Goldcorp Leave to Construct EB-2011-0106

Exhibit KM 1.6: Goldcorp's Proposed 115kv Transmission Line Class Environmental Assessment Study – Environmental Study Report, Feb 2011.

PLEASE NOTE THE COMPLETE ENVIRONMENTAL STUDY REPORT IS AVAILABLE AT THE BOARD'S LIBRARY, 25TH Floor, 2300 YONGE STREET, TORONTO.

K M 1.6

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GOLDCORP
RED LAKE GOLD MINES

Goldcorp's Proposed 115kV Transmission Line Class Environmental Assessment (EA) Study

ENVIRONMENTAL STUDY REPORT

February 2011

SNC·LAVALIN

GOLDCORP RED LAKE GOLD MINE
115 kV TRANSMISSION LINE

EXECUTIVE SUMMARY

Goldcorp Inc.'s Red Lake Gold Mines ("Goldcorp") is proposing to construct a new 115 kV electrical power transmission line (10.7 km) taking off from Hydro One Networks Inc. (HONI's) existing 115 kV E2R Transmission Line near Harry's Corner and continuing northeasterly, across the Chukuni River, to a new, to be constructed transformer station at Goldcorp's Balmer Mine Complex in Balmertown. The proposed new 115 kV transmission line and transformer station as well as a proposed new switchyard at Harry's Corner comprise the "Project." All three proposed components are located within the Municipality of Red Lake in northwest Ontario.

Goldcorp's Red Lake Gold Mines is the largest employer in the Municipality of Red Lake. Its operations at Balmertown comprise the integration of the former Red Lake underground mine complex (1948) and Campbell underground mine complex (1949) as well as Balmer complex (2003). Goldcorp has been making progressive improvements to its mine facilities at Balmertown, including expanding, deepening and integrating the undergrounds to improve efficiency and safety as well as to access additional ore.

The existing 44 kilovolt (kV) supply system which Goldcorp relies on to meet its power is almost at capacity. Currently, Goldcorp's operations at Balmertown experience supply fluctuations and furthermore, the existing 44kV supply is prone to outages. Goldcorp expects to require additional power by late 2011 or early 2012. The Project is proposed to provide a critical additional capacity to ensure sufficient and stable power for Goldcorp's current and future requirements without delay or disruption.

The Project fits the definition of projects covered by the *Class Environmental Assessment for Minor Transmission Facilities* (Class EA) (Ontario Hydro, 1992) which is approved under the Ontario *Environmental Assessment Act* (EA Act).

As documented in this draft Environmental Study Report (ESR), the Class EA process for Goldcorp's proposed 115 kV transmission line has included an assessment of the existing environment, prediction of the potential effects, identification of mitigation requirements and determination of net effects, including the significance of those net effects. Public and regulatory consultation has been carried out as part of the process. Potentially affected public, government agencies, municipalities, elected officials, and First Nations communities were notified and/or consulted through letters, personal contact and newspaper advertisements. A Public Information Centre (PIC) was held early in the process.

Standard mitigation measures are recommended, including:

- Erosion/sediment and runoff control measures;

- Timing and sequencing of construction;
- Designated areas for re-fuelling and for storage/handling of hazardous materials;
- Requirement for Contractor to have a waste management plan, a fire contingency plan, hazard control plan and a health and safety plan which are compliant with regulatory requirements;
- Workers to have training in spill control and response, and a spill response kit to be readily available at each work site. As safe to do so, immediate containment/clean up of spills as per regulatory requirements, including reporting;
- Implementation of best management practices (BMPs), such as maintaining a rubbish free site; keeping debris from entering watercourses/waterbodies; and restricting vehicles, equipment and storage to the right of way and staging areas;
- Avoid/minimize work during wetweather conditions to minimize rutting and soil compaction;
- No storage equipment and materials or movement of construction equipment and vehicles outside the designated right of way or staging areas or access roads;
- Do not use herbicides during clearing or operations for vegetation management;
- Wash equipment imported from other regions to avoid introducing non-native species;
- Use of indigenous species for hydro-seeding or plantings;
- Implement dust control measures during construction, as required;
- Restrict idling of equipment and maintain construction equipment in good repair, fitted with fully functioning mufflers and comply with the provincial noise emission standards;
- Preferential First Nation / local employment and local purchasing of supplies and services in consideration of availability, merit and business requirements;
- Assistance to members of First Nation communities to obtain required preparatory training programs for construction activities;
- Should deeply buried archaeological or heritage resources be identified during development, Lac Seul First Nation (and other First Nations having identified traditional land uses in the area) and the Ministry of Culture as well as Goldcorp shall be notified;
- In the unlikely event human remains are encountered, Lac Seul First Nation (and other potentially affected First Nations) as well as the Police, Coroner and/or the Registrar of the Cemeteries Regulation Unit shall be identified immediately and Goldcorp;
- Implement other applicable mitigation as per HONI's Environmental Guidelines for the Construction and Maintenance of Transmission Facilities (2009).

