

Record of Proceedings, Including Reasons for Decision

In the Matter of

Proponents COGEMA Resources Inc. and
Cameco Corporation

Subject Environmental Assessment Screening Report
(EA Screening Report) for the Cigar Lake waste
rock disposal in the McClean Lake mining
facility's Sue C pit

Date August 29, 2003

RECORD OF PROCEEDINGS

Proponents: COGEMA Resource Inc. and Cameco Corporation

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Purpose: Environmental Assessment Screening Report (EA Screening
Report) for the Cigar Lake waste rock disposal in the McClean
Lake mining facility's Sue C pit

Date(s) of hearing: June 25, 2003

Location: Canadian Nuclear Safety Commission (CNSC) Public Hearing
Room, 280 Slater St., 14th Floor, Ottawa, Ontario

Members present: L.J. Keen, Chair A.R. Graham
C. Barnes L. MacLachlan
J.A. Dosman J.M. McDill
Y.M. Giroux

Counsel: I.V. Gendron
Secretary: M.A. Leblanc
Recording Secretary: C.N. Taylor

Proponent Represented By	Document Number
<ul style="list-style-type: none">• J. Jarrell, Vice-President of Environment and Safety for Cameco• B. Pollock, Vice-President, Environmental Health and Safety for COGEMA• Barry Schmitke, Cameco's General Manager for the Cigar Lake Project• Glen White, Project Manager for the Cameco	CMD 03-H21.1
CNSC Staff	Document Number
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Intervenors	Document Number
Saskatchewan Environment	CMD 03-H21.2 CMD 03-H21.2A
Fisheries and Ocean Canada	CMD 03-H21.3

Decision and Reasons:

Date of Decision: June 25, 2003

1. Introduction

COGEMA Resources Inc. (COGEMA) and Cameco Corporation (Cameco) have applied to the Canadian Nuclear Safety Commission for approval to handle, transport, and dispose at COGEMA's McClean Lake Operation Sue C pit, approximately 1.3 million cubic metres of waste rock from Cameco's proposed Cigar Lake uranium mine project. For the project to proceed, both Cameco's licence for the Cigar Lake mining facility, and COGEMA's licence for the McClean Lake mining facility would need to be amended. The Cigar Lake and McClean Lake mining projects are located approximately 70 kilometres apart in the Athabaska basin in northern Saskatchewan.

Before the Commission may consider a decision on the application for amendment of the licences, it must fulfill its obligations as a responsible authority under the *Canadian Environmental Assessment Act* (CEAA). In this case, it was determined that the CNSC must conduct and make decisions on a screening environmental assessment (EA) of the proposed waste rock disposal project in accordance with the CEAA. It was further determined that the EA would be carried out in cooperation with the Province of Saskatchewan in accordance with the *Canada-Saskatchewan Agreement on Environmental Assessment Cooperation*, with the province taking the lead role. Furthermore, it was determined that Fisheries and Oceans Canada (DFO) was also a responsible authority for the assessment under the CEAA due to the approvals required under the *Fisheries Act* with respect to the planned roadway improvements and related stream crossings.

In June 2000, CNSC staff, in cooperation with the province, established the *Project-specific Environmental Assessment Guidelines* (EA Guidelines) for the screening assessment. The specific requirements for the scope that were subsequently identified by DFO were determined to fall generally within the project-specific EA Guidelines; however, some factors identified by DFO were added subsequently in the completion of the Screening Report.

The EA Guidelines define the scope of the project and the scope of assessment that was to be carried out. Following a 30-day public review of the EA Guidelines administered by the province, the EA Guidelines were used by CNSC staff in delegating to COGEMA, pursuant to section 17 of the CEAA, the preparation of an Environmental Impact Statement (EIS). A draft of the EIS underwent a technical review by the CNSC staff, as well as other relevant federal and provincial government departments. The completed EIS was then used by CNSC staff in the preparation of the required Screening Report. The EIS and a draft of the Screening Report were released for review by the public, stakeholders and First Nations prior to finalization of the Screening Report and its submission to the Commission for this hearing and decision.

The environmental assessment considered: normal operations; accidents and malfunctions that may occur; cumulative effects with other past, current and future projects in the area; effects of the environment on the project; and effects of future decommissioning.

