

## Review Comment Table

<b>Board:</b>	SLWB
<b>Review Item:</b>	S17L1-004 S17P-005 - Enbridge - Closure and Reclamation Plan - Version 1.0
<b>File(s):</b>	<a href="#">S17L1-004</a>
<b>Proponent:</b>	Enbridge Pipelines (NW) Inc.
<b>Document(s):</b>	<a href="#">Closure and Reclamation Plan Version 1.0</a> (2 MB)
<b>Item For Review Distributed On:</b>	Mar 1 at 11:06 <a href="#">Distribution List</a>
<b>Reviewer Comments Due By:</b>	Mar 12, 2018
<b>Proponent Responses Due By:</b>	Mar 19, 2018
<b>Item Description:</b>	<p>Enbridge Pipelines (NW) Inc. has submitted Version 1.0 of its Closure and Reclamation Plan in accordance with Part I, condition 1 of Licence <a href="#">S17L1-004</a>. This Plan is for Board approval.</p> <p>Reviewers are invited to submit questions, comments, and recommendations on the Closure and Reclamation Plan by March 12, 2018.</p> <p>If you have questions or comments regarding this review or the Online Review System, please contact Sabrina Sturman at (867) 598- 2413 ext 224 or <a href="mailto:sabrina.sturman@slwb.com">sabrina.sturman@slwb.com</a>.</p>
<b>Contact Information:</b>	Sabrina Sturman 867-598-2413

## Comment Summary

GNWT - ENR: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	Topic 1: Revegetation	<p><b>Comment</b> ENR notes that there are several criteria outlined regarding successful natural revegetation in Table 3 such as: . No large bare areas observed where vegetation should be present; . Species composition consistent with the</p>	<p><b>Mar 20:</b> Vegetation will be assessed based on the following criteria and based on the professional judgement of the assessor: - Vegetation cover is established with overall consistency across the site - No significant bare areas</p>	

		<p>surrounding representative area; . Average desirable vegetation density comparable to the surrounding representative area (the existing ROW); and . Overall vegetation health similar to surrounding representative area (the existing ROW) It is not clear how all these criteria will be assessed on the site. For example, what would be the "average desirable vegetation density" and can these be quantified? Similarly, it is not clear how "overall vegetation health" will be assessed and compared to the surrounding area.</p> <p><b>Recommendation 1)</b> ENR recommends that Enbridge provide additional quantitative detail on criteria related to how the success of natural revegetation will be measured. Specifically, as it related to the “average desirable vegetation density” and “overall vegetation health”.</p>	<p>observed - Vegetation health is comparable to the land type within the vicinity of the project site. Enbridge notes that the project activities took place in rock and cobble areas where there was limited vegetation. Access areas were maintained with snow pack to protect the underlying vegetation.</p>	
2	<p>Topic 2: Part 5.3: Post-Closure Monitoring, Maintenance, and Reporting</p>	<p><b>Comment</b> Information regarding water quality of lakes and rivers in the Northwest Territories (NWT) that is collected on a regular basis by industry, as part of their various monitoring programs, represents a significant source of water quality knowledge. This type of information can inform decision makers regarding trends and natural variation in water quality in the NWT, as well as the cumulative effects</p>	<p><b>Mar 20:</b> Enbridge only collected field measurements of turbidity during the Project. This information can be provided to the Board upon request.</p>	

		<p>from multiple use activities within an area or region. However, in order to use such information, to understand water quality conditions in the NWT, the information must first be available in an accessible format.</p> <p><b>Recommendation 1)</b> ENR recommends that Enbridge Pipelines (NW) Inc. submit all water quality data associated with their Closure and Reclamation Plan report(s) to the Board for posting on the public registry in an accessible format (e.g., csv or spreadsheet file).</p>		
3	Topic 3: Metadata Template	<p><b>Comment</b> It is important to provide metadata that provides context for the water quality data. Metadata refers to a description of data that was collected as part of a water quality sampling program, and includes field conditions and a description of laboratory analyses conducted. Metadata standards are required to ensure the proper use and interpretation of the data by the users.</p> <p><b>Recommendation 1)</b> ENR recommends that Enbridge Pipelines (NW) Inc. complete the attached metadata template in the same spreadsheet as the associated water quality data and submit this information to the Board for posting in the public registry in an accessible format (e.g., csv or spreadsheet file).</p>	<b>Mar 20:</b> See above.	

4	General File	<b>Comment</b> ( <a href="#">doc</a> ) ENR Letter with Comments and Recommendations <b>Recommendation</b> ENR Letter with Comments and Recommendations		
<b>Sahtu Renewable Resource Board: Colin Macdonald</b>				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	General Report	<b>Comment</b> After Line 21 maintenance at the Saline River, Enbridge proposes to return the local environment to pre-disturbance condition and has experience to do so from the construction and maintenance of the pipeline. The Closure and Reclamation Plan (CRP) is very general however and provides few details of how the post-closure site will be assessed and monitored. <b>Recommendation</b> It is critical that an independent site inspector confirm that Enbridge conduct the project activity as described in the CRP and that the post-closure site is as close to pre-disturbance as possible.	<b>Mar 20:</b> Enbridge will continue to inform the GNWT Lands Inspector of progress and activities related to the CRP.	
2	3.0 Physical Environment	<b>Comment</b> The description of the local environment comes from a desktop review for local conditions, rare species and species at risk. No site-specific surveys or assessment are referenced. Similarly, fish and aquatic communities in the area of the pipeline work are unknown. Section 5.0 (Permanent Closure and Reclamation) outlines plans to return site to pre-	<b>Mar 20:</b> A preliminary environmental site screening was completed in the project area on August 15, 2017, and information obtained from this site screening was incorporated into the environmental assessment provided in Appendix 1 of the application to the SLWB, including site photos.	

