



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Proponent AREVA Resources Canada Inc

Subject Environmental Assessment Screening Report  
for the Receipt and Processing of McArthur  
River Ore Slurry at the McClean Lake Operation

Hearing Date April 19, 2012

## **RECORD OF PROCEEDINGS**

Applicant: AREVA Resources Canada Inc.

Address/Location: 817 45<sup>th</sup> Street West, Saskatoon, SK, S7K 3X5

Purpose: Environmental Assessment Screening Report for the receipt and processing of McArthur River Ore Slurry at the McClean Lake Operation

Application received: November 9, 2009 and April 8, 2010

Date of hearing: April 19, 2012

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

Members present: M. Binder, Chair

Secretary: M.A. Leblanc  
Recording Secretary: S. Dimitrijevic

## Table of Contents

<b>Introduction</b> .....	1
<b>Decision</b> .....	2
<b>Issues and Commission Findings</b> .....	3
<b>Completeness of the Screening Report</b> .....	3
<b>Likelihood and Significance of Environmental Effects</b> .....	4
<i>Adequacy of the Assessment Methods</i> .....	4
<i>Effects of the Project on the Environment</i> .....	5
<i>Effects of the Environment on the Project</i> .....	5
<i>Effects Malfunctions and Accidents</i> .....	6
<i>Cumulative Effects</i> .....	6
<i>Follow-Up Program</i> .....	6
<i>Conclusions on the Likelihood and Significance of Adverse Environmental Effects</i> .....	7
<b>Nature and Level of Public Concern</b> .....	7
<b>Conclusion</b> .....	9

## Introduction

1. AREVA Resources Canada Inc. (AREVA) has notified the Canadian Nuclear Safety Commission<sup>1</sup> of its intention to operate the high grade ore slurry receiving area and high grade milling circuits (high grade facilities) at the McClean Lake Operation in Saskatchewan, to increase the maximum annual production from 3 629 300 kilograms to 5 909 090 kilograms of uranium oxide U<sub>3</sub>O<sub>8</sub>, and to process ore slurry from McArthur River Mine as an approved licensed activity within the McClean Lake operating licence.
2. The authorization of the requested activities requires an amendment to AREVA's McClean Lake operating licence, UMOL-MINEMILL-McCLEAN.00/2017, pursuant to subsection 24(2) of the *Nuclear Safety and Control Act*<sup>2</sup> (NSCA).
3. Before the Commission can amend the licence, the Commission must, in accordance with the requirements of the *Canadian Environmental Assessment Act*<sup>3</sup> (CEAA), make a decision on an Environmental Assessment (EA) screening of the proposed project. An EA is also required by the Saskatchewan Ministry of the Environment (SMOE). The Commission is the sole responsible authority (RA) for the EA<sup>4</sup>, and Fisheries and Oceans Canada, Health Canada, Natural Resources Canada and Environment Canada were identified as federal authorities and, on request, provided technical expertise during the review process.
4. Two of AREVA's requests, the operation of the ore slurry receiving area and the high grade milling circuits, and the increase of the annual production limit, fall within the parameters of previous projects assessed under the CEAA. The conclusions of both assessments that the Project is not likely to cause significant adverse environmental effects still apply to AREVA's requests.
5. CNSC staff determined that, pursuant to paragraph 5(1)(d) of the CEAA, a federal EA is required before the Commission could consider AREVA's third request, the processing of ore slurry from the McArthur River Mine as an approved licensed activity within the McClean Lake operating licence.
6. The EA Guidelines "*Project-Specific Guidelines Scoping Document for the Preparation of an Environmental Impact Statement – Receipt and Processing of McArthur River Ore at the McClean Lake Operation*" were considered and approved by the Commission on October 21, 2010<sup>5</sup>. The Commission decided that, pursuant to subsection 17(1) of the CEAA, the conduct of technical support studies would be delegated to AREVA. Based on these studies and the resulting Environmental Impact Statement (EIS), reviewed by both the CNSC and the SMOE, CNSC staff prepared the EA

---

<sup>1</sup> The *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

<sup>2</sup> Statutes of Canada (S.C.) 1997, chapter (c.) 9.

<sup>3</sup> S.C. 1992, c. 37.

<sup>4</sup> Responsible Authority in relation to an EA is determined in accordance with subsection 11(1) of the CEAA.