Issues:

In considering the Screening Report, the Commission was required to decide:

1. whether the Screening Report is complete; that is, whether all of the factors and instructions set out in the EA Guidelines and subsection 16(1) of the CEAA were adequately addressed;
2. whether the project, taking into account the appropriate mitigation measures identified in the Screening Report, is likely to cause significant adverse environmental effects;
3. whether the project should be referred to the federal Minister of the Environment on the basis of the results of the environmental assessment, the uncertainty of those results, or public concern about the project (i.e., pursuant to paragraph 20(1)(c) of the CEAA); and
4. whether the Commission will take a course of action consistent with paragraph 20(1)(a) of the CEAA; that is, to proceed with its consideration and decision on the applications for licence amendment under the *Nuclear Safety and Control Act* which, if granted, would allow the project to proceed.

Public Hearing:

The Commission, in making its decision, considered information presented for a one-day public hearing held on June 25, 2003 in Ottawa, Ontario. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*. During the public hearing, the Commission received written submissions and heard oral presentations from COGEMA and Cameco (CMD 03-H21.1), CNSC staff (CMD 03-H21) and intervenors (CMD 03-H21.2 to CMD 03-H21.3).

2. Decision

Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission decides that:

- a) the Screening Report attached to CMD 03-H21 is complete and meets all of the requirements set out in the EA Guidelines and subsection 16(1) of the CEAA;
- b) the project, taking into account the appropriate mitigation measures, is not likely to cause significant environmental effects;
- c) the Commission will not refer the project to the federal Minister of the Environment for his referral to a review panel or mediator; and

d) consistent with the course of action described in paragraph 20(1)(a) of the CEAA, the Commission will proceed with consideration of COGEMA's and Cameco's applications for amendment of the relevant licences.

The applications for amendment of the licences to allow the project, or any part of the project, to proceed will be the subject of future licensing decisions by the Commission, or persons authorized by the Commission.

3. Issues and Commission Findings

The Commission addressed the four issues identified in section 1 above under three main headings: (1) the completeness of the Screening Report; (2) the likelihood and significance of the environmental effects; and (3) the nature and level of public concern. The Commission's findings in each of these areas are summarized below.

3.1 Completeness of the Screening Report

Before considering the conclusions in the Screening Report, and the adequacy of the methods used to arrive at those conclusions, the Commission considered whether the assessment had addressed the full scope of the project and assessment factors previously established.

In this regard, the Commission noted that the description of the project scope did not explicitly address how the waste rock would be transferred from the highway trucks to rock trucks that are able to descend safely into the Sue C pit. The Commission questioned whether, for example, the effects of runoff or seepage from a transfer pad at the McClean Lake site had been included in the assessment. In response, COGEMA stated that the need for such a transfer pad has not yet been determined, but that, if one is needed, COGEMA has facilities at McClean Lake that are designed for this purpose and that COGEMA has considerable experience with the safe and environmentally acceptable operation of such facilities. CNSC staff concurred with the above statements of COGEMA and expressed the view that this is a design detail to be addressed in licensing and that it poses a very low risk to the environment over a relatively short period of time.

Based on this response, the Commission is satisfied that the environmental assessment does not need to be extended to address the effects of this specific aspect of waste rock handling at the McClean Lake site. While the Commission is satisfied that the Screening Report has adequately addressed the likely environmental effects of waste rock handling in general, the safety and environmental details of the rock transfer handling and locations will be further addressed in the future licensing review.

The Commission concludes therefore that the Screening Report attached to CMD 03-H21 addresses the full scope of the project and assessment factors required in section 16 of the CEAA and as established by CNSC staff and Saskatchewan in the EA Guidelines. The Commission concludes therefore that it is able to proceed to its consideration of the likelihood and

significance of the environmental effects of the project, the adequacy of the proposed impact mitigation measures, and the public's concerns about the project.

4.2 Likelihood and Significance of Adverse Environmental Effects

This section contains the Commission findings with respect to the conclusions in the Screening Report on whether the project, taking into account appropriate mitigation, is likely to cause significant adverse environmental effects. The Commission first considered the adequacy of the study methods used to identify and evaluate the potential environmental effects, followed by a consideration of the reported effects on each of the relevant components of the environment.

