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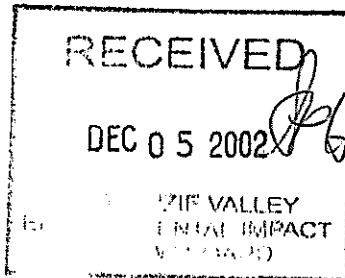
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From / De
Nahanni NP.
Date
02/12/05
Pages
7

Message

Please find attached Parks Canada Review of CZN's
response to MVEIRB IR #1



Mike Grande





Parks Canada - Parcs Can

Nahanni National Park Reserve
Parks Canada Agency
P.O. Box 348
Fort Simpson, NWT X0E 0N0

December 5, 2002

Mr. Luciano Azzolini
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Dear Mr. Azzolini:

RE: Parks Canada Review of CZN Response to MVEIRB Information Request #1

Thank you for the opportunity to provide comments on the Canadian Zinc Corporation (CZN) response to the MVEIRB Information Request No. 1 issued on October 18, 2002. As you know, Nahanni National Park Reserve is known as a wilderness park providing not only park visitors with a wilderness canoeing experience but, by its very existence, providing Canadians with a piece of the Canadian identity - valuing chosen wilderness areas and ensuring that these chosen areas remain protected. If this park were to be threatened ecologically and its wilderness character questioned, its profile as a World Heritage Site could also be threatened and affect the way in which the world community views Canada and its protected areas. John Ralston Saul's treatise about the value of Nahanni National Park Reserve is attached for your consideration.

Parks Canada's comments are intended to identify mitigation measures that can be implemented by CZN for the operation of the mine at Prairie Creek and that will help to protect the ecological integrity of Nahanni National Park Reserve and its World Heritage designation. Our comments follow:

1. In the introduction to the CZN Response, CZN states that the tailings pond is not going to be used in the water treatment process because expert advisors will not allow it without the tailings pond first having geo-technical certification and CZN is not going to get that certification. However, later on in the assessment when the potential for overtopping the containment structures is discussed, CZN suggests that the impact of such an event would be mitigated by the fact that the tailings pond would capture this over topping prior to being released to the environment. It has already been stated that the tailings pond is not to be considered as a treatment system because it lacks integrity. Given this, it should follow that anything released or "captured" by the tailings pond should be considered as released into the environment because of the lack of integrity in the tailings pond. Further testing for deleterious substances in the mine effluent should occur prior to the effluent flowing into the tailings pond because it essentially flows into the environment without treatment.
2. It is difficult to gauge the possibility and potential impact of over topping for a couple of reasons.

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CZN admits there is a chance of hitting a water filled cavity or expected veins of quartz but they do not appear to account for this in their treatment discharge estimates of 15 cubic meters/day. If discharge is greater than the 15 cubic meters/day, what is the ability of the two 35 ft thickeners to prevent release of effluent into the environment? If the ability is exceeded, will the over topping be discharged to the tailings pond, and ultimately to the environment without treatment? What mitigation will be used?

3. In the section "Underground Decline/Exploratory Drilling Development Description", CZN states that a typical influence on mine water quality is hydrocarbons due to the use of fuels and lubricants. Equipment or fuel transfer systems that leak hydrocarbons into the environment, and particularly into waters frequented by fish, are unacceptable at certain detectable levels. CZN suggests they will keep levels below exceedences using absorbent pads and berms but they do test for hydrocarbon characteristics in the effluent. Water quality testing must include tests for hydrocarbons and again prior to effluent being released into the tailings pond for both dissolved and lighter fractions of hydrocarbons in the effluent.
4. Roxanne Beavers, Water Resources Division, DIAND, states in a report entitled "Historical Water Quality of the Prairie Creek Project Area"(July 2002): "Contaminated water is being discharged from the site settling pond into Harrison Creek and Prairie Creek. When the levels observed at the discharge point from the settling pond into Harrison Creek are compared to the CPFAL (Guidelines for the Protection of Freshwater Aquatic Life), even considering those parameters which appear naturally high upstream, it is evident that the minewater is a significant source of metals, ammonia, and TSS. **These inputs may be adversely affecting the aquatic life of Harrison and Prairie Creek.**" The author's recommendation is to conduct sampling during periods of discharge, at a minimum of once a month, of all sites noted in her report. The discharges need to be quantified to determine seasonal variability.