<sup>5</sup> Record of Proceedings, including Reasons for Decision, issued by the CNSC, hearing date: October 21, 2010.

Screening Report (Screening Report). Stakeholders, including the federal authorities, were provided an opportunity to review the draft Screening Report prior to its finalization and submission to the Commission for this hearing and decision.

#### Issue

7. In considering the Screening Report, the Commission was required to decide:
  - a) whether the Screening Report is complete; that is, whether all of the factors and instructions set out in the approved EA Guidelines and subsection 16(1) of the CEAA were adequately addressed;
  - b) whether the project, taking into account the mitigation measures identified in the Screening Report, is likely to cause significant adverse environmental effects;
  - c) whether the project must be referred to the federal Minister of the Environment for referral to a review panel or mediator, pursuant to paragraph 20(1)(c) of the CEAA; and
  - d) whether the Commission can proceed with its consideration of an application for a licence amendment under the *Nuclear Safety and Control Act*, consistent with paragraph 20(1)(a) of the CEAA.

#### Hearing

8. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the application. The Commission, in making its decision, considered information presented for a hearing held on April 19, 2012 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from CNSC staff (CMD 12-H106) and AREVA (CMD 12-H106.1).

#### **Decision**

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

- a) the Environmental Assessment Screening Report appended to CMD 12-H106 is complete; that is, the scope of the project and assessment were appropriately determined in accordance with section 15 and 16 of the *Canadian Environmental Assessment Act*, and all of the required assessment factors were addressed during the assessment;

- b) the project, taking into account the mitigation measures identified in the Environmental Assessment Screening Report, is not likely to cause significant adverse environmental effects;
- c) it will not refer the project to the federal Minister of the Environment for his referral to a federal Environment Assessment review panel or mediator;
- d) it will proceed to consider the application for licence amendment under the provisions of the *Nuclear Safety and Control Act*, consistent with paragraph 20(1)(a) of the *Canadian Environmental Assessment Act*.

### **Issues and Commission Findings**

10. The findings of the Commission are based on the Commission's consideration of all the information and submissions available for reference on the record for the hearing.

### **Completeness of the Screening Report**

11. In its consideration of the completeness of the Screening Report, the Commission considered whether the assessment had adequately addressed an appropriately defined scope of project and assessment factors.
12. CNSC staff reported that they had assessed effects of the project on the environment and considered activities related to the normal operations and the effects of possible malfunctions and accidents. They had also considered effects of the environment on the proposed project.
13. CNSC staff further reported that the Screening Report had been developed based on the review of the EIS and technical studies submitted by the proponent and in accordance with the approved EA Guidelines.
14. Based on the Commission's review of the EA Guidelines and Screening Report, the Commission concludes that the scope of the project and the scope of the factors for the assessment are appropriate and that all of the required factors were addressed during the assessment.
15. The Commission also concludes that the Screening Report is complete and compliant with the requirements of the CEAA.

## **Likelihood and Significance of Environmental Effects**

16. This section contains the Commission's findings with respect to whether the project is likely to cause significant adverse environmental effects, taking into account the identified mitigation measures.

### *Adequacy of the Assessment Methods*

17. CNSC staff and AREVA, in their submissions, informed the Commission that the project includes the following primary components that have a potential interaction with the environment:
- use of the existing operating licensed ore slurry loading infrastructure at the McArthur River Mine;
  - use of ore slurry trucks to transport the slurry in ore slurry transport containers along the existing provincial highways for up to approximately 600 return trips per year, 300 days a year, for a maximum of three years;
  - use of the existing high grade ore slurry offloading infrastructure at the JEB Mill, located at the McClean Lake Operation;
  - use of the existing high grade milling circuits at the JEB Mill;
  - deposition of tailings into the existing and operational JEB tailings management facility; and
  - use of the existing McClean Lake Operation waste management systems for handling of treated effluents and deposition of tailings.
18. CNSC staff noted that the project works and activities had been assessed to identify those project-environment interactions that would result in a measurable change to the existing environment.
19. CNSC staff added that the assessment of the direct and indirect effects of the project on the environment had been carried out in a step-wise manner including the following steps:
- identifying potential interactions between the project and the environment;
  - determining if each interaction is likely to result in a measurable adverse change to the environment;
  - identifying measures to mitigate the environmental effects; and
  - determining the significance of residual environmental effects.