4.2.1 Adequacy of the Assessment Methods

With respect to the assessment methodology, CNSC staff described how the assessment, beginning with the use of project-environment interaction tables, systematically focused on potential new or additive environmental impacts and potential alterations to the existing levels of environmental impacts which are currently regulated and monitored. From that, CNSC staff explained how it further evaluated any identified effects that had either not been previously evaluated, or have not been adequately evaluated to date. CNSC staff described how the process made use of all available relevant information and compared that information to existing environmental conditions and Valued Ecosystem Components (VECs) as assessment end-points. Mitigation measures were then identified for potential effects and the remaining effects were assessed for significance using defined criteria.

CNSC staff further noted that the assessment method included an examination of alternative methods of transporting the waste rock. In this regard, the assessment looked at both a continuous haul option and one that involves hauling the waste rock in at least two haul campaigns. CNSC staff reported that, while the campaign option requires temporary stockpiling of waste rock at the Cigar Lake mine site, it was chosen as the preferred option, primarily because of lower potential impacts at the Sue C pit.

The Commission concludes that the methods used in conducting the EA were adequate for identifying and describing the environmental effects of the project with an acceptable level of certainty. The Commission is therefore satisfied that it has a suitable basis on which to proceed with its consideration of the likelihood and significance of the effects of the project, the appropriateness of the mitigation measures, and nature and extent of public concerns.

4.2.2 Effects on the Atmospheric Environment

With respect to the effects of the project on the atmospheric environment, CNSC staff concludes in the Screening Report that, while there will be some dust and radon released from the waste rock stockpile sites at Cigar Lake, current monitoring at the existing rock stockpiles at Cigar Lake does not show significant effects. Similarly, CNSC staff does not predict significant effects from dust and radon gas along the transport route, taking into account the use of dust

suppressants on the roadway when appropriate. Placement of the waste rock in the Sue C pit will be done in a wet environment and therefore dust will not be an issue at that location.

With respect to vehicle emissions, CNSC staff concludes in the Screening Report that these will not be significant and that vehicles will be required to be maintained in good working condition to minimize emissions.

Based on this information, the Commission concludes that the project is not likely to cause significant adverse effects on the atmospheric environment.

4.2.3 Effects on the Surface Water Environment

Aquatic Habitat:

CNSC staff reported that the assessment identified potentially adverse effects of the roadway component of the project on aquatic life at stream crossings (of which there are 11). The effects would be as a result of: habitat loss, fish passage impediments, erosion and sedimentation, disruption of flow, release of substances, and entrainment and impingement of biota. However, DFO has concluded that the effects can be effectively mitigated with the application of specific mitigation measures. Those mitigation measures include: avoiding construction during sensitive periods, using appropriate materials and equipment, controlling erosion and sedimentation, inspection and monitoring for high suspended solids downstream, prompt restoration of the disturbed areas, selecting the least sensitive crossing locations, and choosing culvert and span designs and sizes to minimize effects.

Furthermore, in the Screening Report, the Commission noted that Cameco will be required to compensate for the predicted loss of habitat at the road stream crossings by revegetating the abandoned section of the temporary access road within the 30 metre riparian buffer strips adjacent to waterbodies. Cameco will also be required to monitor stream flow velocities at culverts during freshets to ensure the designs are effective.

The Commission asked a question about the habitat loss compensation measures, and specifically whether it may be less disruptive to leave the abandoned crossing locations undisturbed. In response, a representative from DFO explained that, while it is still working on the details of the compensation requirements, it is important that abandoned sites be restored to match the upstream and downstream morphology. DFO added that its primary interest will be in ensuring the culverts do not pose an impediment to fish movement.

Based on this information, the Commission concludes that the project is not likely to cause significant effects on the aquatic environment, taking into account the appropriate mitigation measures.

Surface Water Quality:

With respect to the potential effects of the project on surface water quality, CNSC staff reported that there will be a modest increase in the amount of runoff from the waste rock stockpile sites at the Cigar Lake site. CNSC staff has concluded, however, that with the proposed storage pad liner and runoff water collection and treatment system, the effects on downstream water quality is not likely to be significant. CNSC staff noted that the collected water will pass through the same treatment system that will be used for the mine water and will consist of less than 1% of the treatment system throughput.

