



GWICH'IN LAND AND WATER BOARD
Box 2018 Inuvik, NT X0E 0T0
Ph 867-777-4954
Fx 867-777-2304
www.glwb.com

May 20, 2014

File: G14E002

GNWT – Department of Transportation
Attn: Mr. Arvind Vashishtha
PO Box 2038
Inuvik, NT X0E 0T0

Re: *Issuance of Land Use Permit G14E002 – Dempster Highway and Quarries*

Mr. Vashishtha,

The Gwich'in Land and Water Board has approved land use permit application number G14E002 for a five year term. A copy of the permit is attached. The Board anticipates full compliance with the terms and conditions of the permit.

Please note that the Department of Transportation has yet to submit proof of a valid Quarry Permit for the quarry and stockpile locations, as well as proof that the Charter Community of Tsiigehtchic and the Town of Inuvik are willing to accept domestic and sanitary wastes, associated with the project activities, into their facilities. Please note that a Quarry Permit from the Department of Lands is required prior to carrying out any quarrying activities under land use permit G14E002.

Attached are letters of comments and/or advice from Environment Canada, Fisheries and Oceans Canada, GNWT-Department of Environment and Natural Resources, Gwich'in Renewable Resources Board, and the Gwich'in Social and Cultural Institute. Please review these letters carefully as they contain advice based on the agencies' mandated responsibilities.

Please contact Helga Harlander at (867) 777-6622 or h_harlander@glwb.com if you have any questions.

Yours sincerely,

Paul Sullivan
Chair, Gwich'in Land and Water Board

Copied to: Conrad Baetz, Regional Superintendent, GNWT - Department of Lands



Environment Canada Environnement
Canada Canada

Environmental Protection Operations Directorate (EPOD)
Prairie & Northern Region (PNR)
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

May 9th, 2014

EC File: 5300 000 026 / 003
GLWB File: G14E002

Helga Harlander, Lands and Water Technician
Gwich'in Land and Water Board
P.O. Box 2018
Inuvik, NT
X0E 0T0

Via email at H_Harlander@glwb.com

Attention: Ms. Harlander

RE: Land Use Permit Application G14E002 – Operation, Maintenance and Reconstruction of the Dempster Highway – Government of the Northwest Territories Department of Transportation

Environment Canada (EC) has reviewed the Spill Contingency Plan and the Waste Management Plan for the Land Use Permit application referenced above and has not identified any concerns. Advice, when provided by EC, is pursuant to EC's mandated responsibilities arising from the *Canadian Environmental Protection Act, 1999* (CEPA), the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act, 1994* (MBCA) and the *Species at Risk Act* (SARA).

If there are any questions, please do not hesitate to contact me at (867) 669-4732 or via email at devin.penney@ec.gc.ca.

Sincerely,

Devin Penney

Environmental Assessment Officer, EPO

cc: Carey Ogilvie (Head, Environmental Assessment North, EPO)
 Loretta Ransom (Environmental Assessment Coordinator, EPO)

Canada

www.ec.gc.ca



May 9, 2014

Helga Harlander
Land and Water Technician
Gwich'in Land and Water Board
Box 2018
Inuvik, NT
X0E 0T0

Dear Ms. Harlander,

**RE: DoT, GNWT
Land Use Application – G14E002
Operation Maintenance and Reconstruction of Dempster Hwy
Quarries and Construction of Winter Road to Tsiigehtchic
Request for Review and Comment**

The Department of Environment and Natural Resources has reviewed the application at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, *Waters Act* and the *Wildlife Act* and has no comments or recommendations at this time.

If you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at 920-6118 or email at patrick_clancy@gov.nt.ca.

Sincerely,



Patrick Clancy
Environmental Regulatory Analyst
Environmental Impact Assessment
Conservation Assessment and Monitoring Division
Department of Environment and Natural Resources
GNWT

Subject: RE: Land Use Permit Application G14E002 DFO file# 14-HCAA-00466
From: Fisheries Protection <fisheriesprotection@dfo-mpo.gc.ca>
Date: 5/9/2014 2:25 PM
To: Helga Harlander <H_Harlander@glwb.com>

Ms. Harlander,

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada was forwarded the Department of Transportation Land Use Permit Application on April 14, 2014.

