans.</p>

	Condition	Rationale	Notes on Proposed Changes
	ii. Linkages to other monitoring programs required in this Licence; and		
	iii. Any other information about the monitoring that will be performed to meet the objectives in Part F, Condition 1.		
	c) Information regarding responses to monitoring results:		
	i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 of this Licence are met. This description shall include: <ul style="list-style-type: none"> a. Definitions, with rationale, of Action Levels applicable to the performance of the Tailings facilities with respect to monitored parameters; and, b. For each Action Level, a description of how exceedances of the Action Level will be assessed and generally which types of actions will be taken if the Action Level is exceeded. 		This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
	ii. Action Level exceedances and actions taken during the year shall be reported in the Annual Report as per Part B, Condition X and Schedule 1, Condition X.		Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.
	d) Information regarding contingency planning, including:		
	i. A description of reasonably foreseeable scenarios; and		Contingency planning information requirements have been added to all management plans. This ensures that licensees and Inspectors have pre-approved response options immediately available in situations where a timely response is necessary. This reflects the limited legislated ability of the LWBs to sub-delegate their

	Condition	Rationale	Notes on Proposed Changes
	ii. For each scenario identified in (d)(i) above: <ul style="list-style-type: none"> a. A description of response action options; and b. A risk-based analysis of response action options, identifying preferred options and alternate options. 		authority to the Inspectors for water use and waste deposit.
7.	The [insert facility name] Operations and Maintenance Plan referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following:	This condition sets out the information requirements for an Operations and Maintenance Plan.	
	a) Information regarding the facilities and operations, including:	This condition will typically not be used for Operations and Maintenance Plans for municipal licences or Hydrocarbon-Contaminated Soil Treatment Facilities, which have applicable templates and guidelines, respectively. It may be used in some cases for larger or new municipal facilities.	
	i. A description of the [insert facility name] and associated infrastructure;		
	ii. A description of the operating procedures for the [insert facility name] ;		
	iii. A description of the maintenance procedures and schedules for the [insert facility name] ; and		
	iv. A description of how climate change has been considered, including any linkages to the [insert facility name] Design and Construction Plan and other plans required under this Licence Measures for climate change preparation and adaptation.		Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.
	b) Information regarding surveillance and monitoring, including:		
	i. A description of the surveillance procedures and schedules for the [insert facility name] ;		Split into surveillance and monitoring components for consistency with other plans. Staff notes for this condition will remind Board staff to minimize overlap with licence

	Condition	Rationale	Notes on Proposed Changes
			conditions and other plans when developing draft licences.
	<p>ii. Details of the monitoring, including rationale, that will be undertaken for each component of the [insert facility name], including:</p> <ul style="list-style-type: none"> a. monitoring locations, parameters, frequencies, methods, and types of instrumentation; b. a map to scale, with monitoring locations; and c. predicted performance values for monitoring parameters based on expected facility design. <p>details of the monitoring procedures and schedules for the [insert facility name];</p>		Revised to match proposed standard monitoring requirements for management plans.
	<p>iii. Linkages to other monitoring programs and inspections required under this Licence.</p>		
	<p>c) Information regarding responses to monitoring, including:</p>		
	<p>i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include:</p> <ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to the performance of the [insert facility name]; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and, generally, which types of actions will be taken for the Action Levels exceeded. 		This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
	<p>d) Information regarding contingency planning, including:</p>		

	Condition	Rationale	Notes on Proposed Changes
	d) A description of contingency plans for the [insert facility name]; and		Revised to match proposed standard contingency requirements for management plans.
	i. A description of reasonably foreseeable scenarios; and		
	ii. For each scenario identified in (d)(i) above: a. A description of response action options; and b. A risk-based analysis of response action options, identifying preferred options and alternate options.		
	e) The details on how the Licensee will document and report on activities conducted under this Manual.		Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.
8.	The Water Quality Monitoring Plan referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following information:	This condition sets out the information requirements for a Water Quality Monitoring Plan.	
	a) Information regarding site conditions:		
	i. A description of the surface hydrology, including appropriate maps and diagrams, as assessed by a Professional Engineer, hydrologist, hydrogeologist, or equivalent professional;	This Plan may be required when an extensive AEMP is not necessary, but supplemental water quality monitoring is needed to identify potential impacts in the aquatic Receiving Environment (e.g., HCSTF or advanced mineral exploration projects). Depending on the nature and scale of required monitoring, the monitoring may be described in a Water and Wastewater Management Plan, rather than in a separate Water Quality Monitoring Plan. The need for one or both of these Plans will be determined during the regulatory process.	Removed Professional Engineer, since they would not necessarily be qualified to assess hydrology or hydrogeology. Hydrologists and hydrogeologists are not certified/registered professionals in Canada (or the NWT), so these will usually not be defined terms.
	ii. A description of the underlying and surrounding hydrogeology, including appropriate maps and flow diagrams, as assessed by a Professional Engineer, hydrologist, hydrogeologist, or equivalent professional;		
	iii. A summary of baseline data including: a. Baseline data collected to date; b. Identification of baseline data gaps; and		