With respect to the effects of malfunctions and accidents, such as from a liner leakage or transportation accident, CNSC staff concluded in the Screening Report that such events are not likely to cause significant effects and that remedial actions could be readily taken. The risk of a rock spill into a stream along the transport route will be further mitigated with road maintenance, driver training and traffic controls.

With respect to the potential effects on surface water quality at the Sue C pit, CNSC staff reported that the project will result in an increased volume of water requiring treatment. This is due to the requirement to pump water from the pit to allow the placement of the waste rock. CNSC staff concluded from the assessment that, while there will be a resulting increase in contaminant loadings to Collins Creek, the modelling indicates that the levels will remain well below those which may be toxic to biota.

In response to the Commission's questions on the magnitude of the water treatment issue, COGEMA stated that, while the additional volume of water is significant, it will be well within the capacity of the existing treatment facility at the McClean Lake Operation (which is capable of treating 7,000 cubic metres of water per day). CAMECO added that by using a campaign, rather than continuous haul strategy, the volume of water will be approximately halved.

Another potential mechanism for causing impacts on surface water quality is the eventual emergence of contaminated groundwater from the Sue C pit to McClean Lake and Collins Creek. However, the analysis of this indicates that the resulting sediment and water contamination in those water bodies is expected to remain below effect levels for biota and that a relatively small area would be affected. The discharge of the groundwater plume is not expected to take place for approximately 4,000 years and the projected arsenic concentration (the contaminant of highest concern) would be at approximately 1 microgram per litre which is well below toxicity levels for biota.

The Commission asked what measures would be taken, and by whom, in the event that the above predictions are incorrect. COGEMA responded that it will be closely monitoring the source term pore water quality in the Sue C pit and the local hydrogeological conditions over the next several decades. If it appears that the potential long-term effects on groundwater and surface water have been significantly underestimated, steps can be taken to either reduce the presence and/or mobility of the contaminants in the pit pore water. COGEMA noted that this could include pumping and treating the pore water until the generation of contaminants slows, or fine material could be injected into the waste rock matrix in the pit to reduce contaminant mobility.

With respect to the predicted quality of the water in the Sue C pit lake (in the long-term following re-flooding of the pit), CNSC staff concluded from the assessment that, by placing the finer, lower porosity Cigar Lake waste rock overtop of the coarser McClean Lake mine waste rock, the upward movement of contaminants to the overlying lake will be limited and will not result in significant adverse effects.

Based on this information, the Commission concludes that the project is not likely to cause significant adverse effects on the quality of surface water.

Surface Water Quantity:

From the Screening Report, the Commission notes that the pumping of water from the Sue C pit over time had previously been predicted to cause significant, but acceptable effects on water levels in the neighbouring lakes. Those effects have not been as large as predicted during the development of the Sue C pit and therefore the Commission is satisfied that the additional pumping that will be required for the project is also not likely to cause significant effects on the quantity of surface water in the area.

4.2.4 Effects on the Groundwater Environment

With respect to the potential for adverse effects on groundwater quality at the Cigar Lake mine, CNSC staff concluded from the Screening Report that, while there is a potential for some effects from leaks in the waste rock stockpile site liner at Cigar Lake, the effect would not likely be significant and that groundwater collection wells could be added to capture and treat the affected water.

In response to a question from the Commission on the liner, COGEMA confirmed that the liner material will be a high-density polyethylene similar to that currently being used under similar stockpiles at the Cigar Lake mine.

With respect to the potential effects on groundwater quality adjacent to and down-gradient from the Sue C pit, CNSC staff concluded from the Screening Report that there should be no such effects during the project while a low pit water level is being actively maintained. This is due to the inward flow gradients that the pumping will temporarily create in the surrounding rock. Following closure of the pit and restoration of natural water levels, CNSC staff concludes in the Screening Report that contaminants in the pit pore water (primarily arsenic) will flow westwards into the relatively porous sandstone layer. It is predicted that the contaminated plume of groundwater will develop slowly over a 3 kilometre distance before discharging to surface water. It is estimated that the plume will have extended a distance of 1.5 kilometres from the site in about 2,000 years.