Mitigation more specific to the Project and its environmental setting include:

- No in-water work. For the Chukuni River crossing, implement mitigation and protection measures as per Department of Fisheries and Oceans' (DFO's) "*Overhead Line Construction Operational Statement*", including prior notification of DFO;
- No clearing/construction along right of way during caribou calving period (May - June);
- Cease clearing operations if a caribou or wolverine observed within the corridor and notify Goldcorp who will seek advice from the appropriate authorities;
- Locate transmission line at least 400 m from primary bald eagle nests and 200 m from secondary nest (proposed route meets these criteria at the Chukuni River crossing);
- Preferably winter clearing. Otherwise, no clearing of vegetation within 1 km of the bald eagle nests from March 15 to September 1. For the protection of migrating birds, no clearing of vegetation during the breeding season (May 15 to July 15), where feasible. Otherwise, conduct a pre-clearing nest search;
- Conduct crepuscular surveys for whip-poor-wills along the newly cleared corridor.
- For the provincially rare floating marsh marigold (*Caltha natans*), fence or otherwise mark known occurrences of the plant and preferentially conduct vegetation clearing during the winter months, at least in the vicinity of known occurrences of the plant.

An aviation obstruction study has been conducted to ensure that the design meets regulatory requirements for obstruction markings as well as incorporates additional mitigation that may be deemed necessary to address concerns of float plane operators.

This draft ESR is being made available (hard copy and CD) at the local library, the Red Lake Indian Friendship Centre, the local library and municipal offices. Copies have been provided to the First Nation communities, with the request that the document be made available for review by community members at the band offices. It is also being circulated to key government agencies. Please contact the following if you have any comments or questions:

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List of Abbreviations

ANSI	Area of Natural and Scientific Interest
APLIC	Avian Power Line Interaction Committee
AZR	Airport Zoning Regulations
C of A	Certificate of Approval
CARS	Canadian Aviation Regulations
CANSCA	Civil Air Navigation Services Commercialization Act
CFSA	Crown Forest Sustainability Act
CIA	Customer Impact Assessment
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario.
DO	Dissolved Oxygen
BMP	Best Management Practices
EA	Environmental Assessment
EP	Environmental Protection
ELC	Ecological Land Classification
ESA	Environmentally Significant Area
ESDG	Ecological Stratification Working Group
ESR	Environmental Study Report
FBMP	Forest Bird Monitoring Program
FRI	Forest Resource Inventory
FRL	Forest Resource Licence
H	High (net effect)
HADD	Harmful Alteration, Disruption or Destruction of Fish Habitat
HONI	Hydro One Networks Inc.
HWM	High Water Mark
IESO	Independent Electricity System Operator
IFNA	Independent First Nation Alliance
kV	kilovolt
L	Low (net effect)
M	Medium (net effect)
M-D	Monitoring during Decommissioning and Closure
M-C	Monitoring during Construction
M-O	Monitoring during Operations
N	Not required or not applicable
MA	Mega Annum (10^6 years)
ME	Minor Adverse Effect / Mitigable Effect (Not Significant)
MF	Mandatory Frequency
MMAH	Ministry of Municipal Affairs and Housing

MOE	Ministry of the Environment
MNO	Mineral Rights Only
MTO	Ministry of Transportation
NOTAM	Notice to Airmen
NWPA	Navigable Waters Protection Act
OEB	Ontario Energy Board
OPG	Ontario Power Generation Inc.
OR	Ontario Regulation
PIC	Public Information Centre
PPS	Provincial Policy Statement
RAP	Rapid Assessment Plot
SAR	Species at Risk
SIA	system impact assessment
RSFD	Resource Stewardship and Facility Development
RSO	Revised Statute of Ontario
S	Significant Adverse Net Environmental Effect
SLF	Sustainable Forest Licence
SNC	SNC-Lavalin Inc.
SRO	Surface Rights Only
TDG	Workplace Hazardous Materials
VFR	Visual Flight Rules
VEC	Valued Ecosystem Component
WHMIS	Workplace Hazardous Materials Information System