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Submission to the Joint Panel Review on Kemess North Mine Smithers, B.C., November 22, 2006

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Thank you for this opportunity to appear before the Joint Panel and to express our considered opinion regarding the Kemess North Gold-Copper Mine Project.

Founded in 1999, MiningWatch Canada is a twenty member coalition of labour, Aboriginal, environmental, social justice and development organizations from across Canada with a mandate to support communities affected by mining in Canada, and affected by Canadian mining companies abroad.¹ We provide a coordinated public interest response to the threats to public health, water and air quality, fish and wildlife habitat and community interests posed by irresponsible mineral policies and practices in Canada and by Canadian companies around the world.

We have been reviewing the voluminous submissions for the Environmental Assessment of this mine project since the Draft Agreement between BC and Canada was first posted, and have come to the following conclusion:

The Panel has no choice but to find that the Kemess North Mine project poses serious environmental effects which cannot be mitigated and that are not justified under the circumstances.

I have divided our presentation into three sections: the Panel's mandate, serious environmental effects that cannot be mitigated, and the circumstances.

The Panel's responsibility in this matter

¹ Our members are: Bathurst Sustainable Development, the Canadian Arctic Resources Committee (CARC), the Canadian Auto Workers (CAW) Social Justice Fund, the Canadian Environmental Law Association (CELA), the Canadian Parks and Wilderness Society (CPAWS), the Citizens' Mining Council of Newfoundland, Development and Peace, the Environmental Mining Council of British Columbia (EMCBC), Friends of the Earth Canada, the Innu Nation, Inter Pares, Kairos (a coalition of church-based groups), Nature Canada, Northwatch, the Public Service Alliance of Canada, the Sierra Club of Canada, the Steelworkers Humanity Fund, SUCO, the Transboundary Watershed Alliance and the Yukon Conservation Society (YCS).

The Panel's responsibility in this matter is set out in the BC Environmental Assessment Act and the Canadian Environmental Assessment Act as follows:

The Canadian Environmental Assessment Act is clear about the purpose of the Act:

4. (1) The purposes of this Act are:

(a) to ensure that projects are considered in a careful and precautionary manner before federal authorities take action in connection with them, in order to ensure that such projects do not cause significant adverse environmental effects;

(b) to encourage responsible authorities to take actions that promote sustainable development and thereby achieve or maintain a healthy environment and a healthy economy;

It further states at 37(b) that responsible authorities are not to issue permits for projects where: "taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, the project is likely to cause significant adverse environmental effects that cannot be justified in the circumstances."

Although the BC Act does not state its purpose, the Service Plan for the EAO states:

"The Environmental Assessment Office delivers a timely and integrated process for assessing the environmental, social, heritage, economic and health effects, and potential impacts to First Nations' claims to Aboriginal rights and title, of major projects in British Columbia, reports the findings of environmental assessment reviews to government and may make recommendations regarding project certification...²"

The question before this panel is whether or not the significant adverse environmental effects caused by the Kemess North Mine can be mitigated and, if not, can be justified in the circumstances. We think the balance of the evidence is clear: 1) the project will have significant adverse environmental effects which cannot be mitigated, and 3) the effects are not justified in the circumstances.

Serious adverse environmental effects which cannot be mitigated:

There can be no doubt that the Kemess North Mine proposal, which includes the destruction of Duncan Lake, will cause major, catastrophic significant adverse effects on the environment, as defined in the CEAA Reference Guide: Determining Whether A Project is Likely to Cause Significant Adverse Environmental Effects, Table 1.

1. It is clear from the submissions and the economic analysis that the company considers Duncan Lake to be the only affordable option for the disposal of its wastes. This position has been substantiated by Northgate's own economic analysis, by Pacific Analytics, by Gartner Lee and by Micon. Micon has made a proposal for delay in the use of Duncan Lake for tailings disposal which has not been addressed by the company. So, it appears that all other disposal options are out of the question.

2. The Kemess mine footprint will be expanded from 1252 ha to 2137 ha during operation. The expanded mine will consist of roads, a crusher, conveyor systems, tunnels, waste rock dumps, borrow material areas, fuel depots and hydro lines, explosives, and other infrastructure, as well as a two

enormous open pits, an expanded mill, a 500-person camp and an airstrip. The footprint will also encompass the impacts from dust, noise, and water pollution on the surrounding ecosystem.