The Commission expressed concern that there appears to be no attempt to isolate the contaminants in the pit, i.e., the contaminants will be free to move into the surrounding porous sandstone. In response to this concern, CNSC staff and COGEMA stated that the Sue C pit is not designed to contain and isolate the contaminants within the pit in the way that this has been

done in mined-out pits that are being used for mill tailings disposal (i.e., the permeable-surround design concept). The expected migration of contaminants from the Sue C pit has been modelled, and is not predicted to result in significant effects down-gradient, including upon emerging to surface water.

CNSC staff further indicated in the Screening Report that the waste rock will be strategically placed in the pit in massive structures to reduce the amount of contaminated groundwater migration off-site. For example, a mass of the relatively lower-porosity waste rock from Cigar Lake will be piled against a “sandstone window” in the northwest corner of the pit to seal it. Furthermore, CNSC staff explained that by placing the lower-conductivity Cigar Lake waste rock in a layer across the pit, contaminants will tend not to flow upwards into the overlying lake where about 90% of the groundwater flow-through occurs due to the infinite hydraulic conductivity of the lake.

In response to a follow-up question from the Commission on how the porous Cigar Lake waste rock would “seal” the sandstone, CNSC staff stated that by placing the relatively finer, lower-conductivity Cigar Lake waste rock in this location, the groundwater will tend to flow through the surrounding higher-conductivity waste rock and away from the protected area.

The Commission also questioned whether the storage of the waste rock on the surface for several years at the Cigar Lake mine site would result in a much higher amount of contaminants being mobilized and available for release into the Sue C pit pore water (i.e., due to oxidation of the exposed rock). In response, CNSC staff stated that this effect has been estimated using conservative assumptions and it was concluded that the duration of the temporary storage of the rock on the surface does not have a significant impact on the assessment results.

While the Commission accepts the conclusion of the Screening Report that the project is not likely to cause significant adverse effects on groundwater quality, the Commission is of the view that this aspect of the project will need to be reviewed with particular attention in the licensing stages and during the planned follow-up. The Commission will continue to seek assurances that the migration of contaminants from the Sue C pit to the surrounding sandstone is well understood and monitored, and that appropriate contingency strategies are in place.

In this regard, CNSC staff noted that, if the project is approved, the Commission will have the benefit of approximately 20 years of additional monitoring of the hydrogeology and pit performance before any of the Cigar Lake waste rock would arrive at Sue C pit.

4.2.5 Effects on the Terrestrial Environment

With respect to effects of the project on the terrestrial environment, including wildlife and vegetation, CNSC staff concluded in the Screening Report that the only potential for significant effects is along the transportation route. The proposed waste rock stockpile site at the Cigar Lake mine and the disposal site at McClean Sue C pit are within licensed areas and these are already largely clear of vegetation and are not likely to attract wildlife.

With respect to the road, the Screening Report identifies the potential for the killing of wildlife by the trucks. While it was concluded that the mortality in the local wildlife populations is not anticipated to be significant, the need for special contingency measures to protect the migrating Beverly woodland caribou was identified. Those measures will be required if the Beverly herd winters in the local area and they will be developed in consultation with stakeholders and the Beverly and Qamanirjuaq Caribou Management Board.

In response to a question from the Commission on the likelihood that these measures will be required, COGEMA remarked that the Beverly herd winters in the project area very infrequently and that the contingencies are only precautionary.

The Screening Report also considered how the improved roadway might increase hunting pressures in the area and it was concluded that this was not a significant factor.

Based on this information, the Commission concludes that the project is not likely to cause significant adverse effects on the terrestrial environment.

4.2.6 Effects on Public and Worker Health and Safety

With respect to radiation effects of the project, CNSC staff concluded in the Screening Report that doses received by workers from dust and gamma radiation while handling the waste rock at the stockpile and disposal sites will be less than 1 mSv/year and thus will not be significant.

With regard to conventional occupational hazards, CNSC staff concluded in the Screening Report that the proponents' existing occupational health and safety programs will mitigate those risks to acceptable levels.