	Condition	Rationale	Notes on Proposed Changes
	c. A description of methods for filling in baseline data gaps or methods for approximating baseline conditions if necessary.	This Plan could include surface water, wastewater, and groundwater. If groundwater monitoring is extensive, a separate Groundwater Monitoring Plan may be required. Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.	
iv.	A summary of the potential impacts from Project-related activities on the Receiving Environment, and any associated mitigation measures;		Removed, since this information should be in other plans. Although a brief summary could be included here, it is important to limit the potential for inconsistencies between approved plans and to reduce the need to update multiple plans to reflect changes.
v.	A summary of how all site Water and Wastewater will be managed;		Removed, since this information should be in other plans. Although a brief summary could be included here, it is important to limit the potential for inconsistencies between approved plans and to reduce the need to update multiple plans to reflect changes.
	b) Information regarding monitoring:		
i.	Identification, with rationale, of parameters of concern that should be used as indicators of potential impacts from Project-related activities on the aquatic Receiving Environment;		Revised to limit these information requirements to the 'aquatic' receiving environment, because the legislated purpose of licences is to protect water, and primary objective of Water and Effluent Quality Policy is to protect water quality in the receiving environment.
ii.	A description, with rationale, of the site-specific monitoring activities required to identify impacts from Project-related activities on the aquatic Receiving Environment;		
iii.	A description of monitoring protocols, methodologies, parameters, and frequencies specific to each type of monitoring identified in (b) (ii) above;		
iv.	Site map(s) and attached table or detailed legend, illustrating monitoring and sampling locations; and		

	Condition	Rationale	Notes on Proposed Changes
	v. A description of the quality assurance and quality control measures followed for each monitoring type;		
	c) Information regarding responses to monitoring results:		
	i. A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include: <ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels for each parameter of concern; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and, generally, which types of actions will be taken for the Action Level exceeded. 		This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g., small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
	ii. Action level exceedances and actions taken during the year shall be reported in the Annual Water Licence Report as per Part B, Condition X and Schedule 1, Condition X.		Removed, because reporting is required for each plan in the Annual Water Licence Report standard schedule.
9.	The Groundwater Monitoring Plan , referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following information:	This condition sets out the information requirements for a Groundwater Monitoring Plan.	
	a) Information regarding Groundwater conditions:		
	i. A description of the underlying and surrounding hydrogeology, including appropriate maps and flow diagrams [that depict seasonal variations and/or interactions between Groundwater and surface Water], as assessed by a Professional Engineer, hydrologist, hydrogeologist, or equivalent professional; and	Depending on the nature and scale of required monitoring, Groundwater monitoring may be described in a Water and Wastewater Management Plan, or an overall Water Quality Monitoring Plan, rather than in a separate Groundwater Monitoring Plan.	Removed Professional Engineer, since they would not necessarily be qualified to assess hydrology or hydrogeology. Hydrologists and hydrogeologists are not certified/registered professionals in Canada (or the NWT), so these will usually not be defined terms.

	Condition	Rationale	Notes on Proposed Changes
ii.	<p>A summary of baseline data including:</p> <ul style="list-style-type: none"> a. Baseline data collected to date; b. Identification of baseline data gaps; and c. A description of methods for filling in baseline data gaps or methods for approximating baseline conditions if necessary. <p>A summary of baseline Groundwater monitoring information, and a plan to collect additional information necessary to establish baseline conditions; and</p>	<p>The need for any of these Plans will be determined during the regulatory process.</p> <p>Reporting on the activities conducted under this Plan is included in the Annual Water Licence Report Schedule.</p>	
ii.	<p>A description of how any Groundwater encountered during development of [list project components] will be managed;</p>		<p>Removed, since this should be described in a Water and Wastewater Management Plan, which has a separate standard schedule. Although a summary could be included here, it is important to limit the potential for inconsistencies between approved plans and to reduce the need to update multiple plans to reflect changes.</p>
b)	<p>Information regarding monitoring:</p>		
i.	<p>Identification, with rationale, of parameters of concern that should be used as indicators of potential impacts from Project-related activities on the aquatic Receiving Environment;</p>		<p>This proposed addition is consistent with the requirements of the Water Quality Monitoring Plan above.</p>
ii.	<p>A description, including detailed rationale, of the site-specific Groundwater monitoring activities required to identify Project-related impacts on Groundwater quality and quantity;</p>		
iii.	<p>The location and purpose, with rationale, of all existing and proposed Groundwater monitoring stations, including a map, as provided by Professional Engineer, hydrologist, hydrogeologist, or equivalent professional;</p>		

