



**CANADIAN PARKS AND  
WILDERNESS SOCIETY  
NWT CHAPTER**

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**Mackenzie Valley Land  
& Water Board**

**File**

**MAY 13 2002**

**Application # N3L2-0004  
Copied To KLI/PM/LC/ISM/Reg**

May 10, 2002

**RE: North American Tungsten Corporation Ltd. Water Licence N3L2-0004**

Dear Ms. Cordell:

Please accept this letter as comments of the Northwest Territories Chapter of the Canadian Parks and Wilderness Society (CPAWS-NWT) on the water licence application listed above. CPAWS-NWT is part of a national non-profit conservation organization, dedicated to protecting Canada's wilderness.

**Context**

In our December 19, 2001 letter to the Mackenzie Valley Land and Water Board, CPAWS-NWT included a section which outlined the important conservation values of the wilderness area that surrounds the CanTung mine. We again want to highlight these conservation designations as a reminder of the unique ecological context in which the North American Tungsten (hereafter referred to as 'CanTung') application is made.

The conservation designations in the area are the Nahanni National Park Reserve (NNPR), which is also a UNESCO World Heritage Site; and the South Nahanni river within the Park Reserve is a Canadian Heritage River. Also, a large portion of the South Nahanni Watershed is a potential protected area, as it has been identified for subsurface withdrawal by the Government of Canada and the Deh Cho First Nations in the Deh Cho Process negotiations.

The CanTung mine site is located in the South Nahanni Watershed (SNW), approximately 40 km from the NNPR boundary. This is an area with globally significant wilderness values and natural features, which are recognized and protected by the national and international conservation designations listed above. It is because of the wilderness values and designations in this area that CPAWS-NWT is requesting that this water licence application be referred to an environmental assessment.

### National Park Reserve

The recently revised *Canada National Parks Act* (2000) declares that the "maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks" (section 8(2)). This purpose of National Parks is echoed by the report of the Panel on the Ecological Integrity of Canada's National Parks (Parks Canada Agency, 2000)<sup>1</sup>, which stated that "conserving, restoring and maintaining ecological integrity is the core of Parks Canada's mandate."

The SNW is a large wild area, approximately 33,000 km<sup>2</sup> in size, which contains the NNPR within its boundaries. The area of immediate area of concern when protecting the ecological integrity of the Park Reserve, as identified by Parks Canada, is the entire South Nahanni Watershed and a small portion of the Liard River basin adjacent to the confluence with the South Nahanni River. Parks Canada has clearly stated the role of the watershed in protecting the ecological integrity of the NNPR:

"Among the most obvious examples of the importance of watershed protection to the ecological integrity of Nahanni National Park Reserve are water quality and woodland caribou. As the park covers only one-seventh of the South Nahanni watershed, the majority of the waters flowing through the park originate outside its borders, and any upstream activities do have the potential to impact water quality in the park."<sup>2</sup>

Obviously then, the NNPR will be impacted by what occurs in the SNW, whether or not it occurs within the current Park Reserve boundaries.

### World Heritage Site

The NNPR is also internationally recognized as a United Nations Educational, Scientific and Cultural Organization Natural World Heritage Site for its globally significant natural features and wilderness values on par with other World Heritage Sites such as the Great Barrier Reef, the Galapagos Islands and the Grand Canyon. Nahanni was designated under two different criteria; as "an outstanding example representing significant ongoing ecological processes or biological evolution" and for its "superlative natural phenomena, formations or features or areas of outstanding natural beauty." (United Nations Educational, Scientific and Cultural Organization, 1998).<sup>3</sup>

### Canadian Heritage River

A Canadian Heritage River designation is meant to ensure that rivers of outstanding natural, historic or recreational value are recognized and managed in a manner which conserves their distinctive values, while allowing for public use and enjoyment of the rivers. The South Nahanni river was designated to recognize its natural and recreational resources, as the river "provides a wilderness river experience which is unique in Canada, in a setting of world-class, natural beauty"(The Canadian Heritage River System, 2000)<sup>4</sup>

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<sup>1</sup> Parks Canada Agency, 2000. "Unimpaired for Future Generations"? Protecting Ecological Integrity with Canada's National Parks. Vol. I. "A Call to Action." Report of the Panel on the Ecological Integrity of Canada's National Parks. Ottawa, ON.

<sup>2</sup> Mackenzie Valley Environmental Impact Review Board Information Request Response from Parks Canada, September 2000.

<sup>3</sup> <http://www.unesco.org/whc/opgutoc.htm#debut>

<sup>4</sup> [http://www.chrs.ca/Rivers/SouthNahanni/SouthNahanni\\_e.htm](http://www.chrs.ca/Rivers/SouthNahanni/SouthNahanni_e.htm)

### Potential Protected Area

Another aspect of the unique context of this application is that areas of high cultural and ecological value within the South Nahanni Watershed are the subject of negotiations for interim land withdrawals between the Government of Canada and the Deh Cho First Nations, through the Deh Cho Process.

