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Northern B.C. Mining Action Group

Kemess North Backgrounder

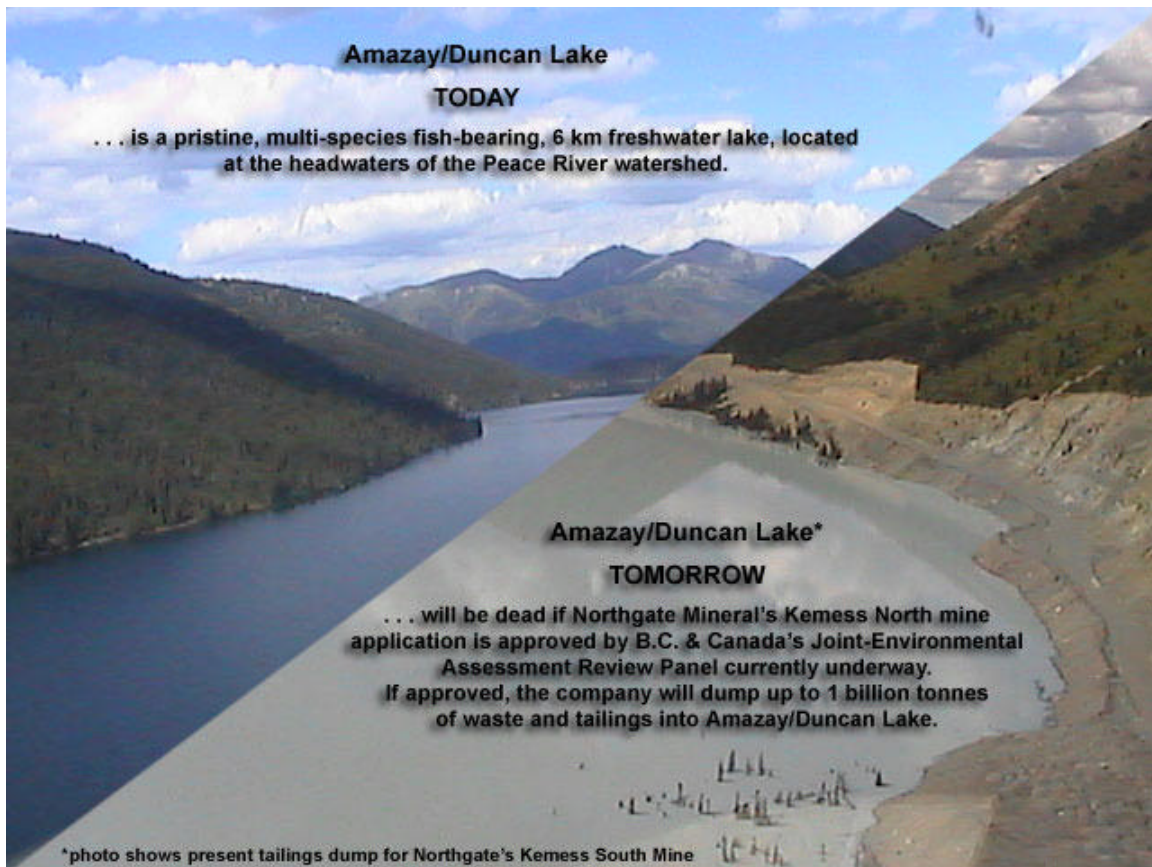


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Northern BC Mining Action Group **Kemess North Backgrounder**

The Issue

A 35,000 hectare property belonging to Kemess Mines Limited, a subsidiary of Northgate Minerals Corporation, is the site of several reserves of copper and gold ore.¹ Kemess South, the only site to be developed to date, is an open pit copper and gold mine operation located in the Omineca Mountains of northern British Columbia, approximately 430 kilometres northwest of Prince George.² It is estimated that there is only enough ore at the Kemess South site to continue operation until 2008 and Northgate Minerals plans to prolong productivity by developing a second site – Kemess North – where 414 million tonnes of proven and probable reserves have been identified.³ The Kemess North deposit is approximately 5 kilometres north of Kemess South and it is estimated that the expansion will sustain the mine until 2020.⁴ Due to the delays in the application, if Kemess North is approved, it will likely begin operation after Kemess South has already been closed.

