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January 9, 2006

Anne Currie Project Assessment Dir. Environmental Assessment Office P.O. Box 9426 Stn Prov. Govt. Victoria, B.C. V8W 9V1

Dear Ms. Currie:

Please find attached the comments on the Galore Creek Copper Gold Silver Projects Draft Terms of reference. We have asked Amy Crook as our technical advisor to pepare the comments on the Galore Creek Draft Terms of Reference and she has. We have reviewed the comments and are in agreement with them.

Sincerely,

Marie Quock
Chief Councillor
Iskut First Nation

# CENTER for SCIENCE in PUBLIC PARTICIPATION

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"Technical Support for Grassroots Public Interest Groups"



January 2, 2006

Chief Marie Quock Iskut Band Council P.O. Box 30 Iskut, BC V0J 1K0

I have reviewed the Galore Creek Copper--Gold-Silver project Draft Terms of Reference for NovaGold Canada Inc.'s Application for an Environmental Assessment Certificate pursuant to BC's Environmental Assessment Act, dated December 1, 2005. Overall the document is comprehensive and adequate. I offer the following section specific comments for your consideration.

#### 1.8 LAND USE CONTEXT

The description of the land use context uses the Cassiar Iskut-Stikine Land and Resource Management Plan as the primarily reference. As a secondary consideration the TOR say the application will also describe the claimed traditional territory of the Tahltan Nation. Further discussion of aboriginal land use is mentioned in sections 6.12 LAND AND RESOURCE USE and 5. DESCRIPTION OF THE EXISTING ENVIRONMENT.

It is essential that the application give adequate emphasis to traditional Tahltan and Iskut use and occupation of the land the Galore Creek Mine wants to locate on. A thorough discussion of traditional Tahltan and Iskut use and occupation of their lands should be a defining consideration and underlying premise of the whole application process.

#### 3.3 MINE DEVELOPMENT

This section should add a discussion of pit wall management, a dust control plan for the mine site including a plan to avoid release of dust and ore off the mine site by wind and truck transport.

### 3.3.1 Process Plant

Mill reagents and any other hazardous materials used at the mine site and water treatment facility should be identified. This will assist with determining the cause of any toxicity impacts. Complete MSDS information should be provided in the application and an ongoing inventory kept with complete documentation of cradle to grave acquisition, storage, use, and disposal.

A complete description of the wastewater diffuser including design, construction impacts, modeled efficacy, maintenance, and required dilution zone should be included in the application.

#### 3.4.1 Air Access

Impacts to wildlife and wilderness guiding businesses from air craft noise should be included.

### 3.4.2 Permanent Access to the Mine Site

The application should also describe the plans for road maintenance or closure after the mine closes. Who will have this responsibility?

## 3.4.4 Concentrate Slurry Pipeline

The application should also detail the pipeline maintenance plan and emergency spill response plan.

#### 6.6 SURFACE WATER AND GROUNDWATER QUALITY AND QUANTITY

This section should include a thorough discussion of Total Dissolved Solids affects on aquatic resources. Recent research on the affects of Total Dissolved Solids on reproductive success and growth of several species of salmonids have shown toxic responses at levels below 500-1000 mg/l of TDS. The results of the Alaska Science and Technology Foundation (Final Report for ASTF Grant #98-1-012, Salmon as a Bioassay Model of Effects of Total Dissolved Solids, prepared for the Alaska Science and Technology Foundation by Michael S. Stekoll, William W. Smoker, Ivan A. Wang, and Barbi J. Failor of the University of Alaska at Fairbanks (ASTF Report)) show toxic effects to fish at levels below 500-1000 mg/l of TDS. The ASTF Report found reduced fertilization rates in salmon at TDS concentrations as low as 250 parts per million (ppm). The study was designed to only test concentrations down to 250 ppm. The authors acknowledged this as a limitation, thus there may be effects at even lower concentrations of TDS.

The ASTF study tested fish at various stages of fertilization and development with a variety of concentration exposures. In the ASTF continuous exposure experiment, all species tested showed a statistically significant trend of increasing numbers of unfertilized eggs with increasing TDS concentrations. King, Pink and Coho salmon showed effects from exposure to 250 ppm of TDS. In the fertilization experiment, Chum, Steelhead, King, Pink and Coho salmon showed increased numbers of unfertilized eggs with increasing TDS concentration exposures. Coho salmon exhibited effects at 250 ppm, Pink salmon at 500 ppm, and King salmon at 750 ppm.

The ASTF study further concludes that the probable cause of lowered fertilization rates within the TDS solution is calcium or sulfate (Stekoll report at page 17). The ASTF study also found a statistically significant effect on average weight of fish at TDS concentrations of 500, 750 and 1250 ppm and a statistically significant effect on average length of fish at TDS concentrations of 500, 750 and 1250 ppm.

A description of the type of models and input data should be included for all water quality impact predictions.

# 6.10 TRADITIONAL ECOLOGICAL KNOWLEDGE AND CULTURE

The application should identify gaps where TEK is not available and identify how the TEK gaps will be filled.

The application should discuss economic and cultural impacts to existing businesses and livelihoods in the project area (guiding, trapping, and other existing businesses).

#### 6.14 SOCIAL

The social impacts need to be broadened to include all of the impacts found in mining communities. Please see the following references for a complete list (CCSG Associates, Labrador West Status of Women Council)

# 7. ENVIRONMENTAL MANAGEMENT SYSTEM

Iskut Band Council should be involved in approving the EMS plan. Local communities and governance should be actively involved in developing an independent monitoring program to oversee project impacts. The community implemented independent monitoring program should be funded by NovaGold and operate through mine closure and beyond as a long-term independent confirmation of project impacts.

# 7.3 CLOSURE, DECOMMISSIONING AND RECLAMATION

The application should include a proposed bond amount for the complete facility footprint and access road, and perpetual care and maintenance. This is necessary to assure the Tahltan communities that there is enough financial assurance and so the communities will not be placed at financial risk.

I hope these comments have been helpful. Please contact me with questions.

Sincerely,

Anny Crook

### References:

CCSG Associates. 2004. Overburdened: Understanding the Impacts of Mineral Extraction on Women's Health in Mining Communities. Prepared for Mining Watch Canada. http://www.miningwatch.ca/updir/Overburdened.pdf

The Labrador West Status of Women Council In collaboration with MiningWatch Canada and the Steelworkers Humanity Fund. Effects of Mining on Women's Health in Labrador West. November 2004. http://www.miningwatch.ca/updir/Lab\_West\_Final\_Report\_en.pdf

Stekoll, Michael S., William W. Smoker, Ivan A. Wang, and Barbi J. Failor. 3 February 2003. Final Report for ASTF Grant #98-1-012 Salmon as a Bioassay Model of Effects of Total Dissolved Solids University of Alaska Fairbanks, Juneau Center School of Fisheries and Ocean Sciences, 11120 Glacier Highway, Juneau, AK 99801