3. There are significant environmental effects beyond fish habitat considerations. Lakes are more than fish habitat as we have heard in the presentation from the Tse Keh Nay elders. The Environment Canada hydrology submission³ speaks to the importance of Duncan Lake in regulating water flows in the system. Even the company EIS makes it clear that taking Duncan Lake is a “significant adverse environmental effect” which can only be compensated, not mitigated. Duncan Lake would be impounded by a 90 m high dam and converted into a Tailings Disposal Facility that would cut off discharge into Duncan Creek. During project operation flows in Duncan Creek will be reduced by 90% and in Attycelley Creek by approximately 30%.⁴ Loss of critical fisheries habitat within the project footprint, together with degraded water quality from the disposal of acidic waste rock, would effectively eliminate the Duncan Lake ecosystem”.⁵ The Kemess North Mine alone will have permanently destroyed over 600 hectares of virgin land⁶. At least 17.6% of caribou and grizzly habitat in the area will have been destroyed⁷, and two ecological plant communities will have been wiped out⁸. It will have created a mine pit that is at least 1600 metres in diameter and up to 500 metres deep, that will take 80-100 years to fill with water⁹, acidified by the pit walls¹⁰. Upon closure, downstream water quality at the Attycelley Creek confluence would exceed sulphate and cadmium water quality guidelines by factors of 14 and 3, respectively, and its tailings dams will require monitoring forever¹¹. This does not include the already enormous footprint from Kemess South Mine.

4. Despite claims to the contrary, there will be permanent and lasting destruction of the Duncan Lake and Duncan Creek ecosystem. It is clear that the company is still developing a plan to remediate the lake, and there is no guarantee that it can be done effectively.¹² Even if they are able to do it, there will be a 90 metre high tailings dam to maintain, and concerns with the continued discharge of sulphates and cadmium from the impoundment. The company’s examples of remediated tailings ponds are not necessarily applicable. “Apart from Trojan Pond of Highland Valley Cooper Mine (Hamaguchi, 1997), there, at present, are no precedents for the restoration of a tailings impoundment to a self-sustaining, fish bearing Lake with a productivity equivalent to that of the original natural lake.”¹³ Trojan Pond is a man-made lakes, and the fishing that takes place on it is for sport only.¹⁴ Appendix 4 lists a number of instances where tailings have been disposed to natural water bodies in Canada and elsewhere. The purpose of including this Appendix is unclear, as there is no dispute about the effectiveness of keeping acid-generating tailings under a water cover. The Appendix does nothing to allay concerns about the effect of tailings on fish populations. It should be noted that of the 28 mine case studies, only 11 are said to have had fish in them, and in five of these cases the fish are

³ Oct 25,2006, page 12-19,hydrology

⁴ transcript p.730.

⁵ Levy, David. Review of the Aquatic Environmental Impact Assessment for the Kemess North Project, December 2005

⁶ EIA, Appendix 12, Table 1.1

⁷ EIA, page 309-10

⁸ EIA, page 100

⁹ EIA, page 250

¹⁰ EIA, page 250

¹¹ EIA, page 250

¹² transcript Nov 1/06- pages 194-199

¹³ Robertson Geo Consultants Inc and Rescan Environmental Services Ltd, Review of Mine Waste Management Plan, July 29, 2004, prepared for Northgate Minerals.

¹⁴ http://www.bcminerals.ca/files/bc_mine_information/000078.php, “Decommissioned pits and tailings ponds will be turned into recreational fishing areas, much like Trojan Pond, a reclaimed tailings pond from the Bethlehem pit, where introduced trout have thrived, and which hosts an annual fundraising fishing derby in support of local charities.”

maintained by stocking. Most of the examples are historic/abandoned mines. Of the recent examples given, Rabbit Mine has not yet breached the dikes in the lake, so the impacts have not yet happened; at Voisey's Bay in late September 2005, a broken tailings slurry pipe killed fish in a river that was supposed to be protected. In almost all of these cases, there was no testing of fish or biota for contaminants at any of the mine sites.