### Context Summary

It is within the context of globally significant ecological values and protective designations which an assessment of this application must be based. The importance of protecting the ecological values of the watershed and NNPR, as well as the status of the SNW as a proposed protected area, are the reasons why CPAWS-NWT is requesting this water licence application be referred to an environmental assessment. Since the CanTung mine does not require a land use permit to operate, only the surface lease and a water licence, this water licence application is the only opportunity to undertake an environmental assessment of this mine site<sup>5</sup>.

In the sections below, please find the specific concerns related to the CanTung water licence permit application.

### Water Quality

The July 2000 NNPR Fact Sheet identifies mining activity as the "single greatest threat" to the Park Reserve and watershed (page 9). Additionally, the report of the Panel on the Ecological Integrity of Canada's National Parks (Parks Canada Agency, 2000) lists mining and transportation adjacent to National Parks as ecological stresses which significantly affect most parks.<sup>6</sup>

The potential for mining activity to degrade water quality in the SNW led to the implementation of a water quality monitoring study in the NNPR. The report '*Protecting the Waters of Nahanni National Park Reserve, N.W.T.*' by Environment Canada, Conservation and Protection, and Canadian Parks Service(1991) states "the cumulative impact of the mining activities [in the SNW] could be considerable" (page 9), and that mining activity has "*the potential to adversely affect the water quality of the basin and disrupt the life processes which depend on it*" (page 19, emphasis added), and recommended that "water quality monitoring be significantly expanded if exploration and development activities in the basin proceed" (page 51).

The subsequent report '*Protecting the Aquatic Quality of Nahanni National Park Reserve, N.W.T.*' by Environment Canada and Heritage Canada (1998) states the mining potential in the Greater Nahanni Ecosystem presents a serious threat to water quality within the Nahanni National Park Reserve.

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<sup>5</sup> Historically, an environmental assessment of the CanTung mine operations was not required or completed.

<sup>6</sup> Parks Canada Agency. 2000. "Unimpaired for Future Generations"? Protecting Ecological Integrity with Canada's National Parks. Vol. I. "A Call to Action." Report of the Panel on the Ecological Integrity of Canada's National Parks. Ottawa, ON.

*"Aquatic quality monitoring activities should continue at present levels, and be increased if new development occurs in the South Nahanni River basin, such as start-up of a metal mine on Prairie Creek, re-opening of the Tungsten mine ..."*<sup>7</sup>

The CanTung mine re-opened after 15 years of inactivity without an environmental assessment. As a condition of the licence renewal, it is requested that the recommendations in the aforementioned 1991 and 1998 water quality reports be examined and implemented prior to renewing this water licence, and that the licence be subject to relevant conditions contained in the reports in order to maintain the present high level of water quality in the SNW. However, it should be noted again that the best method to maintain water quality is not to licence activities which could put it at risk, without first subjecting those activities to a thorough environmental assessment.

#### Long Term Stability of Tailings Pond Slopes

Inspections of the tailings ponds in October 2000 by Skaha Consultants indicated that they were in stable condition.<sup>8</sup> During that inspection it was also noted that tailings pond 3 had permanent trickles of seepage at the base of the impoundment, and that the seepage was determined to be a combination of groundwater discharge and the result of rainfall. The schematics (Figures 7 and 8) in the licence application indicate that there are 140 cubic metres (or 140,000 L) per day of water losses from pond 3. This is a rather large volume of water loss, which may itself be a problem, and may be indicative of future problems with the tailings pond. That the pond was flooded in July 2000 as cited in the October 2000 Geotechnical Site Inspection report (page 5) causes further concern for the current and future stability of this tailings facility.

This documentation of seepage or 'base exfiltration' from containment Pond 3 is significant and should be mitigated immediately, prior to the commencement of mining operations, and closely monitored in the long term. It should also be noted that the inspections during October 2000 were made during the "long term care and maintenance" phase of the mine, and not during actual mining operations. As such, it is uncertain whether this volume estimate of water loss would increase and to what extent during the actual mining operations. Likewise, the water licence application submission does not address whether the water quality of this seepage water would be altered during mining operations. Therefore, in order to sustain a healthy watershed, the current leaking tailings ponds must strictly adhere to environmental regulations and standards, and any erosion or runoff problems remediated prior to continued operation of the mine.

#### Fuel Spill

The January 2002 spill of more than 23,000 litres of diesel fuel highlighted numerous shortcomings in the fuel system and fuel handling procedures at the mine. The subsequent report acknowledged the lack of full and accurate fuel metering and labeling of valves, lack of written procedures for operating the fuel system, lack of proper training for people using the fuel system, lack of a schematic of the fuel system, and that the system was susceptible to this type of accident. This incident illustrates that there were significant problems with the mining operations that needed to be addressed prior to re-starting operations. Issues associated with the fuel system

<sup>7</sup> Environment Canada and Heritage Canada. December 1998. Protecting the Aquatic Quality of Nahanni National Park Reserve, N.W.T.. Page ii.

<sup>8</sup> Skaha Consultants. October, 2000. Tailings Impoundments. Tungsten NWT. Geotechnical Inspection Report.