



Fisheries and Oceans Canada  
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Yellowknife, NT  
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October 31, 2014

*Your file*      *Votre référence*  
**S14A-006 & S14L1-004**

*Our File*      *Notre référence*  
**14-HCAA-01489**

Bonnie Bergsma  
Regulatory Specialist  
Sahtu Land and Water Board  
Box 1, Fort Good Hope  
Northwest Territories  
X0E 0H0

Dear Mr. Bergsma:

**Subject: Suncor Energy Inc., Application for Type “A” Land Use Permit and Type “B” Water License, Tweed Lake M-47 Well Re-suspension.**

Fisheries and Oceans Canada’s (DFO)- Fisheries Protection Program would like to thank the Sahtu Land and Water Board (SLWB) for providing an opportunity to provide comments on the Type “A” land use permit and Type “B” water license application including supporting documents, submitted by Suncor Energy Inc., for the Tweed Lake M-47 well re-suspension project.

DFO has conducted a preliminary assessment of Suncor Energy’s Type “A” land use permit and Type “B” water license application with supporting documents **only** as it relates to our mandate. The mandate of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries.

Fisheries and Oceans Canada (DFO) comments with respect to the land use permit water license application with supporting documents, are provided in the attached “Reviewer Comment Table”.





We forward to working with the (SLWB) on the land use permit and water licensing of Suncor Energy Inc.’s Tweed Lake M-47 Well re-suspension project. If you have any questions, please contact Mark D’Aguiar at our Yellowknife office at 867-669-4934, or by email at [Mark.D’Aguiar@dfo-mpo.gc.ca](mailto:Mark.D’Aguiar@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Stu Niven". The signature is fluid and cursive, with a horizontal line above the first few letters.

Stu Niven  
Senior Fisheries Protection Biologist

## Review comments from Department of Fisheries and Oceans Canada

ID	Topic	Reviewer Comment/Recommendation
1	General File	<b>Comment:</b> Fisheries and Oceans Canada (DFO) – Cover Letter. 
5	Topic 1- Appendix 1 EPP - Temporary crossings over ice-covered water bodies	<p><b>Comment:</b> Where the construction of temporary crossings over ice covered water bodies is required, the proponent should conduct the activities as specified in DFO's Northwest Territories protocol on Ice Bridges and Snow Fills. This provides specific advice on ice bridge and snow fill construction, maintenance and removal. </p> <p><b>Recommendation:</b> The proponent should follow the DFO's Northwest Territories Operational Statement on Ice Bridges and Snow Fills for any temporary crossings over ice covered water bodies related to the proposed land use activities.</p>
6	Appendix 1. EPP - Winter Water Withdrawal - General	<p><b>Comment:</b> The removal of water under ice covered water bodies can impact fish through oxygen depletion, loss of overwintering habitat and/or reductions in littoral habitat. </p> <p><b>Recommendation:</b> DFO recommends that the proponent adhere to the DFO Protocol for Winter Water Withdrawal from Ice-Covered Waterbodies in the Northwest Territories and Nunavut (attached) to avoid such impacts. To mitigate impacts to fish from water withdrawal from ice covered water bodies, and to provide standardized guidance to water users, including volume limits for certain water source types, DFO has developed this protocol in conjunction with industry and other regulators.</p>
7	Appendix 1. EPP - Winter Water Withdrawal - General Construction of Winter Roads	<p><b>Comment:</b> DFO has a prepared a Fish Screen Design Criteria for Flood and Water Truck Pumps guidance document. The objective of this document is to provide fish screen design criteria for common applications related to water withdrawal for the construction and maintenance of seasonal winter roads. </p> <p><b>Recommendation:</b> DFO recommends that the proponent adhere to the recently finalized Fish Screen Design Criteria for Flood and Water Truck Pumps (attached) where appropriate. The proponent should also review the attached 'Water Flow Calculation Form' and the supplementary 'Application of the NWT Winter Water Withdrawal Protocol with Bathymetric Profiles of Select Small Lakes in the Mackenzie Delta Region' (Attached)</p>