It should also be noted that once a water body has been re-defined as a Tailings Impoundment Area and added to Schedule 2 of the Metal Mining Effluent Regulation, there is no longer any regulatory requirement to remediate the lake whatsoever. We note that the remediation of Duncan Lake is not part of the habitat compensation proposed by the company.

5. Taking lakes for Tailings Impoundments is not common practice in Canada. The EIA Appendix 4 attempted to show that the taking of lakes for tailings is common practice in Canada. This is not true. In 2002, Environment Canada added Schedule 2 to the new Metal Mining Effluent Regulations under the Fisheries Act. This schedule "redefined" natural water bodies as tailings impoundment areas (TIAs). Once a natural water body is added to Schedule 2, it ceases to be a lake or a pond. It is defined as an industrial waste dump. However, an Order in Council is required to amend Schedule 2. During the 2002 debate about the addition of Schedule 2 to the new MMERs, Environment Canada averred that the schedule was needed to deal with operating and "historic" mines that already use natural water bodies as mine waste dumps. NGO representatives were explicitly assured by EC in 2002 that Schedule 2 would not become a common means for the mining industry to "use lakes for waste disposal" as it would take a regulatory amendment of the MMERs, including all associated consultation, publication in Canada Gazette, and approval by Governor-in-Council. This process was presented as forming a serious barrier to new mines looking at "water bodies frequented by fish" as possible tailings impoundments. A recent amendment to the MMER enables the redefinition of fish-bearing waters as TIAs (Tailings Impoundment Areas) upon submission of a satisfactory fish compensation plan to the Minister. Some nine new mines planned for BC, Nunavut, and NFLD have indicated they plan to use lakes as tailings impoundments. Duncan Lake is one of these. People who care about the environment across the country are in an uproar about this amendment and it is a politically charged situation.

6. DFO has an appalling record for monitoring and enforcement of fisheries compensation measures, which has recently been confirmed by three studies.¹⁵ This situation is unlikely to improve as changes to federal fisheries enforcement are being considered that will see triage of HADDs such that the industry will self-regulate Class 3 and 4 fish habitat.

7. Cumulative impacts have not been considered by the Panel, but will be enormous. The mine project itself relies upon the completion of the Cascadero Falls Hydro Project, although this project has not been included in this EA. The Kemess North Project must be viewed from a comprehensive perspective that takes into account the cumulative impacts of all the industrial development activities that have assaulted First Nations in that region over the past few decades. Historically, the community has been devastated by the Williston Reservoir, the arrival of a Japanese biological weapon in World War II, the Kemess South Mine and resulting infrastructure, as well as the pine beetle infestation. Among the projects being proposed in the region are the Enbridge pipeline, Klappan Coal and Coalbed Methane Extraction, Stewart-Omineca Resource Road, Cascadero Falls Hydro Project (a generation project near the outlet of Thutade Lake, approximately 10 km from Kemess), Sustut and Lorraine mineral deposits, as well as the forestry and sport hunting which inevitably follow in their

¹⁵Susan Isaac, Protecting Fish Protecting Mines, MiningWatch Canada, 2005; Samis, Khan and Birtwell, Canadian Technical Report of Fisheries and Aquatic Sciences # 2606, 2005; and D. J. Harper I and J. T. Quigley, No Net Loss of Fish Habitat: A Review and Analysis of Habitat Compensation in Canada, 09/30/05

wake. These many projects together will clearly impact “the capacity of renewable resources that are likely to be significantly affected by the Project to meet the needs of the present and those of the future”.¹⁶ The cumulative effects of all these projects have not been addressed in this EA.¹⁷

8. The mine is only going to last until 2021 at the latest, and many of the intervenors have spoken to the possibility that another ore body will be found in the same area. This is ominous in its implications...first South Kemess, then North Kemess and then another mine in the area...enlarging the footprint and the destruction - all being driven by the need to keep the mining jobs in the area. Northgate continues to explore and option other properties in the area¹⁸, such as Sustut. When does the First Nation get to say “enough”?