20. Based on its review of the Screening Report and the submitted information, the Commission concludes that the EA methods were acceptable and appropriate.

*Effects of the Project on the Environment*

21. CNSC staff provided information on the potential impact of every project activity on 13 biophysical environmental components and on 14 key socio-economic components. CNSC staff stated that most interactions were not expected to result in measurable effects, and therefore, no further assessment was required. However, interactions expected to result in measurable effects were further analyzed to consider the application of mitigation measures.
22. CNSC staff reported that they had identified potential residual effects, taking into consideration the implementation of appropriate mitigation measures. All potential residual effects identified were determined to be not significant.
23. CNSC staff concluded that the works and activities associated with this project are not likely to cause significant adverse environmental effects, taking into account the implementation of mitigation measures identified in the Screening Report.
24. Based on its review of the Screening Report and the above-noted information and considerations, the Commission concludes that the proposed project, taking into account the identified mitigation measures, is not likely to cause significant adverse environmental effects.

*Effects of the Environment on the Project*

25. CNSC staff reported that they had considered a range of credible natural hazards and their potential influence on the performance of project activities, as well as the potential for these hazards to damage the Project and cause adverse effects on the environment. CNSC staff added that contingency measures have been described in AREVA's Emergency Preparedness and Response Program, and that design and operational measures to reduce potential effects would be implemented during project activities, as required. CNSC staff concluded that no residual adverse effects on the project or on the environment are likely to result from natural hazards.
26. Based on the above information, the Commission concludes that the environment is not likely to cause significant adverse effects on the project.



*Effects Malfunctions and Accidents*

27. CNSC staff informed the Commission about their assessment of possible environmental effects of accidents and malfunctions. CNSC staff added that they had considered credible scenarios of such events, identified available means to prevent or mitigate the possible effects, and determined the significance of any residual effects. CNSC staff concluded that the postulated credible malfunction and accident scenarios are not likely to cause significant adverse environmental effects, taking into consideration the prevention measures and the contingency plans.
28. Based on the above information and considerations, the Commission concludes that accident and malfunction events are not likely to cause significant adverse effects on the environment.

*Cumulative Effects*

29. CNSC staff informed the Commission that they had considered this project together with other projects or activities that could have overlapping effects with effects from this project and added that cumulative effects assessment builds on the analysis of residual effects of an EA. CNSC staff emphasized that, for the purpose of this assessment, the Caribou Project, the Midwest Project, the JEB Tailings Management Facility (TMF) Expansion Project, the Key Lake Extension Project, the Millennium Project, the Golden Heart Gold Mine Project and the Cigar Lake Mine, have been selected as a suite of major developments that may occur in the foreseeable future.
30. CNSC staff concluded from the results of the assessment that potential cumulative effects are not likely to cause significant adverse environmental effects.
31. Based on the information received, the Commission concludes that, taking into account the identified mitigation measures, significant adverse cumulative effects are not expected to occur as a result of the project.

*Follow-Up Program*

32. CNSC staff reported that a follow-up program was not considered appropriate for this project as it would be occurring on currently licensed facilities, with existing monitoring programs in place, and will be of short duration. CNSC staff stated that, based on the assessment of effects in the proposed Screening Report, no new follow-up monitoring programs are required. Follow-up programs are optional for screening-level assessments.

33. Based on its review of the proposed Screening Report and on the above-noted information, the Commission is satisfied that existing monitoring programs are in place and will be adequate for verifying and, if necessary, identifying where additional mitigation measures may be required during the project implementation.

*Conclusions on the Likelihood and Significance of Adverse Environmental Effects*

34. Based on the considerations and reasons noted above, the Commission concludes that the proposed project is not likely to cause significant adverse environmental effects, taking into account the identified mitigation measures.
35. The Commission is satisfied that the likelihood and significance of the effects have been identified with reasonable certainty.

