

February 11, 2022

Sahtu Land and Water Board

Box 1
Fort Good Hope, NT
X0E 0H0

Attention: Bonnie Bergsma, Regulatory Coordinator

Dear Bonnie:

**Re: Land Use Permit and Water Licence Application for
Suncor Energy Inc. Tweed Lake M-47, A-67, and Bele O-35
Abandonment and Reclamation Program
Colville Lake Area, Sahtu Region, NT**

Please find enclosed applications and supporting documentation for a new Land Use Permit (LUP) and Water Licence (WL) to conduct abandonment and reclamation activities at Suncor Energy Inc.'s Tweed Lake M-47, Tweed Lake A-67, and Bele O-35 wells southwest and south of Colville Lake, Sahtu Region, Northwest Territories.

While work requiring an LUP and WL is not anticipated to begin until November 1, 2023, Suncor is requesting a start date of May 1, 2022 to provide assurance prior to awarding contracts and staging equipment.

Cheques will be forwarded as follows:

1. LUP Application Fee (\$150.00) made out to the Receiver General for Canada
2. Land Use Fee – N/A
3. WL Application Fee (\$30.00) made out to the Receiver General for Canada
4. Water Use Fee – N/A

NOTE: The annual water use in the first year of the Water Licence (May 1, 2022 – April 30, 2023) is anticipated to be zero. The annual water use in the second year (May 1, 2023 – April 30, 2024) is anticipated to be 43,250m³. A cheque for \$432.50 made out to Government of the Northwest Territories will be sent to the SLWB on or before the anniversary date of the issuance of the WL in advance of using the water.

Please direct any questions or concerns regarding this application to the attention of the undersigned at 403-296-4960 or cmoger@suncor.com or to Margot Ferguson at 403-543-5353 or margot.ferguson@envirosearch.ca.

Sincerely,

Suncor Energy Inc.



Chris Moger
Surface Landman
Enclosures



Prepared for:

Suncor Energy Inc.
P.O. Box 2844
150 - 6 Avenue S.W.
Calgary, AB
T2P 3E3

Suncor Energy Inc.

Land Use Permit and Water Licence Application

Tweed Lake M-47

Tweed Lake A-67

Bele O-35

Abandonment and Reclamation Program
Colville Lake Area, Sahtu Region, Northwest Territories

Submitted to:



Sahtu Land and Water Board

File 21NT0254 | FEBRUARY 2022



Prepared by:

EnviroSearch Ltd.
1924 - 10 Avenue S.W.
Calgary, AB T3C 0J8
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Suncor Energy Inc.
P.O. Box 2844
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Calgary, Alberta T2P 3E3
Tel: (403) 296-4960
www.suncor.com

May 20, 2022

Sahtu Land and Water Board

Box 1
Fort Good Hope, NT
X0E 0H0

Your files: S22A-001 and S22L1-001

Attention: Marie Nietfeld, Regulatory Specialist

Dear Marie:

**Re: Additional Information Request (Feb 25, 2022) in support of
Land Use Permit and Water Licence Application for
Suncor Energy Inc. Tweed Lake M-47, A-67, and Bele O-35
Abandonment and Reclamation Program
Colville Lake Area, Sahtu Region, NT**

Please find attached supporting documentation to Suncor Energy Inc.'s (Suncor's) Land Use Permit (LUP) and Water Licence Application S22A-001 and S22L1-001 as requested by the Sahtu Land and Water Board (SLWB) in your letter dated February 25, 2022. Suncor is applying for a permit and licence to conduct abandonment and reclamation activities at Suncor's Tweed Lake M-47, Tweed Lake A-67, and Bele O-35 wells southwest and south of Colville Lake, Sahtu Region, Northwest Territories.

To simplify your review of the supporting documentation, we have included your specific requests as presented in the original tables and provided Suncor's responses in an additional column with supporting documents as attachments.