9. There has been no analysis of the value of the natural capital that will be destroyed by the mine, as the Suzuki Foundation points out in their submission. During the EA process, all the arguments about costs and benefits have been couched in traditional economic terms. *But the mine will get to use the water in Duncan Lake for free*. This will mean a loss of eco-system integrity and services, as well as further intrusion on roadless areas, the loss of cultural practices; the depletion of resources available for future generations. Sustainable progress indicators, such as a multi-attribute trade-off analysis, do exist and have not been used.

10. Mineral reserves in Canada are being depleted at an alarming rate. “Canadian mineral reserve levels are declining, and have been declining for over two decades. Copper reserves have declined from 17 million tonnes in 1980 to less than 6 million tonnes at present. Zinc reserves have fallen from 28 million tonnes to 5 million tonnes, while silver and lead reserves have shown similar 80% declines during this quarter-century period. Gold reserves increased in the 1980s, reaching a new peak in 1996, but have since dropped by 40 percent and have now returned to the lower levels experienced in the early 1980s. At current rates of production, Canada has 5.5 years of lead reserves remaining, seven years of zinc, 10.5 years of copper, 15 years of gold and 21 years of nickel reserves.”¹⁹

The Canadian mining industry approaches this problem by asking for more support to the exploration industry, so that more reserves will be discovered and in turn, depleted. Without policies and incentives to protect any remaining reserves from immediate and total pillage, future generations are likely to find themselves with no metals left to mine at all.

The circumstances:

In its March 2006 submission MiningWatch Canada stated: “The Environmental Assessment for Kemess North provides an opportunity for a modern and comprehensive analysis and evaluation of the impacts of the proposed mine. It would enable both levels of government and intervenors in the process to look at the full costs and benefits of the project for this and future generations. Over the

¹⁶ 2J. in the EIA Guidelines for the project.

¹⁷ The CEAA Reference Guide for addressing cumulative environmental effects states: “Fourth, the Act states that projects or activities that have been *or will be* carried out must be considered.” As mentioned above, many environmental assessments already consider the cumulative environmental effects of the project in combination with those of past and existing projects. What is new is that the environmental effects of projects or activities “*that will be carried out*” must now be examined in combination with the environmental effects of the project being proposed. ...it would be prudent to consider projects or activities that are in a government approvals process as well. Environmental assessments can take a long time to complete, and approvals for other projects and activities may be given during the assessment of the project in question.”

¹⁸ See Northgate Annual Information Return, March 29,2006, pages 27-33

¹⁹ Mining Association of Canada presentation to Mines Ministers Conference, Whitehorse, August 2006.

past ten years, the level of understanding of the impacts and benefits of large scale mining projects has grown exponentially, and this could be an opportunity to bring that knowledge into play”. This was not done. There has been little or no evaluation of ecological costs, no evaluation of cumulative impacts, and only a very sketchy analysis of economic costs and benefits for the First Nations and region.

Unfortunately, none of the interpretation documents on the CEAA website, nor – to my knowledge - relevant jurisprudence, interpret what the *justifying circumstances* over-riding a finding of *significant adverse environmental effects* might be. In the absence of such an operative guide, we offer the following analysis of the circumstances, or context, for the mine.