Based on the information provided, this project has been identified as a project where a *Fisheries Act* authorization is not required given that serious harm to fish can be avoided by following standard measures. Proposals in this category are not considered to need an authorization from the Program under the *Fisheries Act* in order to proceed. In order to comply with the Act, it is recommended the proponent follow our guidance tools which can be found at the following website (<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>).

Yours sincerely,

Jenie Cooper
A/Team Leader, Triage and Planning
Fisheries and Oceans Canada

From: Helga Harlander [mailto:H_Harlander@glwb.com]
Sent: 2014-May-07 3:53 PM
To: Fisheries Protection
Subject: Re: Land Use Permit Application G14E002 DFO file# 14-HCAA-00466

Thanks Emily,

It would be useful if you could re-write the letter so that it is clear that the responsibility to follow DFO guidance etc. is that of the proponent, and not the board's.

Regards, Helga

On 5/7/2014 1:34 PM, Fisheries Protection wrote:

Hi Helga,

My apologies for the advice yesterday. If you would like, I can re-write the letter to gear it towards the Government of the Northwest Territories.

Thanks,

Emily

Emily Morton
Fisheries Protection Program | Programme de Protection des Pêches
Fisheries and Oceans Canada | Pêches et Océans Canada
867 Lakeshore Road | 867 Chemin Lakeshore
P.O. Box 5050 | Boîte postale 5050
Burlington, ON, L7R 4A6

Tel | Tél: 905-336-4893; Fax | Téléc: 905-336-6285

Emily.Morton@dfo-mpo.gc.ca

Web site | site Web: www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html Government of Canada |
Gouvernement du Canada

Fisheries and Oceans Canada has changed the way new project proposals (referrals), reports of potential Fisheries Act violations (occurrences) and information requests are managed in Central and Arctic Region (Alberta, Saskatchewan, Manitoba, Ontario, Nunavut and the Northwest Territories). Please be advised that general information regarding the management of impacts to fish and fish habitat and self-assessment tools that enable you to determine Fisheries Act requirements are available at DFO's "Working Near Water" website at www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html. For all occurrence reports, or project proposals where you have determined, following self-assessment, that you cannot avoid impacts to fish and fish habitat, please submit to fisheriesprotection@dfo-mpo.gc.ca. For general inquiries you can also call 1 855 852-8320.

From: Helga Harlander [mailto:H_Harlander@glwb.com]

Sent: 2014-May-06 3:22 PM

To: Fisheries Protection

Subject: Re: Land Use Permit Application G14E002 DFO file# 14-HCAA-00466

Ms. Cooper,

Just a point of clarification, for the record. Please note that the proponent of the project is the Government of the Northwest Territories Department of Transportation, not the Gwich'in Land and Water Board as the advice appears to suggest. The Gwich'in Land and Water Board forwarded the application to DFO as per Subsection 63(1) of the Mackenzie Valley Resource Management Act.

Regards, Helga Harlander

On 5/6/2014 11:11 AM, Fisheries Protection wrote:

Ms. Harlander,

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received your proposal on April 14, 2014.

Based on the information provided, your proposal has been identified as a project where a *Fisheries Act* authorization is not required given that serious harm to fish can be avoided by following standard measures. Proposals in this category are not considered to need an authorization from the Program under the *Fisheries Act* in order to proceed. In order to comply with the Act, it is recommended that you follow our guidance tools which can be found at the following website (<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>). It remains your responsibility to meet the other requirements of federal, provincial and municipal agencies.

Should your plans change or if you have omitted some information in your proposal such that your proposal meets the criteria for a site specific review, as described on our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>), you should complete and submit the request for review form that is also available on the website.