More importantly, the author states that "a long term solution is required to **stop** the flow of minewater from the settling pond into Harrison Creek. This discharge should be treated to meet acceptable standards for the identified components **before** being released to Harrison Creek and Prairie Creek." A further monitoring program is recommended to determine the extent of any residual impact on water quality from the years of minewater discharge (at a frequency of 3 times per year). Furthermore, sediment sampling upstream and downstream of the site in both Harrison Creek and Prairie Creek, and groundwater sampling is recommended.

Based on this information, Parks Canada is concerned that CZN continues to consider the dilution effect of water within Harrison Creek and Prairie Creek as an acceptable method of reducing impacts to the receiving environment from minewater discharge. CZN states in the section Water Quality Impacts: "The model further suggests that treatment to meet MMER standards will result in adequate protection of the environment and that treatment to meet lower discharge standards as set under the original Water Licence provide little additional benefit in terms of downstream water quality. This is a function of the relatively small volumes of site discharges as compared to flows in the receiving environment." This conclusion, based on a model for which only limited information has been provided, is contrary to the conclusions reached by Roxanne Beavers in her report of available data. Doug Halliwell, Environment Canada, who also reviewed the Beavers report, also states that although there appears to be little or no impacts from the mine infrastructure to water quality at a distance of 48 km, this is **not** the case at sites closer to the mine. The impacts to water quality close to the mine may be resulting in adverse impacts to aquatic life that are not limited to areas in close proximity to the mine, but could potentially be affecting aquatic life in the watershed.

Parks Canada therefore respectfully requests that the Mackenzie Valley Environmental Impact Review Board require Canadian Zinc Corporation to undertake an expanded water quality, sediment and groundwater monitoring program as recommended by Roxanne Beavers and to be responsible for costs associated with the monitoring program. In addition, we further recommend that the water quality testing

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program be expanded to include testing for hydrocarbons, which are not currently included in the testing program. Canadian Zinc Corporation should also be required to develop a solution to stop the flow of mine water from the settling pond into Harrison Creek. The tailings pond will have to have geo-technical engineering certification if it is to be considered as any part of the water treatment process or as a mitigative measure.

If you have any questions regarding these comments, please do not hesitate to call me at (867) 695-3151.

Yours sincerely,

Chuck Blyth
Superintendent, Nahanni National Park Reserve

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From John Ralston Saul's *On Equilibrium* published 2001, Penguin/Viking
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He is the most beautiful person in the painting. He is the representation of corporeal perfection. Carpaccio seems to be saying something about the truth of the inner intellectual structure of the universe as beauty, versus corporeal beauty. And the murderer's back is turned to us so that we do not see his face.

This inner structure of the universe is all around us. In August 2000, I flew in a small plane up the Nahanni River in the Canadian Northwest Territories. We flew low, with the cliffs of the monumental canyon above us on both sides. This National Park is probably the most spectacular unspoiled watershed in the world. Partway upriver you reach the Virginia Falls, which are twice the height of Niagara Falls. You fly straight at their crest, crossing only a few metres above the waterline, and touch down on the pool above — the most astonishing way to land a plane I know of.

The problem is that the park includes only the Nahanni itself — the central line of the watershed — not the pristine rivers which drain into it.

You might say that at its most basic level the watershed system of the Nahanni is a physical example of the inner intellectual structure of the universe. Each of the parts can be looked at separately — the various rivers crashing through the mountains, the plateaus, waterfalls, wildlife — but the true beauty exists only as a whole.