Table 1: Land Use Permit Application Additional Information Required

Item on Application Form	Topic	Additional Information Required	Suncor Response
2.	Name and Contact Information – Applicant’s Head Office	In addition to the operating licence documents submitted with the Application, please also provide a copy of the current NWT Certificate of Registration.	Suncor’s current NWT Certificate of Registration is provided as Attachment 1 .
7.	Permit Type and Criteria	Board staff note the Application Package describes the use of fuel storage containers that are larger than 4,000 L. Please confirm with sections 4 and 5 of the MVLUR and revise the form to add 4(a) iii as a trigger.	The LUP Application Form has been updated and is provided as Attachment 2 .
9.	Camp	<p>Board staff note that Appendix 2 Figure 3 describes the main camp as being under the authority of the Colville Lake Community. Please confirm if there is an access and benefit agreement with the community for the camp use (may reduce the closure cost estimate (security). Otherwise, section 9 of the Guide, requires that details of proposed camps sites are to be provided, including:</p> <ul style="list-style-type: none"> • Size and layouts; • Location and distance from any waterbody; • Number and type of structures; • Square footage of structure and number of personnel stationed in the camp; • Name and type (e.g. lake, river) of water source(s); • Purpose and quantity of water to be used (rates, volumes (m³/day). <p>The Board may include a condition in the draft Permit to submit a final camp plan prior to commencement of the winter abandonment activity.</p>	Suncor intends to use the Colville Lake 25-man camp at the old airstrip. A draft layout has been provided as Attachment 3 . Once a contract is in place, a final camp plan can be provided prior to commencement of the winter abandonment activity.
11.	Proposed Waste Management Methods: Sewage	<p>Board staff have identified inconsistencies in Application documents for sewage disposal methods (Attachment C, Page 9 and Table 5-1). Suncor have identified that this WMP version 1.0 is intended to be updated prior to the project commencement, including confirmation and approval from local waste facilities to accept waste, preferred options for waste disposal and contingencies.</p> <p>A condition will be included in the draft permit requiring the submission of an updated WMP 90 days prior to commencement of the winter abandonment project.</p>	Acknowledged.
	Off-site disposal	A condition will be included in the draft permit for submitting written confirmation (e.g., an email, letter, etc.) from the facility/facilities indicating they will accept the waste prior to the commencement of abandonment activities.	Acknowledged.
	Overburden	On the Application Form, insert 'Not Applicable' or provide detailed information about salvaging, storing, and reuse of any overburden and organic materials, if applicable.	The LUP Application Form has been updated and is provided as Attachment 2 .

Item on Application Form	Topic	Additional Information Required	Suncor Response
12.	Equipment	The list of equipment needs to include the equipment weight (in tonnes). These are necessary for the closure cost estimate and to verify permitting criteria.	The Equipment List has been updated with typical weights (specific contracts have not yet been awarded) and is provided as Attachment 4 .
15.	Spill Contingency Plan/Information	<p>Suncor submitted a corporate Emergency Response Plan that covers all Suncor Projects for drilling, completions, and logistics and a Site Specific Emergency Response Plan (SSERP) for the Colville Lake Project. The former plan contains more detail than is required by the INAC Guidelines for Spill Contingency Planning, is not site specific to the Colville Lake Project, and is not a Plan that the Board would distribute for public review. The SSERP does not contain enough information to be useful in the event of a spill, and is missing key elements from the INAC Guidelines.</p> <p>Please update and resubmit the Site Specific Spill Contingency Plan by including relevant portions of section 6.0 of the corporate ERP in the site specific plan and ensure the updated plan addresses and includes the following components:</p> <ul style="list-style-type: none"> • Introduction, including project and site description; • Site map with locations of potential spill materials and spill response resources and equipment; • Description of all potential spill types, sources, sizes, and potential effects; • Description of worst-case scenario for the site; and • Action plan(s) (for all spill types or for different spill categories), with procedures for: <ul style="list-style-type: none"> i. initial action, ii. reporting and updates, iii. containing and cleaning up the spill, iv. managing spill-related wastes, and v. restoring affected areas and completing clean-up; • Spill response resource inventory; • Description of training programs; and • Description of how the plan will be reviewed and revised. 	The Site-Specific Spill Contingency Plan has been updated and is provided as Attachment 5a .
16.	Proposed Time Schedule	Correct an error in the time schedule provided on page 3 of the Site Specific Emergency Response Plan (Duration: Dec 10th, 2022 to March 31st, 2022).	The Site-Specific Emergency Plan has been updated and is provided as Attachment 5b .