	Condition	Rationale	Notes on Proposed Changes
iv.	A description of monitoring protocols, methodologies, parameters, and frequencies specific to each type of monitoring identified in item (b)(i) above; and		
v.	A description of the quality assurance and quality control measures followed for each monitoring type;		
vi.	Linkages to other monitoring programs required under this Licence; and		Added for consistency with other standard plan requirements.
vii.	Any other information about the monitoring that will be performed to meet the objectives in Part F, Condition 1.		Added for consistency with other standard plan requirements.
b) Information regarding responses to monitoring results:			
i.	A description of how the results of Groundwater monitoring will be compared to quantity and quality predictions, and used to update predictions as required;		
ii.	A description of how the Licensee will link the results of monitoring to those corrective actions necessary to ensure that the objectives listed in Part F, Condition 1 are met. This description shall include: <ul style="list-style-type: none"> a. Definitions, with rationale, for Action Levels applicable to groundwater quality and quantity; and b. For each Action Level, a description of how exceedances of the Action Level will be assessed and generally, which types of actions will be taken for the Action Level exceeded. 		This standard wording will be included for all management plans unless there is rationale for not needing action levels in a particular plan (e.g. small projects, or project-specific rationale). The purpose is to establish an early warning system and appropriate general responses to prevent effects in the receiving environment. Generally, for management plans, response plans (like those required for AEMPs) are not necessary unless a project-specific need is identified – reporting in the Annual Water Licence Report is adequate.
iii.	Action level exceedances and actions taken during the year shall be reported in the Annual		Removed, because reporting is required for each plan in the Annual Water Licence Report

	Condition	Rationale	Notes on Proposed Changes
	Water Licence Report as per Part B, Condition X and Schedule 1, Condition X.		standard schedule.
10.	The Construction/Post-Construction Monitoring Plan referred to in Part F, Condition X of this Licence, shall include, but not be limited to, the following:		Removed. These Plans have often been included in licences for remediation projects; however, the information typically required in these plans should be included in other standard plans (i.e. Design and Construction Plans, Water and Wastewater Management Plans, Water Quality Monitoring Plans, etc.) for consistency with other types of projects.
11.	The Long-term Monitoring Plan, referred to in Part F, Condition X of this Licence shall include, but not be limited to, the following:		Removed. This Plan has often been included in licences for remediation projects; however, the intent of this Plan is captured in the standard Post-Closure Monitoring and Maintenance Plan. A separate Plan for remediation projects is not required.

Schedule X: Conditions Applying to Closure and Reclamation

	Condition	Rationale	Notes on Proposed Changes
1.	The Closure and Reclamation Plan referred to in Part I, Condition x of this Licence shall include, but not be limited to the following information:	-	Standard conditions for this Plan have already been finalized and are not included here. To see the approved information requirements for this Plan, please see the Standard Water Licence Conditions Template .
2.	<u>Option 1:</u> The component-specific Closure and Reclamation Plan referred to in Part I, Condition x shall include, but not be limited to, the applicable contents of Tables 8.1 and 8.2 of Environment and Climate Change Canada's <i>Solid Waste Management for Northern and Remote Communities: Planning and Technical Guidance Document</i> .	-	Standard conditions for this Plan have already been finalized and are not included here. To see the approved information requirements for this Plan, please see the Standard Water Licence Conditions Template .