Should you have any questions or concerns about the compliance of your proposal with the *Fisheries Act*, you may wish to engage an environmental professional familiar with measures to avoid impacts to fish and fish habitat (<http://www.dfo-mpo.gc.ca/pnw-ppe/env-pro-eng.html>).

Yours sincerely,

Jenie Cooper
A/Team Leader, Triage and Planning
Fisheries and Oceans Canada

Fisheries and Oceans Canada has changed the way new project proposals (referrals), reports of potential Fisheries Act violations (occurrences) and information requests are managed in Central and Arctic Region (Alberta, Saskatchewan, Manitoba, Ontario, Nunavut and the Northwest Territories). Please be advised that general information regarding the management of impacts to fish and fish habitat and self-assessment tools that enable you to determine Fisheries Act requirements are available at DFO's "Working Near Water" website at www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html. For all occurrence reports, or project proposals where you have determined, following self-assessment, that you cannot avoid impacts to fish and fish habitat, please submit to fisheriesprotection@dfo-mpo.gc.ca. For general inquiries you can also call 1 855 852-8320.

From: Helga Harlander [mailto:H_Harlander@glwb.com]

Sent: 2014-April-14 3:45 PM

To: Gwichya RRC; Gwichya DGO; Phillip Blake; Ehdiitat RRC coordinator; Danny Greenland; GeorginaVN; Ina Koe; supervisor; Allen Firth; Jozef Carnogursky; Herbert Blake; SAO Inuvik; Patrick Tomlinson; Susan McKenzie; Amy Amos; Janet Boxwell; Sharon Snowshoe; EC EA; Fisheries Protection; GNWT EA; Donald Arey;



Gwich'in Social & Cultural Institute

www.gwichin.ca

Head Office

P.O. Box 46
Tsiigehtchic, NT X0E 0B0
Tel: (867)953-3613
Fax: (867)953-3820
Alestine Andre, Heritage Researcher
aandre@learnnet.nt.ca

Executive Director Office

P.O. Box 30
Fort McPherson, NT X0E 0J0
(867) 952-2524
(867) 952-2238
Sharon Snowshoe, Executive Director
gsciexecutivedirector@learnnet.nt.ca

Language Office

P.O. Box 54
Fort McPherson, NT X0E 0J0
(867)952-2377
(867)952-2433
Wm. Firth, Language Manager
wgfirth@learnnet.nt.ca

Research Office

Suite 202B, 4912-49 St.
Yellowknife, NT X1A 1P3
(867)669-9743
(867)669-7733
Ingrid Kritsch, Research Director
Ingrid_Kritsch@learnnet.nt.ca

Helga Harlander
Gwich'in Land and Water Board
Box 2018
Inuvik NT X0E 0T0
Via email: H_Harlander@glwb.com

May 8, 2014

Dear Helga,

Re: Land Use Permit Application– G14E002

We have reviewed the above application against our heritage databases, and have the following information and concerns.

A management plan for the Gwich'in Territorial Park is currently being developed. The Department of Transportation should ensure they are aware of the conditions of this plan, and should inform the parties drafting the plan of any development which may impact the planning process.

The GSCI supports all recommendations by the Assessment Archaeologist Glen MacKay for archaeological assessment of existing and potential quarry locations along the Dempster Highway. The GSCI recommends further assessment of the location of the boundary of MiTr-1 in Tsiigehtchic, which may be impacted by the winter road alignment.

The GSCI is unclear if this application is only for ten or twelve quarries, or for any existing or potential quarries along the Dempster. Furthermore, it is difficult to properly assess these developments as the plans do not include season or length of use, type of use (stockpiling, excavation, or blasting, for example) nor whether the quarries will be impacting previously undisturbed ground. The table below summarizes some concerns the GSCI has with the quarries, but notes that more specific mitigation may be recommended for these, or other pits, based on further information. The GSCI requests that a full assessment of impacts to traditional use and heritage values be conducted, perhaps during the archaeological assessment, for all existing and proposed quarries.