The Commission questioned COGEMA whether there was a need to take any special precautions to protect workers operating heavy equipment in the Sue C pit. COGEMA responded that it has considerable experience with the safe operation of heavy equipment in and around the pits. COGEMA further noted that slope stability and other geotechnical evaluations relevant to worker safety will continue to be carried out as per current practice.

Further in regard to the proposed Sue C pit operations, and as noted above in section 3.1, the Commission asked whether the waste rock arriving at the McClean Lake Operation would be first tipped from the highway trailers and re-loaded into rock trucks that can descend more safely into the pit. In response, COGEMA stated that no unsafe movement of vehicles in the pit will be permitted and that, if necessary to assure the safety of the drivers and personnel in the pit, the waste rock will be transferred to appropriate vehicles.

With respect to the potential to cause harm to the truck drivers and public on the roadway during the rock haul campaigns, CNSC staff concluded in the Screening Report that this risk will be mitigated by improving the road to meet all applicable standards for highway safety, appropriate driver training, road maintenance (eg. surface conditions and dust control), traffic coordination, and properly maintained and equipped vehicles.

Based on this information, the Commission concludes that the project is not likely to cause significant effects on the health and safety of persons.

4.2.7 Effects on Renewable Resources

As stated in the Screening Report, the project will take place generally within the existing cleared footprints of the mine sites and roadways and, therefore, the effects on renewable resources will not be significant.

The Commission concurs with this conclusion as set out in the Screening Report.

4.2.8 Effects on the Socio-economic Environment

CNSC staff concluded in the Screening Report that the project is not likely to have any adverse effects on: local business and employment (a minor positive effect is anticipated), traditional use of resources by aboriginal people, or archaeological and heritage resources. This is because the project will take place within areas previously disturbed and because there will be no significant emissions or effluents.

The Commission concurs with this assessment and concludes that the project is not likely to cause significant adverse effects to the socio-economic environment.

4.2.9 Effects of the Environment on the Project

With respect to the possible effects of the environment on the project, CNSC staff examined in the Screening Report the effects that could result from a Probable Maximum Precipitation (PMP) event and long-term climate change resulting in dryer conditions in the future.

CNSC staff concluded from the Screening Report that a PMP event would result in a short-term and manageable increase in runoff requiring treatment from the Cigar Lake stockpile sites. CNSC staff also noted that the PMP could increase the risk of accidents along the haul route and that this would be mitigated by short-term shutdowns of the hauling operations.

With regard to the effects of climate change, CNSC staff concluded in the Screening Report that the dryer conditions would generally lower the potential for environmental effects by reducing the amount of water flowing through the rock storage and disposal systems.

The Commission questioned whether climate change could result in conditions becoming wetter, rather than drier as assessed. In response, CNSC staff stated that the information on climate change was provided by climate specialists working in the area of climate change.

With respect to the effects of earthquakes, the information in the Screening Report indicates that the area is seismically stable and that the waste rock will be disposed of in a stable condition below grade and underwater.

Based on this information, the Commission concludes that the environment is not likely to cause significant adverse effects on the project.

4.2.10 Cumulative Effects

For the cumulative effects part of the assessment, all of the contaminant loadings (mainly arsenic) to the groundwater environment from all sources at the McClean Lake site were taken into account. Collins Creek and McClean Lake, where the contaminants are expected to emerge eventually, were used as the assessment end-points. The conclusion in the Screening Report is that the maximum post-operational incremental arsenic concentration will be approximately 1 microgram/litre at Collins Creek in about 4,000 years – a concentration that is well below toxicity levels for biota. The background levels of arsenic in Collins Creek is 0.25 micrograms.

Based on this assessment, the Commission concludes that the project, in combination with other projects in the area, is not likely to result in significant adverse cumulative effects. As noted above, however, the Commission requires that the effects on groundwater be the subject of particular attention in the licensing reviews and follow-up program.