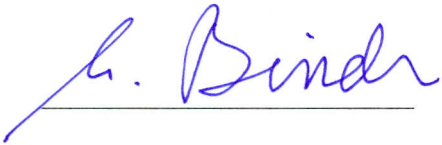
**Nature and Level of Public Concern**

36. With respect to public concern as a factor in its consideration of whether to refer the project to the federal Minister of the Environment for a review panel or mediator, the Commission examined whether the public had sufficient opportunity to become informed about the project and the EA, and express their views on it. The Commission examined the nature and level of concern expressed by the public.
37. CNSC staff informed the Commission that this project was subject to the provincial public participation process and that the federal draft EA Screening Report was subject to public and Aboriginal review concurrently with the provincial Technical Review Comments, and AREVA's EIS, from July 23, 2011 to August 26, 2011. CNSC staff stated that a notice of the public and Aboriginal review period on the draft EA Screening Report, Technical Review Comments and EIS was posted on the Canadian Environmental Assessment Registry, the CNSC web site, and the SMOE web site. The notice provided information on how to obtain a copy of the documents and submit comments.
38. CNSC staff added that the provincially-led public review included radio and newsprint advertisements and mail-outs to a number of First Nations and Métis groups, northern Saskatchewan communities and interest groups. CNSC staff reported that six separate submissions had been received, including two submissions from Aboriginal groups. CNSC staff further reported that the public and aboriginal groups had an earlier opportunity to comment on the project during a review period, initiated in June 2010, for the federal/provincial Project-Specific Guidelines Scoping Document, when seven separate submissions had been received, including two submissions from Aboriginal groups.

39. With respect to public consultation, CNSC staff informed the Commission that Packages of all EA documents had been provided to twelve (12) Northern Saskatchewan communities and two environmental interest groups. One environmental interest group and three members of the public submitted letters of opposition to the project, which included two comments on the EIS; however, no comments were received on the EA process. CNSC staff stated that the comments received during public review had an overall focus on transportation logistics including how the proposed ore haul transportation route might affect local communities, road conditions, as well as accident and malfunction scenarios.
40. CNSC staff informed the Commission that Aboriginal consultation has been integrated into the EA review and stated that, in coordination with the SMOE, they had conducted research that led to a preliminary list of 32 Aboriginal groups that might have an interest in the project. Notification letters had been sent to all identified groups and CNSC staff followed up with phone calls to ensure the letters were received and offered to answer any questions. Based on the information reviewed by CNSC staff, including consultation activities lead by AREVA and SMOE staff, Aboriginal groups have not presented any evidence or information identifying any adverse impacts that the Project may have on any potential or established Aboriginal or treaty rights.
41. CNSC staff reported that the project had also been reviewed by the Saskatchewan Ministry of Highways, which informed the proponent that they had no concerns with the Project and that the slurry trucks could operate safely on the proposed haul route.
42. In conclusion on public and Aboriginal consultation, CNSC staff stated that there had been no public concern expressed to date about this project that would warrant a need to have the Project referred to the Minister of the Environment for the establishment of a mediator or Review Panel.
43. Based on the information provided in the Screening Report and during the hearing, the Commission is of the view that there was sufficient opportunity for the public to be informed and express its views on the project. The Commission also acknowledges the efforts made in relation to the CNSC's obligations regarding Aboriginal consultation and the Legal Duty to Consult. The Commission is satisfied that the consultation process followed for the Project is adequate. Further, the Commission has decided that there is no public concerns raised that would warrant the Project to be referred to the Minister of the Environment for referral to a review panel or mediation under paragraph 20(1)(c) of the CEEA. The Commission therefore decides not to refer the project to the Minister of the Environment for referral to a review panel or mediator under paragraph 20(1)(c) of the CEEA.

## Conclusion

44. The Commission concludes that the environmental assessment Screening Report attached to CMD 12-H106 is complete and meets all of the applicable requirements of the *Canadian Environmental Assessment Act*.
45. The Commission concludes that the project, taking into account the appropriate mitigation measures identified in the Screening Report, is not likely to cause significant adverse environmental effects.
46. Furthermore, the Commission also concludes that, at this time, it will not request the federal Minister of the Environment to refer the project to a review panel or mediator in accordance with the provisions of the CEAA.
47. Therefore, the Commission, pursuant to paragraph 20(1)(a) of the CEAA, can proceed with the consideration of a licence application under the *Nuclear Safety and Control Act* which, if approved, would allow the project to proceed. The consideration of the licence application will be done in the context of a public hearing, providing a further opportunity for public participation.



Michael Binder  
President,  
Canadian Nuclear Safety Commission

APR 19 2012

Date