Item on Application Form	Topic	Additional Information Required	Suncor Response
18.	Closure and Reclamation Plan	<p>Appendix 1 EPP, Section 5.2.3 describes the proposed reclamation activities for the sites and engagement process to help develop the plan, noting that reclamation will adhere to requirements in permit conditions. The Board's new standard permit conditions generally do not include specific reclamation requirements for projects. Rather, the Board prefers that remediation, closure and reclamation plans be developed by the applicant and presented in a stand-alone Closure and Reclamation Plan (CRP) for Board approval. Board staff advises Suncor to refer to section 2.2 of the MVLWB/AANDC Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories for general direction on items to be included in a stand-alone CRP for the Project.</p> <p>For an example of a similar SLWB authorization for well abandonment and restoration activities that required a C&R Plan based on the MVLWB Guidelines, please follow this link (Husky S13A-002).</p> <p>Elements of a CRP include:</p> <ul style="list-style-type: none"> • Closure objectives for individual project components (e.g. sumps, wellbores, pads, access roads, etc.) and overall; • Closure criteria; • Descriptions of closure activities and closure options ; • Contingency plans; • Detailed closure and reclamation schedule for activities identified in 5.2.3, and what each activity will entail; • Reference to pre-reclamation photographs; • Post-closure monitoring and maintenance programs; and • Reference to record of engagement for closure and reclamation. <p>The CRP may be submitted as an Interim CRP with conditions in the draft permit that will require submission of a final CRP following Suncor's proposed consultation with stakeholders and following completion of the abandonment program.</p>	The stand-alone Closure and Reclamation Plan has been provided as Attachment 6 .
	Closure Cost Estimate	<p>Board staff note that the Closure Cost Estimate has been prepared using the Land Use Permit Security Worksheet (2004 under revision). GNWT-ENR will request Suncor to prepare an estimate using the RECLAIM Model for Oil and Gas, and User Manual because this Application is for both a Permit and a Licence. The Board will consider a modified approach provided it includes missing cost items from RECLAIM, updated unit rates, and rationale. The Closure Cost Estimate is to be broken down into water- and land-related activities and liabilities so that appropriate security can be allocated to each of the two authorizations.</p>	The RECLAIM model has been used to calculate the Closure Cost Estimate and has been provided as Attachment 7 .

Item on Application Form	Topic	Additional Information Required	Suncor Response
20.	Fees	The Application Cover Letter indicated that fees would be forwarded to the Board. Board staff confirm the permit fee of \$150.00 made out to the Receiver General of Canada is correct and this cheque may now be forwarded to the Board.	A copy of Suncor's LUP application fee cheque and receipt issued by the SLWB is provided as Attachment 8 .
General		Ensure all Figures, Tables, and Photographs are titled, labeled and referred to in the application documents.	The LUP and WL Application Forms have been updated and provided as Attachments 2 and 9 respectively.

Table 2: Water Licence Application Additional Information Required

Item on Application Form	Topic	Additional Information Required	Suncor Response
7.	Proposed Quantity of Water Involved	In the Water Licence Application Form, Suncor has provided a table of site-specific water sources, and refer to Appendix 2, Figure 3 for information about volumes, etc. The Table in Figure 3 is complete; however, we request the estimated water use volumes per source be added to the Table in the Application, and reference Figure 3 for additional information. Include fish bearing status of each water source if known. Include other users of the water sources if known.	The WL Application Form has been updated and provided as Attachment 9 .
8.	Waste Management Plan	Refer to Table 1, item 11 for Board staff comments on the Waste Management Plan.	Acknowledged.
10.	Spill Contingency Plan	The Application Form indicates to include a Spill Contingency Plan. Refer to Board staff comments regarding the Spill Contingency Plan for the Land Use Permit Application (see Table 1, item 15).	The Site-Specific Emergency Response Plan & Spill Contingency Plan has been updated and is provided as Attachment 5 .
14.	Additional Supporting Information	Refer to Table 1, item 18 for Board staff comments on Closure and Reclamation and Closure Cost Estimate.	The stand-alone Closure and Reclamation Plan has been provided as Attachment 6 . The RECLAIM model has been used to calculate the Closure Cost Estimate and has been provided as Attachment 7 .
15.	Fees	The Application Cover Letter indicated that fees would be forwarded to the Board. Board staff confirm the licence application fee of \$30.00 made out to the Receiver General of Canada is correct and this cheque may now be forwarded to the Board. The Water Licence will set out a condition for annual water fees of \$432.50 in advance of using the water.	A copy of Suncor's WL application fee cheque and receipt issued by the SLWB is provided as Attachment 10 .

Please direct any questions or concerns regarding this application to the attention of the undersigned at 403-296-4960 or cmoger@suncor.com or to Margot Ferguson at 403-543-5353 or margot.ferguson@envirosearch.ca.

Sincerely,
Suncor Energy Inc.



Chris Moger
Surface Landman

Cc: Bonnie Bergsma - SLWB
Trevor Bremner – GNWT-Lands, Sahtu Region
Jeff Walker - GNWT-ENR Sahtu Region
Rick Walbourne - GNWT-ENR, Yellowknife
Margot Ferguson – EnviroSearch Ltd.

Attachments:

1. Proof of NWT Corporate Registration
2. Updated Land Use Permit application form
3. Draft Camp Layout
4. Updated Equipment List with weights
5. Updated Site-Specific Emergency Response Plan & Spill Contingency Plan
6. Stand-Alone Closure and Reclamation Plan
7. Closure Cost Estimate - RECLAIM Model
8. Copy of Land Use Permit Application Fee Cheque and SLWB Receipt
9. Updated Water Licence application form
10. Copy of Water Licence Application Fee Cheque and SLWB Receipt
11. Appendix 1-A - Photos (with updated labels)