1. Micon’s economic analysis makes it clear that Kemess North is a marginal mine.²⁰ The ore is low grade (gold 0.30g/t and copper 0.16 g/t) and the amount of waste (740 million tonnes of waste of which 415 tonnes are tailings) is enormous. The pit will be one of the world’s deepest (500 metres), with serious slope stability issues. Gartner Lee states: “There are few precedents for operation under these conditions”.²¹ The future of the mine is dependent on a sustained high price for gold and copper, which all presenters have refused to predict. The company, in their presentation, cannot even guarantee that their Board will decide to have the mine go ahead.²² There is a very real possibility that Duncan Lake will be used only for the disposal of wastes from Kemess South, and that the Kemess North Mine will not go ahead at all.
2. The risks to tax payers of mine abandonment if the mine goes ahead are substantial. British Columbia under the Mines Act requires “hard security” to cover the estimated costs of clean-up for the next five years of a mine’s life, which is, in effect, full security at the beginning of the mine’s life. Micon thinks that the mine may have to stop production in 2012-2015 because of the falling grade of the ore and possible falling prices²³. The Company has not factored in the costs of a requirement for a full reclamation bond up front in their 2004 feasibility study – which Micon estimates at \$64-65 million. They have put \$60 million in an updated economic analysis, but have assumed: “that the closure cost bonding going forward would be the current practice, which is you bond as you are required... over the course of the project and not all up front”.²⁴
3. The mine will not make a substantial compensating contribution to affected First Nations livelihoods. The EIA confuses “community” with reserve, and fails to recognize the First Nations use of the land (eg, “There are not any communities within 50 km of the project”²⁵). Until 2004, Kemess South had little or no interest in the employment possibilities for First Nations at the mine. In Appendix 9 to the initial EA, it is clear that the benefits of the Kemess South Mine have not been shared with the Aboriginal people in the region. The EIA said that in 2004, out of 350 full-time and 125 seasonal employees, only 28 First Nations employees came from the affected communities²⁶, and they earned an average of \$15,000 to \$25,000 that year.²⁷ In Appendix 9 it said that the income to Tsay Keh Dene from mine employment in 2004 was only \$27,436 (from 4 employees), to Takla Lake \$52,621 (from 15 employees).²⁸ After eight years of operation, the mine only has 16 people from Tse Keh Nay in the union, although a training program was finally

²⁰ transcript p 302

²¹ transcript p 238

²² “It is up to Northgate’s board of directors to decide if the mine will go ahead”- Gartner Lee.

²³ transcript p. 278

²⁴ MacPhail, transcript p 311

²⁵ supplement 23, page1

²⁶ EIA, Page 327

²⁷ EIA, p 326-7

²⁸ Appendix 9-page 125

launched in June 2004. There are no contracts with First Nations owned companies, and there has been no attempt to develop an Aboriginal contracting strategy, although the affected First Nations have occasionally been invited to bid on small contracts.²⁹ The number of Aboriginal employees at Kemess South has in fact been declining over the past year³⁰, but their wages have gone up. By January 2006, 38 employees earned \$1,800,000 in wages, or an average of \$47,368, almost double what they earned prior to the EA. However, the average industrial salary in BC in 2004 was \$77,800³¹; the Kemess median is \$75,000.³²

4. The proponent does not appear to have the intention to pay compensation to First Nations for the taking of their traditional territories and damaging their life-style. No amount has been included in their cost estimates. We would argue that the value of the damage to First Nations lands is at least equal to the difference in cost between the on-land disposal options and the Duncan Lake option – some \$800 million, minus the cost of the fisheries compensation plan. The company appear to think it will get to use the Lake for free, minus some costs for enhancing fish habitat in other water bodies in the area (some \$ 7.75 million). Neither has the proponent included the costs of potential litigation with First Nations.³³
5. The Kemess North Mine is not essential to the economic health of the region. The proponent argues that the socio-economic benefits of the mine are dispersed throughout 92 BC communities who house the fly-in employees, three communities – Blackpine Reserve, Germanson Landing and Manson Creek – which are accessible by the Ominica Resource Access Road, and some 31 communities outside BC. For the smaller communities where employees reside, less than 5% of their labour force works at Kemess and for the larger communities it is less than 1%.³⁴ The company argues that the impact of the mine on the health of communities where employees reside is negligible, and that “the loss of the mine as a source of income does not prevent former employees from seeking similar work at another fly-in mining operation.” The Micon study indicates that there is likely to be a delay of 2.3 years or more before the company will be able to get the equipment it needs for start-up, because of the increase in demand occasioned by high commodity prices³⁵. A number of Alberta tar sands mine projects, the Galore Creek Mine, Red Chris and the Ruby Creek Molybdenum Mine are all likely to be in start-up at the same time. The mining industry itself argues that there is a shortage of skilled miners, with a requirement for 81,000 more within the next ten years.³⁶ Is this mine really necessary to the health of a regional economy where its impacts are so diversified? Will too many mines opening at once not over-heat the regional economy?
6. The Kemess North Mine has an anticipated life of only 11 years. When it closes, there are two possibilities: another ore body is discovered that will continue mine employment, or the mine