Quarry	Issues: ground-altering impacts at site *	Issues: trucks, dust, noise and other disturbances relating to traditional use around the site
KM 6 INAC		<p>Within range of the porcupine caribou herd. Seasonal bald eagle habitat Spring, summer, and winter grayling and trout fishing in the area Caribou hunting area Seasonal grizzly bear habitat (Species at Risk)</p>
KM23-9	<p>Within major trail corridor, increases likelihood of unrecorded archaeological materials at site.</p>	<p>Within range of the porcupine caribou herd. Within major trail corridor: traditional use of the highway and surrounding area for hunting should be protected. Seasonal bald eagle habitat Caribou hunting area Seasonal grizzly bear habitat (Species at Risk)</p>
KM 28-8	<p>Within major trail corridor, increases likelihood of unrecorded archaeological materials at site.</p>	<p>Near to berry-picking areas. Dust and traffic may impact the ability to use berry harvesting sites. Within range of the porcupine caribou herd. Within major trail corridor: traditional use of the highway and surrounding area for hunting should be protected. Seasonal bald eagle habitat Caribou hunting area Seasonal grizzly bear habitat (Species at Risk)</p>
KM 141	<p>Within major trail corridor, increases likelihood of unrecorded archaeological materials at site.</p>	<p>There is a cabin ~500m from this site. If in active use, this cabin's owner must be engaged about mitigation. 2003 owner: L. Jerome. Boreal woodland caribou (Species at Risk) calving area about 750m from the site. Within close proximity to named place Theetoh Nin', a trail between Tsiigehtchic and Fort McPherson. Within traditional beaver, muskrat, and mink trapping area for Tsiigehtchic residents Near traditional fishing areas Traditional moose hunting area</p>
KM 166-3		<p>Boreal woodland caribou frequently sighted along the highway and in the general area (Species at risk) Within swan habitat Within habitat/hunting areas for black bear, caribou, moose.</p>
KM 173-8		<p>Area used for harvesting wood by Inuvik and Aklavik Boreal woodland caribou frequently sighted along the highway and in the general area (Species at risk) Within habitat/hunting areas for black bear, caribou, moose.</p>
KM178-1	<p>Trails and place names nearby increase likelihood of unrecorded archaeological remains.</p>	<p>Boreal woodland caribou frequently sighted along the highway and in the general area (Species at risk) Pit is located on traditional Gwich'in named river Khajilajj (Rengleng River) Coal extraction by Tsiigehtchic nearby. Within habitat/hunting areas for black bear, caribou, moose.</p>

KM193-7		Traditional trapping area for Tsiigehtchic Within habitat/hunting areas for black bear, caribou, moose, grizzly.
KM211-2	Trails nearby.	Active hunting/trapping area (Tom Wright). Within habitat/hunting areas for black bear, caribou, moose.
KM230-2		Tentframe camp in this location. If active, owner/user should be engaged about mitigation. Within berry-picking area. Dust and traffic may impact the ability to use berry harvesting sites. Within habitat/hunting areas for black bear, caribou, moose.
KM 251	Unrecorded but known archaeological remains. Site must not be developed further until this is rectified.	Within habitat/hunting areas for caribou and moose.
KM 235	Within major trail corridor, increases likelihood of unrecorded archaeological materials at site. Numerous archaeological sites nearby. (Note: Arch assessment done)	Within fishing area Within habitat/hunting areas for black bear, caribou, moose.

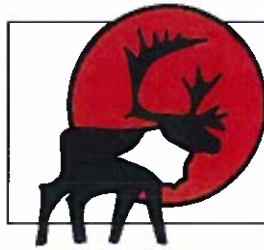
As with any application, if archaeological or heritage materials are encountered during the development within the Gwich'in Settlement Area, all work must cease immediately as required by law, and the GSCI and the Prince of Wales Northern Heritage Centre in Yellowknife must then be contacted.