We flew out along one of the tributary rivers which took us over a mining site, just beyond the park, built deep in a canyon on the water's edge. The tailings pond has been constructed according to the law. It meets all of the instrumental tests. It can be proved by every intellectual tool available that there is no calculable danger.

The intuitive point is obvious. The tailings pond is constructed of high gravel walls on the river's edge. The river is in a deep canyon. The tailings cannot go anywhere else. They can either stay in the pond for eternity, seep out by some undetermined means at some unknown date into the river, or be released by a freak accident, such as a storm which unleashes as yet uncalculated amounts of water.

Around the world over the last twenty years we have seen repeated uncalculated storms, leaks and burst dams. We are told that we are entering a period of increasing climatic instability, which may render safety calculations uncertain.

And in this particular case, what are the known factors used to establish the safety standards? We've only had the opportunity to measure the river system's daily levels for a few years. Until recently it was even more inaccessible. A proper calculation would include an element of timelessness — what do we know, what don't we know, what is the balance? What experiences have there been elsewhere? For example, the Durance in southern France has periodically over the last 150 years risen two to three times beyond its normal variations, crossing dykes, drowning numbers of people and flooding built-up areas. Carefully calculated dams and dykes have since been built throughout the area. Yet nearby, Nîmes, theoretically protected by long-established standards based on two thousand years of experience and measurement, was seriously flooded in 1988 by its much smaller and more controlled river. So the past, even known, is only that. Our survival has to be based on past, present and future, imagined and intuited.

What could be more romantic than the idea of a tailings pond on the Nahanni watershed? Why romantic? Because it assumes that — like love — gravel walls bulldozed into place are forever. This is the romanticism of thousands of emperors and kings, declaring that suns will never set and walls will always stand. But many of their carefully mortared fortresses and palaces last only a few decades.

The intuitive argument is very simple. The Nahanni is an irreplaceable marvel for which humans are responsible to the extent that they touch it. We have no real need to touch it. It is not a matter of our life or death. A few people in mining stand to make a bit of money which at most represents a drop in the sea of cash which finances society. On the other hand, should there be a single spill from a single tailings pond, the whole system will be changed, damaged, perhaps

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trained. A great general would have no trouble understanding this. His profession is to combine the truth of a terrible beauty with its inner structure. Kutuzov and Napoleon were always looking for the unnecessary incalculable risk in order to avoid taking it.

On the other hand, the intent of civilization is very clear. Shaftesbury would have argued that "the purest harmony between man and the world is attainable only through beauty." More than three hundred years ago Spinoza made the same intuitive argument, which could just as easily act as a framework for the Nahanni watershed. Intuition leads "to the adequate knowledge of the essence of things".²¹ To put a tailings pond on it is a romantic refusal of that knowledge.

This sort of argument is relatively straightforward. Why then do we have so much trouble with the idea of intuition and animism? In part because our ability to believe ourselves to be creatures apart — a deformation of the idea of consciousness — does make us what Erich Fromm called "the freak of the universe". We alone "can be evicted from paradise". What is this paradise? That of unconscious participation in the inner structure of the universe. Fromm called it nature. That would explain our ambivalence to the planet on which we live. We love it, moon over it, versify and paint it, yet we take great pleasure in raping it as if to teach it a lesson, as if demonstrating that the true beauty of the great synchronistic whole can be brought down to our level of psychic homelessness.

In mythological terms our eviction is that from the womb. And our loss is the loss of the matriarchal civilization. After all, the matriarchal model is all-inclusive and not tied to an obsession with dividing up power. Only the self-loathing of the evicted could make us want to believe that sticking a tailings pond on the greatest unspoiled watershed in the world is a good idea and worth the risk. And that not doing so would show weakness. Weakness before whom? Before a nature which first evicts us and then, while exhibiting its beauty, resists our control.

Since the industrial revolution the arguments surrounding the