4.2.11 Follow-up Program

The Screening Report includes an outline for the proposed follow-up program which, if the project proceeds, will be further detailed in consultation with stakeholders and incorporated in the conditions of the amended mine site licences. The proposed scope of the follow-up program includes: liner seepage and groundwater quality monitoring at the Cigar Lake stockpile; continued normal dust and radon monitoring; normal effluent release compliance monitoring; road condition and use monitoring; and continued monitoring of groundwater, Sue C pit pore water chemistry, treatment plant feed and effluent monitoring; and environmental effects monitoring off-site. CNSC staff noted that the environmental effects monitoring will reflect the revised *Metal Mining Effluent Regulations*.

The Commission finds the scope and overall plan for follow-up monitoring to be acceptable. The Commission concurs that, if the project proceeds, the relevant stakeholders and First Nations should be consulted in the completion of the plan and that it could form part of the CNSC licence conditions. The Commission notes that the issue of groundwater protection will be of primary importance in the program.

4.2.12 Conclusions on the Likelihood and Significance of Adverse Environmental Effects

Based on the considerations and reasons noted above, the Commission concludes that the proposed project for the handling, transport, and disposal at COGEMA's McClean Lake Operation Sue C pit of approximately 1.3 million cubic metres of waste rock from Cameco's proposed Cigar Lake uranium mine is not likely to cause significant adverse environmental effects, taking into account appropriate mitigation measures.

The Commission is also satisfied that the likelihood and significance of the effects have been identified with reasonable certainty.

Therefore, paragraph 20(1)(b) of the CEAA (i.e., where the Commission would deny further consideration of the licence application) does not apply. The Commission also decides that it will not refer the project to the federal Minister of the Environment, pursuant to subparagraphs 20(1)(c)(i) of 20(1)(c)(ii), for his referral to a mediator or review panel.

In the next section of this *Record of Proceedings*, the Commission describes how it considered the public concern about the project in completing its consideration of whether to refer the project to the Minister pursuant to subsection 20(1)(c)(iii) of the CEAA.

5. Public Concern

CNSC staff described the consultation program that was carried out to solicit public involvement in the environmental assessment and to identify any public concerns. CNSC staff stated that the process effectively engaged the various Athabasca communities, and the existing Athabasca Environmental Quality Committee, Athabasca Working Group, the Athabasca Economic Development and Training Corporation, and the Northern Mines Monitoring Secretariat. Other interested parties in Lac La Ronge and Saskatoon were also contacted.

As part of the consultation process, CNSC staff noted that the EA Guidelines were distributed for a 30-day public review. In addition, the EIS completed by the proponents, the Screening Report completed by CNSC staff, and all of the technical review comments from the provincial reviewers were made available to the public for a further 30-day comment period.

From the Screening Report, the Commission notes that the process of identifying the VECs included input from northern Saskatchewan residents.

CNSC staff noted in the Screening Report that the public concerns centred mostly on traffic safety on the road, and whether the road would be designated as a public or private road. The matter of the road designation is to be addressed by Saskatchewan Highways and Transportation.

Based on this information, the Commission is satisfied that the public had adequate opportunity to become informed about the project and to express its concerns to the study team during the assessment. Furthermore, the Commission is satisfied that this public hearing provided another opportunity to raise concerns with the Commission prior to the Commission making a decision on the Screening Report.

Based on the nature of the public concerns expressed, the Commission decides not to request the federal Minister of the Environment to refer the project to a review panel or mediator.

6. Conclusion

The Commission has considered the information and submissions of the proponents and CNSC staff as presented in the material available for reference on the record, as well as the oral and written submissions of intervenors provided at the hearing.

The Commission concludes that the environmental assessment Screening Report attached to CMD 03-H21 is complete and meets all of the applicable requirements of the *Canadian Environmental Assessment Act*.

The Commission concludes that the project, taking into account the appropriate mitigation measures identified in the environmental assessment, is not likely to cause significant adverse environmental effects.

The Commission decides not to refer the project to the Minister of the Environment for referral to a review panel or mediator on the basis of uncertainty in the assessment or public concern.

The Commission therefore, consistent with a course of action described in paragraph 20(1)(a) of the CEEA, decides to proceed with the consideration of the licence applications under the *Nuclear Safety and Control Act* which, if approved would allow the project to proceed.

Marc A. Leblanc
Secretary,
Canadian Nuclear Safety Commission

Date of decision: June 25, 2003

Date of release of Reasons for Decision: August 29, 2003