Gold and copper mining produces a large amount of waste material that can have a detrimental affect on the environment if not handled properly.⁵ Open pit mines, such as Kemess, extract the desired mineral from “waste rock” by crushing the ore into fine particles, called tailings, which are then treated by chemicals to separate out the target metal.⁶ The waste from this process contains acid-generating sulphides that react with oxygen to produce sulphuric acid that can leach out of the waste and pollute the surrounding environment.⁷ This process is called Acid Mine Drainage (AMD) and is the main threat to water bodies and groundwater in areas where open pit mining occurs.⁸

The Environmental Impact Assessment (EIA) for Kemess North indicates that a “waste disposal facility in the Duncan Lake valley will be developed.”⁹ This plan involves the construction of one large dam (90 metres high) and two smaller ones to block creeks flowing in and out of Amazay (Duncan) Lake, thus creating a “zero-discharge” waste disposal facility.¹⁰ Roughly 740 million tonnes of tailings and waste rock will be deposited in the lake.¹¹ Environmental impact assessments were not performed for the waste disposal alternatives, which do not use Amazay Lake, because the proponent claims that they are not economically viable.¹² The transformation of Amazay Lake into a waste disposal facility would have serious, long-term and irreversible negative impacts on the region’s environment and people. These include:

- ? Permanent destruction of the Amazay (Duncan) Lake ecosystem
- ? Long-term contamination of the region’s aquatic systems
 - o A potential dam failure could contaminate the drinking water of the Tsay Keh Dene and Kwadacha First Nations and other communities on, and downstream, of the Williston Reservoir
- ? Extensive damage to fish and wildlife habitat
- ? Undermining of First Nations’ title and rights, culture, health and economy

- ? Ambiguous closure plans have only budgeted for 5 years of monitoring and a post-closure bond of \$24 million – a fraction of the cost to repair any of the numerous potential environmental disasters.¹³ (reference)

Amazay (Duncan) Lake and Regional Aquatic Systems

The main aquatic impact of Kemess North would stem from the conversion of Amazay Lake into a tailings disposal facility.¹⁴ Amazay Lake is a six kilometre long, pristine, multi-species fish-bearing lake. It has scientific significance because it represents one of the few occurrences of lake-run Dolly Varden in the interior drainage of BC.¹⁵ As a tailings disposal facility, Amazay Lake would no longer support a fish population and downstream water quality would be significantly degraded.¹⁶ For example, the EIA indicates that after mine closure, Attycelley Creek would contain sulphate and cadmium levels in excess of BC water quality guidelines.¹⁷ Kemess proposes that these standards be modified and replaced with site-specific water quality objectives.¹⁸ The EIA does not sufficiently address the post-production maintenance of the dams or the potential pollution of the whole Finlay watershed should a dam failure occur.¹⁹

Fish and Wildlife Habitat

The Department of Fisheries and Oceans (DFO) has a No Net Loss policy for fish habitat. Kemess proposes to move the Dolly Varden, rainbow trout and whitefish populations of Amazay Lake to Mulvaney Lake and Whudzi Lake.²⁰ These transplants are not “low risk” as Kemess claims; there are significant implications for the ecosystems of the transplant lakes and for the survival of these fish populations.²¹ Most importantly, these transplants do not constitute habitat compensation (No Net Loss Policy). Overall, the net habitat loss includes the fish population *as well as* a subalpine lake with a surface area of 269 ha, a volume of 64.6 million cubic metres and a mean depth of 24 metres.²²

This area also contains grizzly, caribou, moose, marmot and mountain goat habitat. According to the EIA, the Kemess North project would reduce moderate to high-quality habitat by 17.6%.²³ Impacts to grizzly habitat include the permanent loss of 256 hectares of fall feeding sites and 12.3 hectares of denning sites.²⁴ Critics of the EIA have noted that these numbers provided by Kemess are not based on scientific data or traditional ecological knowledge (TEK), and represent little more than rough estimations.²⁵

First Nations’ Concerns²⁶

Three First Nations’ territories overlap the Kemess property: Takla Lake First Nation, Tsay Keh Dene First Nation and Kwadacha First Nation. These three First Nations – known collectively as the Tse Keh Nay – have hunted, trapped and lived in this area since time immemorial, and continue to use the land to sustain their economies and cultures. The EIA process has failed to adequately address the concerns of the Tse Keh Nay, who have always been opposed to the project’s proposed use of Amazay Lake as a tailings

disposal facility. The Tse Keh Nay have expressed their willingness to consider supporting the project if alternative waste disposal methods were employed, but Northgate has consistently refused to do so.²⁷ Furthermore, failure to consult in a meaningful and effective way with the Tse Keh Nay is a serious infringement of their aboriginal title and rights. Their objection to the plan is due to the numerous environmental hazards associated with the project. Cumulative environmental impacts on aquatic systems and fish and wildlife habitat, and destruction of archaeologically significant sites, such as burial grounds, are all reasons for these First Nations' opposition to Kemess North.