Sincerely,



Sharon Snowshoe
Executive Director, GSCI

c.c. Tom Andrews and Glen MacKay, PWNHC



Gwich'in Renewable Resources Board

PO Box 2240 Inuvik, NT X0E 0T0
Phone: (867) 777-6600 Fax: (867) 777-6601
<http://www.grrb.nt.ca>

May 9, 2014

Helga Harlander
Land and Water Technician
Gwich'in Land and Water Board
PO Box 2018
Inuvik, NT
X0E 0T0

Re: Land Use Permit application_ G14E002_ Department of Transportation_ quarry operations and winter road at Arctic Red River

The Gwich'in Renewable Resources Board (GRRB) was established under the Gwich'in Comprehensive Land Claim Agreement to be the main instrument for wildlife, fish and forest management in the Gwich'in Settlement Area (GSA). The staff of the GRRB have reviewed Land Use Permit application G14E002 and offer the following comments and recommendations:

- Proponent is reminded to adhere to the regulations concerning fish and wildlife according to the following Acts and legal documents:
 - Migratory Birds Convention Act
 - NWT Wildlife Act
 - Species at Risk Acts (federal and NWT)
 - Gwich'in Land use Plan
 - Fisheries Act
- The proponent shall ensure that any chemicals, fuel or wastes associated with the proposed project do not enter waters frequented by fish and to report all spills regardless of product and amount.
- The proponent shall suspend activities temporarily if caribou, moose, sheep, grizzly bear and/or muskoxen are spotted within 500m of any work site and to resume once the animal(s) have left the area.
- Species at risk that may be encountered in these areas include the Peregrine Falcon (*Falco peregrines anatum*), Woodland Caribou (Boreal population *Rangifer tarandus caribou*) and Bank Swallow (*Riparia riparia*).
 - Bank swallows, their nests, populations and individuals are protected under the Migratory Birds Convention Act, 1994:
 - Bank swallows have been assessed as 'Threatened' by COSEWIC, are being considered under the federal Species at Risk Act and the GRRB has approved this listing. They will likely be listed within the next 5 years, within the length of this application. Thus, the proponent should, at minimum, incorporate recommendations made within the Migratory Birds Conventions Act guidance document for aggregate producers available on-line: https://www.ossqa.com/multimedia/38/fs_bank_swallows-ossqa.pdf
 - Bank swallows are known to nest in quarries. Therefore, GRRB staff recommend that aggregate pits should be examined for Bank Swallow colonies, stockpiling of materials prior to breeding season should be done (as recommended by the guidance document) and a Bank Swallow Contingency plan also be submitted.

The GRRB also supports the recommendations submitted by the Tetlit and Gwich'ya Renewable Resources Councils and the Gwich'in Social and Cultural Institute (GSCI), and acknowledge that the proponent has revised application submissions in the past demonstrating that they are acting on previous recommendations or comments received.

If you have further questions concerning this application, do not hesitate to contact me.

Janet Boxwell

Renewable Resources Manager
Gwich'in Renewable Resources Board
PO Box 2240, Inuvik NT, X0E 0T0

Tel: (867) 777-6615, Fax: (867) 777-6601

Email: jboxwells@grrb.nt.ca

Web: <http://www.grrb.nt.ca>

FB: www.facebook.com/grrb.nt.ca



Photo: John Reaume

BANK SWALLOWS in Pits & Quarries **Guidance for Aggregate Producers**

With habitats around the world, the bank swallow population in Canada is in decline, with an estimated drop of over 95 per cent since 1970 in Ontario alone. While the exact reason for this decline is unknown, loss of nesting sites and young broods as a result of habitat destruction/disturbance has been cited as a possible reason.

BACKGROUND:

The bank swallow (*Riparia riparia*), can nest in colonies from 3 to about 2,000 burrows and average about 70 burrows. Sand and gravel pits often provide suitable habitats for bank swallow colonies and have become important nesting sites for this species.

The bank swallow eats flying insects and spends the winter in South America. It returns to Canada between late April and May to breed. Burrow numbers generally continue to increase until mid-to-late June and colonies often remain active until mid-August.