²⁹ On June 15, 2006 Northgate Minerals Corporation and the Tse Keh Nay (3 Nations) announced that they that they had signed a Cooperation Agreement related to the operation of Northgate’s existing Kemess South mine in Northern British Columbia. In the Agreement, the Tse Keh Nay (3 Nations) consisting of the Takla, Tsay Keh Dene and Kwadacha First Nations agreed to formally respect the rights and interests of Northgate to operate the Kemess South Mine within the traditional territories of the Tse Keh Nay. In exchange for this recognition, Northgate agreed to respect the Tse Keh Nay’s rights in the area and to provide funding to the Tse Keh Nay in the amount of CDN \$1,000,000 per year over the remaining Kemess South mine life. This funding will be used to benefit the Tse Keh Nay member communities.

³⁰ Supplement 25b

³¹ Suppl 23 page 5

³² supp 23, page 6

³³ transcript p 315-7

³⁴ Supplement 23, page 4

³⁵ transcript page 274

³⁶ MITAC, Prospecting the Future

closes. If those employed at Kemess are going to have to find other work in twelve years, maybe sooner if the price of gold and copper drop, is it not just putting off the inevitable to permit this short lived and marginal mine? Because the mine will only last until 2021 at the latest, it is not an effective strategy for building the “post pine beetle economy” that the Mayor of Prince George and the President of the Chamber of Commerce referred to in their submissions³⁷ Would it not make more sense to look at other forms of economic development now, while mining jobs across the country are plentiful?

7. The use of Duncan Lake for tailings disposal is an enormous and unwarranted public subsidy to this mining operation. Why should Northgate receive any further subsidy? The original Kemess Mine was built with huge contributions from the public purse. In the early 1990s, activists rallied to protect the wild Tashenshini River from a mine called Windy Craggy. They won a park, but the mining company got a \$166 million settlement package for the loss of their claims, which included substantial subsidies and a go-ahead to proceed with the development of another mine in the Mackenzie area of British Columbia – the Kemess Mine. The company was Peggy Witte’s Royal Oak Mines. Royal Oak also owned the Pamour-Nighthawk Mine in Timmins and the infamous Giant Mine and Colomac Mines in Yellowknife. By 2001, Royal Oak was in receivership, leaving behind 237,000 tonnes of arsenic trioxide in Yellowknife stored in underground chambers, and a trail of broken promises about fish habitat protection at Kemess and environmental disasters on surface at all three mine locations. However, Royal Oak had managed to accumulate over \$200 million US in tax credits for exploration and development. Instead of going bankrupt, the assets of the company were taken over by the main creditor, Northgate Exploration. Northgate has managed the mine for the last six years, and have only now begun to pay taxes, as their tax incentives have run out.
8. The First Nations affected by the mine are opposed to it. For the Tse Keh Nay who have lived on this land since time immemorial, the taking of Duncan Lake (in their language “Amazay” or “Little Mother”) is not an option. With the support of the BC Assembly of First Nations, they have declared their unwavering opposition to this plan.³⁸ They say that the impacts of taking the lake will destroy their culture and way of life. “Amazay/Duncan Lake is in an area of shared territory used and managed by the 4 Nations for thousands of years. It is an important fish and wildlife area...we won’t allow our way of life to be sacrificed for the benefit and profit of others.”³⁹

In conclusion, we ask the Panel to exercise its responsibility under the Canadian Environmental Assessment Act and the British Columbia Environmental Assessment Act and find that the project will have “significant adverse environmental effects which cannot be mitigated nor justified in the circumstances”.

³⁷ Transcript, p 846-851

³⁸ BC Assembly of First Nations’ annual general meeting in Kamloops, October 24, 2005. “Said Grand Chief Edward John, a member of the First Nations Summit political executive. “Clearly, there is nothing environmentally sound about destroying a pristine lake...how can an environmental review process approve the complete destruction of a beautiful lake and its entire ecosystem? It’s unconscionable in this day and age” ...said Dave Porter, also a member of the First Nations Summit’s political executive. “The chiefs made it clear that the issue of the lake’s potential destruction is now on the forefront of their minds as it relates to environmental protection throughout BC.”

³⁹ August 4, 2005. 4 Nations Vow to Protect Amazay Against Acid Mine Waste