OVERVIEW:

This Proposal, dated September 24, 1996, was received by the Department on September 25, 1996.

The Proposal by Canmine Resources Corporation is to construct and operate a 100 tonne/day mill for processing 20,000 tonnes bulk sample of cobalt-copper ore and 3,000 tonnes of old tailings, both to be hauled to the mill site from their Werner Lake Project located in Ontario. The mill is proposed to be located in Nopiming Provincial Park, at the site of the former Maskwa-Dumbarton Mine. The Proposal involves lowering the water level by 4.5 metres in the existing on-site open pit by pumping the water towards the Bird River, and using the created reserve holding capacity of the pit to collect all the tailings, wastewater and contaminated runoff, while recycling clarified pit water back to the mill to serve its process water requirements. The Proposal is to release no water from the pit into the environment. On-site non-acid generating rock may be used as construction material for road upgrading in Ontario.

The Proposal was advertised in the Lac du Bonnet Leader on Tuesday, October 8, 1996, and in the Pine Falls Community Voice on Wednesday, October 9, 1996. Copies of the Proposal were placed in Public Registries at: the Resource Centre of Manitoba Environment in Winnipeg; the Centennial Public Library in Winnipeg; the Manitoba Eco-Network and the Bibliotheque Allard in St. Georges. The closing date for the receipt of public comments was specified as October 31, 1996.

Responses from the public to this Proposal consisted of one letter of objection from Ms. Alice Chambers, and a letter of concern from Ms. Holly Cleator.

Copies of the Proposal were also sent to the applicable members of the interdepartmental Technical Advisory Committee for their review and comment by no later than October 31, 1996.

On March 6, 1997, the Department received a written request from Canmine Resources Corporation to postpone the issuance of the Environment Act Licence, pending the completion of an assessment by UMA Engineering for an alternate tailings disposal plan. On March 27, 1997, UMA Engineering, acting on behalf of Canmine Resources
Corporation, submitted a Notice of Alteration to the Director under Section 14(1) of The Environment Act, for the approval of the Director. The proposed alteration is to abandon the idea of depositing the tailings into the existing open pit, and instead direct the tailings into the existing on-site underground mine workings left by the Dumbarton operation. About 40,000 cubic metres of water would be initially drawn out of the mine workings, treated on surface to reduce the dissolved nickel content, and then released to the Bird River. All the tailings and process water from the mill would then be directed underground, with no releases of process wastewater to the Bird River. As well, new monitoring wells will be installed around the existing mine workings and sampled before the water draw-down commences in order to obtain baseline data for future comparison. Copies of the Notice of Alteration were sent to the public registries. The Notice of Alteration was treated as a minor alteration and approved by the Director on April 2, 1997 under Section 14(2) of the Environment Act since the licensing process was still in progress.

COMMENTS FROM THE PUBLIC:

In response to the advertised Proposal, one letter of objection was received from the Ms. Alice Chambers, and one letter of concern was received from Ms. Holly Cleator.

Ms. Chambers commented:
- She objects to the idea of allowing mining processing and deposition of tailings within any Manitoba Provincial Parks.
- It is unacceptable to dump the tailings into an existing open pit rather than build a proper containment site.
- Why is a suitable site not available at Werner Lake, since there are tailings there already?
- How are the existing old tailings managed?
- What discussions have taken place between Manitoba and Ontario regarding transboundary effects?
- Is this project the beginning of a much larger processing and mining facility to be constructed in the same area? How will the cumulative effects be measured?
- She objects to the issuance of preliminary approvals for development activities in advance of the final licence.
- There must be a thorough survey of the areas to be disturbed and impacted.
- There must be a thorough assessment of the present biodiversity of the open pit.
- Where is the compensation for the no-net-loss principle for fish habitat?
- A much more detailed assessment is required before even a preliminary permit is granted to this project.

Disposition:
Her comments were forwarded to the proponent for response. In response Mr. E. Ellwood, President of Canmine Resources Corporation, discussed the issues with
Ms. Chambers and sent her a letter on December 5, 1996, outlining Canmine's responses to each issue. No further concerns were submitted.

**Ms. Cleator** commented that:
- The proposal opens the possibility for contamination of the nearby surface water and land and the animals that use the area.
- The proposal does not indicate what chemicals will be used or in what quantities.
- Information regarding vegetation and wildlife in the area is sparse.
- Does the open pit now serve as fish habitat?
- Not enough information is provided in the proposal to properly assess the environmental impacts it would have on the surrounding area.
- Given the proposed siting of this proposal in a provincial park, the proponent should provide more detailed accounting of what they plan to do and its potential environmental impacts.

Disposition:
Her comments were forwarded to the proponent for response. In response Mr. E. Ellwood, President of Canmine Resources Corporation, discussed the issues with Ms. Cleator and sent her a letter on December 5, 1996, outlining Canmine's responses to each issue. No further concerns were submitted.

**COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

**Rural Development** commented that they have no planning concerns since the area is not under their jurisdiction.

**Natural Resources** commented that they have no environmentally related concerns for this limited development provided that the following issues are addressed:
- Since it appears from the proponent's information on river bottom sediments that the Bird River may have been impacted by the previous mine, some discussion should have been offered by the proponent as to how the historical operation may have affected the river.
- The proponent's conclusion of no impairment to the Bird River was based on observations of benthic organisms from only two sampling stations. At least several sampling stations both upstream and downstream should have been used in this assessment.
- The proponent should obtain and provide baseline data on heavy metals or other trace contaminants in fish, along with some biochemical/physiological evaluation of fish in the Bird River.
- The proponent provides no detail on how a discharge from the open pit would be controlled and treated if a discharge is required.
- Prior to the start of the project, the proponent should have a well defined contingency plan in place to deal with the possibility of a required discharge from the open pit adversely impacting the Bird River.
- Monitoring should be carried out for two years or longer following the closure of the facility.
- There may be some temporary adverse impacts to wildlife along PR 315 and also in the vicinity of the mill itself.
- The proponent must provide assurances that potential acid generation will not pose a problem.
- Natural Resources would expect to carry out a detailed review of any longer term project at the Maskwa site which might involve the development and processing of a larger potential reserve at the Maskwa site or the processing of a larger amount of ore from the Werner Lake site.

Disposition:
Their comments were forwarded to the proponent for response. The subsequent response from the proponent addressed most of their concerns. The remaining outstanding concerns have been addressed through the draft licence.

**Historical Resources** commented that they have no concerns.

**Highways** commented that they have no transportation related objection with this development.

**Energy and Mines** commented:
- Is the planned location of the off-site smelting and refining facility known?
- What is the current ore reserve estimate of the Werner Lake mineral deposit?
- Why the need for a 20,000 tonne bulk sample; would a smaller tonnage bulk sample suffice?
- is the planned drawdown discharge from the open pit in conflict with the "no discharge management scenario" statement?
- Mines Branch has no objection to the pre-authorization of the four activities detailed in the proposal covering letter provided that if a licence was denied by Manitoba Environment, the proponent restore the site to its existing condition at the proponent's cost.
- If the Werner Lake Cobalt Project proves economically viable, where will this ore be processed?
- If the future ore from Werner Lake is to be processed at the Maskwa mill, then should not this bulk sample processing proposal should be viewed in the light of a full mine proposal?

Disposition:
Their comments were forwarded to the proponent for response. The subsequent response from the proponent addressed their concerns to their satisfaction.

**Water Quality Management** commented that:
- During the de-watering of the open pit, sampling should be conducted of the discharge as well as monitoring sites 1 and 4 at the Bird River.
- Final landscape modifications intended to re-direct contaminated runoff to the open pit should be provided to Manitoba Environment.
- A contingency plan should be in place in the event that a pump failure occurs with the pump serving the runoff sump pit.
- Only waste rock that has no acid generation potential should be used for road construction material.
- Details of the water sampling program identified on page 6-1 should be provided to Manitoba Environment.
- Further details of the decommissioning plans for the open pit should be provided to Manitoba Environment.

Disposition:
Their comments were brought to the attention of the Proponent for response. The subsequent response from the proponent addressed most of their concerns. The remaining outstanding concerns have been addressed through the draft licence.

Terrestrial Quality Management commented that a plant survey of the area should be conducted by a botanist to ensure that there are no rare plants in the vicinity of the mill development and to describe what ground cover exists. Numerous spelling errors in the scientific and common names of plants and animals were also identified.

Disposition:
Their comments were brought to the attention of the Proponent for response. The subsequent response from the proponent addressed most of their concerns to their satisfaction, however, they requested to receive copies of the discharge data from the dewatering of the open pit out of concern for rare plant species in the wetland area likely to be used as part of the discharge route.

Eastern-Interlake Region of Environmental Operations commented that:
- Discharge rate and volume of the water to be withdrawn from the open pit at the outset should be carefully monitored.
- No discussion is offered by the proponent on how the open pit drawdown water will be conveyed to the Bird River. The assessment of impacts of this exercise would depend on the route taken to convey the water and the rate of discharge.
- Shipping of the ore concentrate by truck and rail had raised some public and municipal concern when a bulk ore sample was stored at Molson siding.
- The septic tank and field design should be specified early in the process. The use of on-site material (waste rock) for septic fields is contrary to MR 95/88R.
- The frequency at which sampling for bacteria in the water supply should be noted.
- The frequency at which periodic environmental audits (section 8.0 of the report) would be conducted should be identified.
- The frequency at which the open pit water quality would be monitored (section 6.0 of the report), and the variables to be monitored, should be identified.
- Regarding the post-closure monitoring program discussed in Section 7.6 of the report, it is recommended that the annual site inspections be conducted in conjunction with Manitoba Environment Regional staff.

- Regarding the Bird River Sediment Results (Table D, Appendix D of the report), iron values reported in the sediments appear to be presented in units different from that of the Ontario Sediment Guidelines

Disposition:
Their comments were brought to the attention of the Proponent for response. The subsequent response from the proponent addressed their concerns to their satisfaction. Only the issue regarding the potential use of Molson Siding for shipping the concentrate was left unanswered. This was clarified through additional communication in that Molson Siding would not be used.

**Canadian Environmental Assessment Agency** commented that application of the Environmental Assessment Act in regards to this proposal will not be required. As well, the Department of Fisheries and Oceans stated that since they do not advocate the use of mine pits as fish habitat due to the potential water or sediment contamination concerns, they would prefer that during the mill operation, the put-and-take operation fishery be ceased, and as such do not consider this a loss of productive fish habitat under Section 35 of the Fisheries Act.

**PUBLIC HEARING:**
No requests or recommendations were made for a public hearing on this Proposal.

**RECOMMENDATION:**
A draft Environment Act Licence is enclosed for the Director's consideration. It is recommended that the Licence, if approved, be assigned to the Eastern-Interlake Region for surveillance and monitoring, ongoing compliance evaluation and enforcement responsibilities.

PREPARED BY:

C. Moche, P. Eng.
Municipal and Industrial Approvals
April 2, 1997

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