BANK SWALLOWS IN PITS & QUARRIES

- Bank swallows are attracted to pits and quarries. They build nests in stockpiled product or banks and they prefer sand or silty sand.
- Breeding season is early May to mid-August in southern Ontario and late-May to mid-August north of Sudbury.
- Excavation or construction during the spring and summer can negatively affect bank swallows or their nesting sites (Environment Canada, 2011).
- These birds will take advantage of stockpiled product and small banks up to large extraction faces offering suitable habitat within a pit, which has the potential to reduce operational access to these areas during the breeding season.



Photo: Mark Browning

The nest is built at the end of a burrow dug mostly by male bank swallows into a vertical bank of sand or silt, or similar material.

YOUR LEGAL RESPONSIBILITY

Bank swallows and their nests are protected under the federal *Migratory Birds Convention Act, 1994*. It is an offence for anyone to kill, hunt, capture, injure, harass, take or disturb a migratory bird nest or eggs. Offenders are liable to a fine or imprisonment. A review is currently underway to determine whether the bank swallow should be declared a species at risk in Ontario.

WHAT YOU CAN DO

- Pre-plan in March to early April (or mid-May north of Sudbury) by altering working faces and stockpiles to prevent harassment or harm to bank swallows. Manage these areas throughout the breeding season to make these potential nesting sites unattractive. See next page for details.
- Provide alternate nesting sites in an inactive portion of your pit or quarry. See next page for details.

FACT SHEET — BANK SWALLOWS (*Riparia riparia*)

HOW TO CREATE & PROTECT HABITAT

✓ **DO** set aside pre-existing suitable habitat or create new habitat in inactive area(s) of a pit or quarry before the breeding season begins by creating vertical faces of 70 degrees or more in piles or banks. These areas should be off-limits to excavation for the duration of the breeding season from May - August. Heavy machinery near colonies is likely to disturb the swallows and reduce nesting productivity.

✓ **DO** cordon off these areas and inform all pit employees of the location of the colony and to avoid disturbing the colony until further notice when bird colonies are established, or suitable faces are created. This will help conserve active colonies. (Using sand piles, or pylons with or without police tape, are easy and effective ways to cordon off nesting sites.)

HOW TO DISCOURAGE BANK SWALLOWS FROM NESTING

✓ **DO** discourage bank swallows from nesting in areas that will be excavated over the breeding season by contouring faces to have a less vertical slope (either by sloping off or piling material on the face to create a slope that is less than 70°). Vertical faces located high up on a slope may have to be altered from above if possible, or extraction in these areas should be scheduled for after mid-August when the birds have left.

✓ **DO** install bird deterrent devices before breeding season starts, such as plastic owls (Great Horned Owls), to discourage bank swallows from establishing a colony in suitable banks.

✗ **DON'T** use deterrent devices (e.g. plastic owl) once a colony has been established since this could interfere with the bank swallow's ongoing nesting activities.

OTHER GENERAL CONSIDERATIONS

✓ **DO** secure access to your stockpiled material throughout the season by ensuring no vertical faces remain in the stockpile. (Slopes less than 70 degrees will prevent birds from nesting.)

✓ **DO** extract material ahead of the breeding season and create suitable habitat in the process by creating vertical faces greater than 70 degrees.

✓ **DO** devote a few minutes to removing vertical faces at the end of the work day so that bank swallows don't begin to build in these faces overnight or over a weekend.

✗ **DON'T** operate heavy machinery or excavate material within 50 metres of a colony. However, moving heavy equipment past a colony once is unlikely to cause any problems.



Photo: Charles M. Francis



Photo: Robert McCaw

RESOURCES:

Environment Canada. 2011. *Bank Swallow Know Your Legal Obligations (CW66-297/1-2011E-PDF)*. Retrieved from http://publications.gc.ca/collections/collection_2011/ec/CW66-297-1-2011-eng.pdf

Quarry Products Association Northern Ireland. *Biodiversity Advice Notes Sand Martin Riparia riparia*. Retrieved from <http://www.qpani.org/pdf/sandmartinadvicenotes.pdf>

DATE: April 26, 2013