Environmental Assessment Process

The federal-provincial environmental assessment (EA) process has been streamlined in recent years.²⁸ Furthermore, the EA departments have faced severe cutbacks. Combined, this means that the EA process is not necessarily able to devote the time needed to properly assess project proposals.

Also, a decade of case law has resulted in a new understanding of the crown's legal obligation to conduct proper consultation before, during and after the assessment.²⁹ However, the actions of the Canadian Environmental Assessment Agency (CEAA) and the British Columbia Environmental Assessment Office (BCEAO) do not reflect this understanding. The manner in which the Kemess North EIA has proceeded testifies to the EA's fundamental flaws and the need for its immediate revision.

Implications for Other Mining Operations

Environmental concerns arising from mining activity are not new; however, this particular project is significant because in the event that it is approved, several precedents will be set. The following is a list of the regulations and policies that would be bypassed or amended to allow Kemess North to operate. These regulations are needed to ensure responsible mining practice and allowing Kemess to proceed without meeting all the legal requirements will open the door for other mining companies to do the same.

- ? *Fisheries Act, Section 35*
 1. *No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat*
 2. *No person contravenes subsection (1) by causing the alteration, disruption or destruction of fish habitat by any means or under any conditions authorized by the Minister or under regulations made by the Governor in Council under this Act*
- ? *Metal Mining Effluent Regulations (MMER) – an annexure to the Fisheries Act – defines a tailings impoundment area as:*
 - a. *A water or place set out in Schedule two; or,*
 - b. *A disposal area that is confined by anthropogenic or natural structures or by both, but **does not include a disposal area that is, or is part of, a natural water body that is frequented by fish***

- ✍ Note – Northgate is seeking an Order in Council to amend Schedule 2 and re-classify Amazay Lake as a tailings pond
- ? Department of Fisheries and Oceans “No Net Loss” – requirements of this policy are not met
- ? BC Water Quality Guidelines – post-closure levels of cadmium and sulphate will exceed current standards
- ? Consultation and Accommodation Negotiation – unresolved

All mining projects negatively impact the ecosystem in which they operate. However, some mining proposals cannot meet environmental standards and should be dismissed; changing the law is too great a compromise. The Kemess North proposal is an example of a mine that threatens the surrounding region and cannot meet the environmental requirements mandated by the Canadian government. Legislative regulations pertaining to mining should be regarded as minimum expectations that must be met by industry, and any attempt to weaken environmental laws should not be taken lightly. Water is a resource that Canadians should not take for granted, and the contamination of our natural water bodies is a threat to us all.

Northern BC Mining Action Group

We want mining companies to be responsible to the people and the environment of the regions in which they operate. The Northern BC Mining Action Group is a public interest group committed to making information available about mining activity and reform.

If you are interested in joining the Northern BC Mining Action Group, or want more information about Kemess North, contact us:

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Other resources:

www.miningwatch.ca/
www.nodirtygold.org/
www.northgateminerals.com/
<http://www.ienearth.org/>
www.dogwoodinitiative.org/
<http://www.csp2.org/>
<http://www.mineralpolicy.org/>
<http://cpawsbc.org/index.php>

Endnotes:

¹ Northgate Minerals Corporation. (2005). *Kemess Mine Expansion EIA, Appendix 1 – Detailed Project Description*. Retrieved 31 January 2006 from Northgate Web site, http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument

² Stogran, S.W., Bent, H. Davidson, S. & Tucker, G. (n.d.). *Waste material management at the Kemess South Mine to Control Environmental Impacts*. Retrieved 31 January 2006 from http://www.trcr.bc.ca/docs/2004-stogran_etal.pdf