	Condition	Rationale	Notes on Proposed Changes
	<p>OR</p> <p><u>Option 2:</u> The component-specific Closure and Reclamation Plan referred to in Part I, Condition X of this Licence shall include, but not be limited to, the following information:</p>		
3.	<p>The Post-Closure and Reclamation Monitoring and Maintenance Plan referred to in Part I, Condition X of this Licence shall include, but not be limited to the following information:</p>	<p>This condition details the information requirements for Post-Closure and Reclamation Monitoring and Maintenance Plans.</p> <p>The results of the activities carried out under this Plan will be reported as set out in the approved Plan. At a minimum, these results must be reported in the Performance Assessment Report(s).</p> <p>(See the POST-CLOSURE and RECLAMATION MONITORING AND MAINTENANCE PLAN condition in Part I of the Standard Water Licence Conditions Template.)</p>	<p>At this time, this condition is included primarily for the purpose of soliciting input on expectations for this Plan and to determine whether a standard condition can be developed. This draft condition is very preliminary and reflects minimum requirements in a simple scenario where the Plan is submitted after all approved closure activities have been completed.</p> <p>If a standard schedule is developed, it should be noted that this condition will often require site-specific revisions and additions. It should also be noted that information requirements may be different in scenarios where component-specific versions of the Plan are required following progressive reclamation.</p> <p>Very few examples of this Plan exist in licences issued by the LWBs to date. The Long-term Monitoring Plan required in some existing remediation licences is similar in intent to the Post-Closure Monitoring and Maintenance Plan, so those conditions were also considered in developing these information requirements.</p>

	Condition	Rationale	Notes on Proposed Changes
			The format was revised to fit with the general wording, structure, and grouping of information requirements set out in other schedules for plans.
	a) Information regarding site conditions:		
	i. A summary of completed Closure and Reclamation activities, including links to Closure and Reclamation Completion Reports;		
	ii. A list of the Closure Objectives and Criteria for completed Closure and Reclamation activities;		
	iii. A list of all components, Closure Objectives, and Closure Criteria that require monitoring, surveillance, and/or inspections;		
	iv. A list of all components that require geotechnical inspections by a Professional Engineer;		
	v. For all structures identified in (a)(iii) that meet the definition of a Dam: a. A description of the Dam; b. A consequence assessment; and c. The current classification of the Dam.		
	b) Information regarding monitoring:		
	i. A description, including detailed rationale, of the site-specific monitoring activities required to evaluate the Closure Objectives and Criteria for the Project, including links to the approved Closure and Reclamation Plan;		
	ii. A description of monitoring protocols, methodologies, parameters, frequency, and duration specific to each type of monitoring identified in (i) above;		

	Condition	Rationale	Notes on Proposed Changes
	iii. Site map(s) and attached table or detailed legend, illustrating monitoring and sampling locations; and		
	iv. A description of the quality assurance and quality control measures followed for each monitoring type.		
	c) Information regarding responses to monitoring results:		
	i. A description of how the Licensee will evaluate the monitoring results against the Closure Objectives and Criteria for the Project;		
	ii. A description of how the Licensee will link the results of monitoring to the implementation of contingencies, revisions to the Plan, and/or other necessary response actions.		The language proposed here is different than other standard plans, because the licensee may not always be proposing corrective actions. For example, post-closure, the licensee may be proposing responses to conditions that are improving, but are slower/different than anticipated, or may be proposing different/less frequent monitoring due to improving conditions.
	c) Information regarding surveillance and inspections:		
	i. A description, including detailed rationale, of the method and schedule for surveillance and inspections for each component identified in (a)(iii);		
	ii. A description, including detailed rationale, of the schedule for geotechnical inspections for each component identified in (a)(iv); and		
	iii. A description, including detailed rationale, of the schedule for Dam Safety Reviews for each component identified in (a)(v).		

	Condition	Rationale	Notes on Proposed Changes
	e) Information about responses to surveillance and inspections:		
	i. A description of how the Licensee will evaluate the results of surveillance and inspections against the Closure Objectives and Criteria for the Project; and		
	ii. A description of how the Licensee will link the results of surveillance and inspections to the implementation of contingencies, revisions to the Plan, and/or any other necessary response actions.		
	f) Information regarding maintenance:		
	i. A description and schedule of routine maintenance work to be conducted at the site;		
	ii. A description of the expected timeline for routine maintenance, including a description of how the Licensee will determine when routine maintenance is no longer required;		Routine maintenance should not be required in perpetuity in most cases.
	iii. A description of reasonably likely non-routine maintenance work that may be required, with linkages to other plans required under this Licence;		
	iv. A description of how and when the Licensee will notify the Board and the Inspector of any proposed non-routine maintenance work;		
	v. A description of any potential impacts to the Receiving Environment during routine maintenance work;		
	vi. A detailed description of any measures used to prevent or mitigate impacts to the Receiving		

	Condition	Rationale	Notes on Proposed Changes
	Environment during routine maintenance work; and		
	vii. A description of any monitoring including, but not limited to, sampling locations, parameters measured and frequencies of sampling to be carried out during maintenance activities to determine impacts to the Receiving Environment.		
	g) A description of how the results of the activities carried out under this Plan will be reported.		At a minimum, this must include the Performance Assessment Reports; however, more frequent updates may be appropriate in some cases, so this addition allows some flexibility.

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