		<p>disturbance condition. How does Enbridge propose to return the site to the original condition if the previous conditions are not known? Also, it appears that conditions at the site will be returned to the disturbed condition from previous work and the ROW, not its natural state.</p> <p><b>Recommendation</b> Enbridge needs to recognise and state in the Plan that the site will be returned to a generic northern site, and that they need continuing access on the ROW for maintenance and monitoring which will continue to disturb the site.</p>		
3	3.5 Watercourses	<p><b>Comment</b> The lack of information on the use of the stretch of river by local fish species or those in the Mackenzie for spawning is concerning. How does Enbridge propose to return the river bed to its previous state to allow fish movement and potential spawning?</p> <p><b>Recommendation</b> The lack of information on the potential impacts to the aquatic community is troubling. Disturbing the sediment and banks of the river may impact the movement of fish through the area in spring, and possibly affect spawning sites downstream. Enbridge needs to recognise this and maintain the local aquatic environment in as natural a state as possible.</p>	<p><b>Mar 20:</b> Enbridge completed a DFO project self-assessment which determined a “low” risk to causing serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery. This self-assessment was based on the August 15, 2017 environmental screening and supplemented with desktop resources, and was included in Appendix 1 of the SLWB Land Use Permit Application.</p>	

4	6.2 Progressive Remediation	<p><b>Comment</b> No details are provided relating to how Enbridge will monitor the site post-closure, or what Board requirements are for monitoring, or to what standards. Generic “monitoring” at the site is mentioned.</p> <p><b>Recommendation</b> Monitoring the site for 2 years is a good idea, but Enbridge doesn’t provide details about what features of the local environment will be monitored, or to what standards. More details should be provided on the monitoring program, or what has been done at other sites.</p>	<p><b>Mar 20:</b> Section 5.2 of the CRP details monitoring criteria. Also, see response to GNWT ID 1.</p>	
5	6.2 Progressive Remediation	<p><b>Comment</b> none</p> <p><b>Recommendation</b> none</p>		



March 12, 2018

Sabrina Sturman  
Regulatory Specialist  
Sahtu Land and Water Board  
Box 1,  
Fort Good Hope, NT X0E 0H0

Dear Ms. Sturman,

**Re: Enbridge Pipelines Inc.  
Water Licence Application – S17L1-004  
Land Use Permit Application – S17P-005  
Closure and Reclamation Plan  
Request for Comment**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the plan at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board.

### **Topic 1: Revegetation**

#### **Comment(s):**

ENR notes that there are several criteria outlined regarding successful natural revegetation in Table 3 such as:

- No large bare areas observed where vegetation should be present;
- Species composition consistent with the surrounding representative area;
- Average desirable vegetation density comparable to the surrounding representative area (the existing ROW); and
- Overall vegetation health similar to surrounding representative area (the existing ROW)

It is not clear how all these criteria will be assessed on the site. For example, what would be the “average desirable vegetation density” and can these be quantified?

Similarly, it is not clear how “overall vegetation health” will be assessed and compared to the surrounding area.

**Recommendation(s):**

- 1) ENR recommends that Enbridge provide additional quantitative detail on criteria related to how the success of natural revegetation will be measured. Specifically, as it related to the “average desirable vegetation density” and “overall vegetation health”.

**Topic 2: Part 5.3: Post-Closure Monitoring, Maintenance, and Reporting**

**Comment(s):**

Information regarding water quality of lakes and rivers in the Northwest Territories (NWT) that is collected on a regular basis by industry, as part of their various monitoring programs, represents a significant source of water quality knowledge. This type of information can inform decision makers regarding trends and natural variation in water quality in the NWT, as well as the cumulative effects from multiple use activities within an area or region. However, in order to use such information, to understand water quality conditions in the NWT, the information must first be available in an accessible format.

**Recommendation(s):**

- 1) ENR recommends that Enbridge Pipelines (NW) Inc. submit all water quality data associated with their Closure and Reclamation Plan report(s) to the Board for posting on the public registry in an accessible format (e.g., csv or spreadsheet file).

**Topic 3: Metadata Template**

**Comment(s):**

It is important to provide metadata that provides context for the water quality data. Metadata refers to a description of data that was collected as part of a water quality sampling program, and includes field conditions and a description of laboratory analyses conducted. Metadata standards are required to ensure the proper use and interpretation of the data by the users.

**Recommendation(s):**



- 1) ENR recommends that Enbridge Pipelines (NW) Inc. complete the attached metadata template in the same spreadsheet as the associated water quality data and submit this information to the Board for posting in the public registry in an accessible format (e.g., csv or spreadsheet file).

Comments and recommendations were provided by ENR technical experts in the Water Resources Division, NWT CIMP and the Sahtu Region and were coordinated and collated by the Environmental Assessment and Monitoring Section (EAM), Conservation, Assessment and Monitoring Division (CAM).

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email [patrick.clancy@gov.nt.ca](mailto:patrick.clancy@gov.nt.ca).

Sincerely,



Patrick Clancy  
Environmental Regulatory Analyst  
Environmental Assessment and Monitoring Section  
Conservation, Assessment and Monitoring Division  
Department of Environment and Natural Resources  
Government of the Northwest Territories