³ Infomine Inc. (2005). *Kemess*. Retrieved 31 January 2006 from Global Infomine Web site, <http://www.infomine.com/minesite/minesite.asp?site=kemess>

⁴ Ibid

⁵ Environmental Mining Council of BC. (n.d.) *Acid Mine Drainage: Mining and Water Pollution Issues in BC*. Retrieved 31 January 2006 from <http://www.theminingnews.org/pubs/amd.pdf>

⁶ Ibid

⁷ Ibid

⁸ Ibid

⁹ Northgate Minerals Corporation. (2005). *Kemess Mine Expansion EIA, Appendix 1 – Detailed Project Description*. Retrieved 31 January 2006 from Northgate Web site, http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument (page 1)

¹⁰ Ibid

¹¹ Northgate Minerals Corporation (2005). *Kemess Mine Expansion EIA, Appendix 1 – Detailed Project Description, p. 136*. Retrieved 23 March 2006 from Northgate Website, http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument

¹² Pacific Analytics Inc. (2005). *Kemess Mine North Expansion: An Economic Review of the Environmental Impact Assessment*. Retrieved 31 January 2006 from http://www.miningwatch.ca/updir/Kemess_North_Economic_Review.pdf

¹³ Northgate Minerals Corporation (2005). *Kemess Mine Expansion EIA, Appendix 12 – Reclamation and Closure*. Retrieved 10 April 2006 from Northgate Website, http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument

¹⁴ Levy, D. (2006). *Review of the Aquatic Environmental Impact Assessment for the Kemess North Project*. Retrieved 2 February 2006 from http://www.miningwatch.ca/updir/Kemess_North_Aquatic_Review.pdf

¹⁵ Ibid

¹⁶ Ibid

¹⁷ Northgate Minerals Corporation. (2005). *Kemess Mine Expansion EIA, Appendix 13 – Water Quality Monitoring*. Retrieved 31 January 2006 from Northgate Web site, http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument

¹⁸ Ibid

¹⁹ Levy, D. (2006)

²⁰ Northgate Minerals Corporation. (2005). *Kemess Mine Expansion EIA, Appendix 11 – Fish Habitat Compensation Plan*. Retrieved 31 January 2006 from Northgate Web site http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument

²¹ Levy, D. (2006)

²² Ibid

²³ Northgate Minerals Corporation. (2005). *Kemess Mine Expansion EIA, Appendix 8 – Environmental Baseline: Terrestrial Resources*. Retrieved 17 March 2006 from Northgate Web site http://www.northgateminerals.com/frame_kemess_north_EIA.html?OpenDocument

²⁴ Ibid

²⁵ Comments of MiningWatch Canada on the Environmental Impact Assessment of the Kemess North Mine, January 6, 2006. Retrieved 31 January 2006 from MiningWatch Web site, http://www.miningwatch.ca/updir/Kemess_North_EIA_comments.pdf

²⁶ Three Nations (2006). *Save Amazay Lake*. Retrieved 3 April 2006 from Three Nations Website: www.saveamazaylake.ca

²⁷ 5 Nations (2004). *Re: Support for Sustainable Development*. Letter from Justa Monk to Ken Stowe, November 9, 2004..

²⁸ Summary Guide to the BC Environmental Impact Assessment Process. Retrieved 17 March 2006 from <http://www.eao.gov.bc.ca/publicat/brochure-mar-03.pdf>

²⁹ List of pertinent Aboriginal case law:

Delgamuukw v. British Columbia, (1997, SCR). Internet Access (April 9, 2006): http://www.lexum.umontreal.ca/csc-scc/en/pub/1997/vol3/html/1997scr3_1010.html

Haida First Nation v. B.C. (Ministry of Forests) and Weyerhaeuser, (2004, SCR). Internet Access (April 9, 2006): http://www.lexum.umontreal.ca/csc-scc/en/pub/2004/vol3/html/2004scr3_0511.html

Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage), (2005, SCR).

Internet Access (April 9, 2006):

http://www.lexum.umontreal.ca/cscscc/en/pub/2005/vol3/html/2005scr3_0388.html

Taku River Tlingit First Nation v. B.C. (Project Assessment Director), (2004, SCC).

Internet Access (April 9, 2006):

http://www.lexum.umontreal.ca/csc-scc/en/pub/2004/vol3/html/2004scr3_0550.html